PatBase - Search results 07 August 2019
Search query (4): FT=(MEDICAL~ AND DOSER~ AND LIQUID AND HANDLE)
Results: 579

Search history

Search 1: FT=(MEDICAL~ DOSER~ AND DEVICE~ AND LIQUID~) (Results 4)

Search 2: FT=(MEDICAL~ AND DOSER~) (Results 9794)

Search 3: FT=(MEDICAL~ AND DOSER~ AND LIQUID) (Results 7338)

Search 4: FT=(MEDICAL~ AND DOSER~ AND LIQUID AND HANDLE) (Results 579)

1) Family number: 33508001 (EP0991628A1)

Title: QUINOLINE AND QUINOXALINE COMPOUNDS WHICH INHIBIT PLATELET-DERIVED GROWTH FACTOR AND/OR P56LCK TYROSINE KINASES

Abstract: This invention is directed to quinoline/quinoxaline compounds which inhibit platelet-derived growth factor or p56 tyrosine kinase activity, to pharmaceutical compositions comprising these compounds, and to the use of these compounds for treating a patient suffering from or subject to disorders/conditions involving cellular differentiation, proliferation, extracellular matrix production or mediator release and/or T cell activation and proliferation.

Classifications:

International (IPC 8-9): A61K A61K31/47 A61K31/495 A61K31/498 A61K31/5377 A61L31/08 A61L31/16 A61P17/06 A61P19/08 A61P29/00 A61P35/00 A61P35/02 A61P43/00 A61P9/00 A61P9/10 C07D C07D215/20 C07D215/38 C07D241/42 C07D241/44 C07D241/52 C07D241/54 C07D403/04 C07D405/10 C07D405/12 C07D453/06 (Advanced/Invention);
A61K31/47 A61K31/495 A61K31/498 A61P9/00 C07D215/20 C07D215/38 C07D241/44 (Advanced/Non-invention);
A61K31/47 A61K31/495 A61K31/498 A61K31/5375 A61P17/00 A61P19/00 A61P29/00 A61P35/00 A61P43/00 A61P9/00 C07D215/00 C07D241/00 C07D403/00 C07D405/00 C07D453/00 (Core/Invention);
C07D215/00 C07D241/00 (Core/Non-invention);
A61K C07D (Subclass/Invention)

International (IPC 1-7): A61K31/395 A61K31/47 A61K31/495 A61K31/498 A61P17/06 A61P19/08 A61P29/00 A61P35/00 A61P35/02 A61P43/00 A61P9/00 A61P9/10 C07D215/20 C07D215/22 C07D215/38 C07D241/44 C07D405/10 C07D405/12

CPC: C07D215/20 C07D215/38 C07D241/42 C07D241/44 C07D241/52 C07D241/54 C07D403/04 C07D405/12 C07D453/06

European: C07D215/20 C07D215/38 C07D241/42 C07D241/44 C07D241/52 C07D241/52B1 C07D241/54 C07D403/04 C07D405/12 C07D453/06

Family:

Publication number	Publication date	Application number	Application date
AP1362 A	20050119	AP19990001711	19980528
AP9901711 A0	19991231	AP19990001711	19980528
AT286886 E	20050115	AT19980925022T	19980528
AU199877062 A1	19981230	AU19980077062	19980528
AU747026 B2	20020509	AU19980077062	19980528
BG103965 A	20000731	BG19990103965	19991208
BRPI9809515 A	20000620	BR1998PI09515	19980528
CA2291728 AA	19991126	CA19982291728	19980528
DE69828607 D1	20050217	DE19986028607T	19980528
DE69828607 D1	20050217	DE19986028607	19980528
DE69828607 T2	20060105	DE19986028607T	19980528
EP0991628 A1	20000412	EP19980925022	19980528
EP0991628 A4	20000726	EP19980925022	19980528
EP0991628 B1	20050112	EP19980925022	19980528
HK1028042 A1	20040903	HK20000107502	20001123
HK1028042 B	20040903	HK20000107502	20001123
HU0004807 AB	20011128	HU20000004807	19980528
HU0004807 AC	20011228	HU20000004807	19980528
IL133007 A0	20010319	IL19980133007	19980528
IL133007 A1	20050619	IL19980133007	19980528
JP2002513417 T2	20020508	JP19990500964T	19980528
NO323721 B1	20070625	NO19990005819	19991126
NO995819 A	19991126	NO19990005819	19991126
NO995819 A0	19991126	NO19990005819	19991126
NO995819 L	19991126	NO19990005819	19991126
PT991628 T	20050531	PT19980925022T	19980528
SI0991628 T1	20050630	SI19980030741T	19980528
SK158099 A3	20000612	SK19990001580	19980528

Priority:

US19970864455 19970528 US19970972614 19971118 EP19980925022 19980528
WO1998US10999 19980528

Probable Assignee: AVENTIS PHARMACEUTICALS INC

Assignee(s): (std): RHONE POULENC RORER PHARMA ; AVENTIS PHARM PROD INC ; AVENTIS PHARMA INC ; AVENTIS PHARMACEUTICALS INC ; AVENTIS PHARMACEUTICALS INC CO

Assignee(s): RHONE POULENC RORER PHARMACEUTICALS INC ; AVENTIS PHARMACEUTICALS INC BRIDGEWATER ; AVENTIS PHARMACEUTICAL PRODUCTS INC ; RHONE POULENC PHARMACEUTICALS INC ; AVENTIS PHARMACEUTICALS INC COLLEGEVILLE PENNSYLVA ; AVENTIS PHARMACEUTICALS PRODUCTS INC ; AVENTIS PHARMACEUTICALS INC COLLEGEVILLE PENNSYLVANIA ; PERSONS PAUL E ; SPADA ALFRED P ; MAGUIRE MARTIN P ; MYERS MICHAEL ; AVENTIS PHARMACEUTICALS INC ROUTE 202 206 P O BOX 6800 MAIL CODE

Inventor(s): (std): MYERS MICHAEL ; MYERS MICHAEL R ; PERSONS E ; PERSONS PAUL E ; SPADA ALFRED P ; SPADA P ; PAUL E PERSONS ; MARTIN P MAGUIRE ; ALFRED P SPADA ; MICHAEL MYERS ; MAGUIRE MARTIN P ; MAGUIRE P

Inventor(s): MICHAEL R MYERS

Agent(s): WATERMARK PATENT AND TRADE MARKS ATTORNEYS; WATERMARK INTELLECTUAL PROPERTY PTY LTD; GOUDREAU GAGE DUBUC; SANFORD TCOLB AND CO

Designated states: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU NL PT SE

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
AP1362 A	20050119	LSGT	+	granted / extensions (spc, cpc, pte)	
AP1362 A	20180528	PEXP		Calculated Patent Term Expiry	
AT286886 E	20050115	LSGT	+	granted / extensions (spc, cpc, pte)	
AT286886 E	20050815	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	REF DOCUMENT NUMBER : 0991628 COUNTRY OF REF DOCUMENT : EP
AT286886 E	20100215	LSLE	-REN	CEASED DUE TO NON-PAYMENT OF THE ANNUAL FEE	
AT286886 E	20180528	PEXP		Calculated Patent Term Expiry	
AU199877062 A1	19981230	LSPB	+	published / reissued	
AU747026 B2	20020509	LSGT	+	granted / extensions (spc, cpc, pte)	
AU747026 B2	20001019	LSAS	PC1	ASSIGNMENT BEFORE GRANT (SECT. 113)	PARTYTYPE : OWNER OWNER : AVENTIS PHARMACEUTICALS PRODUCTS INC. OLDPARTY : THE FORMER OWNER WAS: RHONE-POULENC RORER PHARMACEUTICALS INC.
AU747026 B2	20020613	LSAS	TC	CHANGE OF APPLICANT'S NAME (SEC. 104)	PARTYTYPE : OWNER OWNER : AVENTIS PHARMACEUTICALS INC. OLDPARTY : FORMER NAME: AVENTIS PHARMACEUTICALS PRODUCTS INC.
AU747026 B2	20020905	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU747026 B2	20180528	PEXP		Calculated Patent Term Expiry	
BG103965 A	20000731	LSPB	+	published / reissued	
BRPI9809515 A	20000620	LSPB	+	published / reissued	
BRPI9809515 A	20050209	LSAS	B25D	REQUESTED CHANGE OF NAME OF APPLICANT APPROVED	
BRPI9809515 A	20050209	LSAS	B25G	REQUESTED CHANGE OF HEADQUARTER APPROVED	
BRPI9809515 A	20050308	LSAS	B25D	REQUESTED CHANGE OF NAME OF APPLICANT APPROVED	
BRPI9809515 A	20080520	LSES	B07A	TECHNICAL EXAMINATION (OPINION): PUBLICATION OF TECHNICAL EXAMINATION (OPINION)	
BRPI9809515 A	20081104	LSRV	B09B	DECISION: REFUSAL	TEXT : INDEFIRO O PRESENTE PEDIDO, UMA VEZ QUE O MESMO NAO ATENDE AO REQUISITO DE NOVIDADE ART. 8O E 11 DA LPI.
CA2291728 AA	19991126	LSPB	+	published / reissued	
CA2291728 AA	20030430	LSES	+EEER	EXAMINATION REQUEST	
CA2291728 AA	20100415	LSLE	-FZDE	DEAD	
DE69828607 D1	20060330	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE69828607 D1	20060330	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE69828607 T2	20060105	LSGT	+	granted / extensions (spc, cpc, pte)	
DE69828607 T2	20060330	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE69828607 T2	20180528	PEXP		Calculated Patent Term Expiry	

EP0991628 A1	20000412	LSPB	+	published / reissued	
EP0991628 A1	20000412	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19991227
EP0991628 A4	20000726	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	EFFECTIVE DATE : 20000609
EP0991628 A4	20010606	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : AVENTIS PHARMACEUTICALS PRODUCTS INC.
EP0991628 A4	20020227	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : AVENTIS PHARMACEUTICALS PRODUCTS INC.
EP0991628 A4	20021002	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20020814
EP0991628 A4	20040602	LSRE	RTI1	TITLE (CORRECTION)	TEXT : QUINOLINE AND QUINOXALINE COMPOUNDS WHICH INHIBIT PLATELET-DERIVED GROWTH FACTOR AND/OR P56LCK TYROSINE KINASES
EP0991628 A4	20041117	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : AVENTIS PHARMACEUTICALS INC
EP0991628 B1	20050112	LSGT	+	granted / extensions (spc, cpc, pte)	
EP0991628 B1	20050112	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP0991628 B1	20050114	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP0991628 B1	20050223	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP0991628 B1	20050420	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : EP REF DOCUMENT NUMBER : 20050400935 COUNTRY OF REF DOCUMENT : GR
EP0991628 B1	20050701	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2235331 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP0991628 B1	20060104	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20051013
EP0991628 B1	20080731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20080527 YEAR OF FEE PAYMENT : 11
EP0991628 B1	20080731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20080515 YEAR OF FEE PAYMENT : 11
EP0991628 B1	20080731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20080619 YEAR OF FEE PAYMENT : 11
EP0991628 B1	20080731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20080604 YEAR OF FEE PAYMENT : 11
EP0991628 B1	20080829	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20080514

				NATIONAL OFFICE TO EPO]	YEAR OF FEE PAYMENT : 11
EP0991628 B1	20080930	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20080526 YEAR OF FEE PAYMENT : 11
EP0991628 B1	20080930	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20080515 YEAR OF FEE PAYMENT : 11
EP0991628 B1	20080930	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20080509 YEAR OF FEE PAYMENT : 11
EP0991628 B1	20081031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20080515 YEAR OF FEE PAYMENT : 11
EP0991628 B1	20081031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20080501 YEAR OF FEE PAYMENT : 11
EP0991628 B1	20081031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20080509 YEAR OF FEE PAYMENT : 11
EP0991628 B1	20090331	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20080528
EP0991628 B1	20090331	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20081128 YEAR OF FEE PAYMENT : 11
EP0991628 B1	20090529	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20080410 YEAR OF FEE PAYMENT : 11
EP0991628 B1	20091130	LSLE	-BERE	BE: LAPSED	PARTYTYPE : OWNER REF COUNTRY CODE : EP OWNER : *AVENTIS PHARMACEUTICALS INC. EFFECTIVE DATE : 20090531
EP0991628 B1	20091210	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : PT REF LEGAL EVENT CODE : MM4A TEXT : LAPSE DUE TO NON-PAYMENT OF FEES EFFECTIVE DATE : 20091130
EP0991628 B1	20091231	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP0991628 B1	20100111	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DK REF LEGAL EVENT CODE : EBP
EP0991628 B1	20100129	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20090528
EP0991628 B1	20100129	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20090531
EP0991628 B1	20100129	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM	COUNTRY OF REF DOCUMENT : FI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES

				NATIONAL OFFICE TO EPO]	LAPSED DATE : 20090528
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EP0991628 B1	20100201	LSLE	-NLV4	NL: LAPSED OR ANULLED DUE TO NON-PAYMENT OF THE ANNUAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20091201
EP0991628 B1	20100226	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20091201
EP0991628 B1	20100316	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP0991628 B1	20100331	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20091130
EP0991628 B1	20100430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20090531
EP0991628 B1	20100430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20090528
EP0991628 B1	20100531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY PAYMENT DATE : 20080424 YEAR OF FEE PAYMENT : 11
EP0991628 B1	20100630	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20090531
EP0991628 B1	20100630	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20091202
EP0991628 B1	20100729	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20090529
EP0991628 B1	20101029	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20090529
EP0991628 B1	20110131	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SI REF LEGAL EVENT CODE : KO00 EFFECTIVE DATE : 20101230
EP0991628 B1	20110228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20090528
EP0991628 B1	20110331	LSLE	-PG25	LAPSED IN A CONTRACTING STATE	COUNTRY OF REF DOCUMENT : IT

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EP0991628 B1	20110429	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20090528
EP0991628 B1	20110531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20090529
EP0991628 B1	20110729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20110523 YEAR OF FEE PAYMENT : 14
EP0991628 B1	20110831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20110525 YEAR OF FEE PAYMENT : 14
EP0991628 B1	20110930	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20110525 YEAR OF FEE PAYMENT : 14
EP0991628 B1	20130130	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20120528
EP0991628 B1	20130301	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20130131
EP0991628 B1	20130314	LSDW	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R119 REF DOCUMENT NUMBER : 69828607 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20121201
EP0991628 B1	20130430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120531
EP0991628 B1	20130430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120528
EP0991628 B1	20130628	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20121201
EP0991628 B1	20180528	PEXP		Calculated Patent Term Expiry	
HK1028042 A1	20040903	LSPB	+	published / reissued	
HK1028042 A1	20041215	LSFE	+PF	PATENT IN FORCE	
HK1028042 A1	20091231	LSLE	-PC	PATENT CEASED (I.E. PATENT HAS LAPSED DUE TO THE FAILURE TO PAY THE RENEWAL FEE)	EFFECTIVE DATE : 20090527
HK1028042 A1	20201123	PEXP		Calculated Patent Term Expiry	
HK1028042 B	20040903	LSGT	+	granted / extensions (spc, cpc, pte)	
HK1028042 B	20201123	PEXP		Calculated Patent Term	

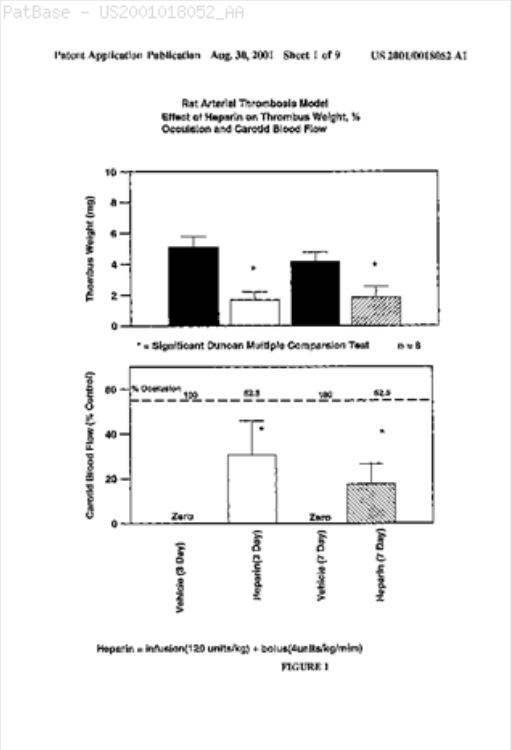
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HU0004807 AB	20011128	LSPB	+	published / reissued	
HU0004807 AC	20100301	LSLE	-FD9A	LAPSE OF PROVISIONAL PROTECTION DUE TO NON-PAYMENT OF FEES	
IL133007 A1	20050619	LSPB	+	published / reissued	
IL133007 A1	20060115	LSGT	+FF	PATENT GRANTED	
IL133007 A1	20080810	LSFE	+KB	PATENT RENEWED	
IL133007 A1	20130203	LSLE	-MM9K	PATENT NOT IN FORCE DUE TO NON-PAYMENT OF RENEWAL FEES	
JP2002513417 T2	20020508	LSPB	+	published / reissued	
JP2002513417 T2	20050616	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20050527
JP2002513417 T2	20050616	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20050527
JP2002513417 T2	20051110	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20051021
JP2002513417 T2	20090303	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20090303
JP2002513417 T2	20091008	LSRV	-A313	FINAL DECISION OF REJECTION WITHOUT A DISSENTING RESPONSE FROM THE APPLICANT	TEXT : JAPANESE INTERMEDIATE CODE: A313 EFFECTIVE DATE : 20090921
JP2002513417 T2	20091027	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20091027
NO323721 B1	20070625	LSGT	+	granted / extensions (spc, cpc, pte)	
NO323721 B1	20191126	PEXP		Calculated Patent Term Expiry	
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2) Family number: 11699002 (US2001018052A)

Title: Use of anti-coagulation factor antibodies as long-lasting protective agents

Abstract: The use of antibodies and antigen-binding fragments directed against coagulation factors and their use in inhibiting thrombosis are disclosed.

Classifications:
International (IPC 8-9): A61K A61K31/00 A61K31/60 A61K38/00 A61K38/46 A61K38/48 A61K38/49 A61K39/395 A61K39/40 A61K39/42 A61P A61P7/00 A61P7/02 A61P9/00 A61P9/10 C07H21/04 C07K C07K16/00 C07K16/08 C07K16/10 C07K16/36 C07K16/40 C07K16/46 C12N C12N15/02 C12N15/09 C12N15/13 C12N5/06 C12N5/10 C12N5/12 C12N5/18 C12P21/02 C12P21/08 (Advanced/Invention);
A61K31/00 A61K38/00 A61K38/49 A61K39/395 A61P7/00 A61P9/10 C12N15/02 C12N5/06 (Advanced/Non-invention);
A61K39/00 A61K39/395 C07K16/00 C12N5/00 (Core/Invention);
A61K C07C C07F C07K C12N (Subclass/Invention)
International (IPC 1-7): A61K31/135 A61K31/215 A61K31/60 A61K37/64 A61K38/00 A61K38/36 A61K38/46 A61K38/48 A61K39/39 A61K39/395 C07K16/36 C07K16/40 C07K16/46 C12N15/13 C12N5/18
CPC: C07K2319/00 C07K16/36 A61K38/00 A61K39/395 A61K2039/505 C07K16/40 C07K2317/24 C07K2317/76 C07K2317/92 A61K38/49 A61K39/3955 C07K2317/33
European: A61K38/49 A61K39/395 A61K39/395C2 C07K16/10F C07K16/36 C07K16/40 K61K38/00 K61K39/505 M07K207/00 M07K209/00 M07K316/960 M07K317/240 M07K317/330 M07K317/760 M07K317/920 M07K319/00
US: 424/133.1 424/133.100P 424/145.1 424/145.100P 424/146.1 424/146.100P 424/146.100S 424/158.1 424/94.64 424/94.640S 435/320.1 435/320.100S 435/326 435/326S 435/69.1 435/69.100S 514/165 514/165S 514/17 514/170 514/170S 530/387.3 530/388.25 530/388.26 530/388.260S 536/23.5 536/23.53 536/23.530S



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Priority:

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US20070622623 20070112 US20070623496 20070116

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Agent(s):	DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; GOWLING LAFLEUR HENDERSON LLP; LLOYD WISE AND CO; MARKS AND CLERK; AOYAMA TAMOTSU; KAWAMIYA OSAMU; TANAKA MITSUO; SMITHKLINE BEECHAM CORPORATE INTELLECTUAL PROPERTY US UW2220 CORP; GLAXOSMITHKLINE CORPORATE INTELLECTUAL PROPERTY UW2220; GLAXOSMITHKLINE
Designated states:	AE AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CY CZ DE DK DZ EE ES FI FR GA GB GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
AR005658 AA	19990714	LSPB	+	published / reissued	
AR005658 AA	20060629	LSGT	+FG	GRANT, REGISTRATION	
AT330630 E	20060715	LSGT	+	granted / extensions (spc, cpc, pte)	
AT330630 E	20070515	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	REF DOCUMENT NUMBER : 1007089 COUNTRY OF REF DOCUMENT : EP
AT330630 E	20091015	LSLE	-REN	CEASED DUE TO NON-PAYMENT OF THE ANNUAL FEE	
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				cpc, pte)	
AU2000278584 BB	20070315	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU2000278584 BB	20100429	LSLE	-MK14	PATENT CEASED SECTION 143(A) (ANNUAL FEES NOT PAID) OR EXPIRED	
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BRPI0015872 A	20100928	LSFE	-B08F	APPLICATION FEES: DISMISSAL - ARTICLE 86 OF INDUSTRIAL PROPERTY LAW	TEXT : REFERENTE A 9A E 10A ANUIDAD(S).
BRPI0015872 A	20111108	LSLE	-B08K	LAPSE AS NO EVIDENCE OF PAYMENT OF THE ANNUAL FEE HAS BEEN FURNISHED TO INPI (ACC. ART. 87)	TEXT : REFERENTE AO DESPACHO 8.6 PUBLICADO NA RPI 2073 DE 28/09/2010.
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BRPI9707049 A	20031202	LSDW	+HKFN	APPLICATION DEEMED WITHDRAWN (DELETED)	
BRPI9707049 A	20070703	LSES	B07A	TECHNICAL EXAMINATION (OPINION): PUBLICATION OF TECHNICAL EXAMINATION (OPINION)	
BRPI9707049 A	20080108	LSRV	B09B	DECISION: REFUSAL	TEXT : ENTENDE-SE QUE A MATERIA REQUERIDA NAO ATENDE AOS REQUISITOS DE PATENTEABILIDADE DE ACORDO COM OS ARTIGOS 8O C/C 13 DA LPI.
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EP1007089 A4	20060208	LSRE	RTI1	TITLE (CORRECTION)	TEXT : ANTICOAGULANT HUMANISED ANTIBODIES AGAINST FACTOR IX, FOR USE IN THE TREATMENT OF THROMBOSIS
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EP1007089 B1	20070530	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20070322
EP1007089 B1	20080131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20071218 YEAR OF FEE PAYMENT : 12
EP1007089 B1	20080131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20071228 YEAR OF FEE PAYMENT : 12
EP1007089 B1	20080131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20071219 YEAR OF FEE PAYMENT : 12
EP1007089 B1	20080430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20080108 YEAR OF FEE PAYMENT : 12
EP1007089 B1	20080430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20080123 YEAR OF FEE PAYMENT : 12

EP1007089 B1	20080430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20071212 YEAR OF FEE PAYMENT : 12
EP1007089 B1	20080530	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20080131 YEAR OF FEE PAYMENT : 12
EP1007089 B1	20080530	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20080125 YEAR OF FEE PAYMENT : 12
EP1007089 B1	20080530	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20080123 YEAR OF FEE PAYMENT : 12
EP1007089 B1	20080530	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20080118 YEAR OF FEE PAYMENT : 12
EP1007089 B1	20080530	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20071219 YEAR OF FEE PAYMENT : 12
EP1007089 B1	20080530	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20080102 YEAR OF FEE PAYMENT : 12
EP1007089 B1	20080530	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20080107 YEAR OF FEE PAYMENT : 12
EP1007089 B1	20080630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20071212 YEAR OF FEE PAYMENT : 12
EP1007089 B1	20080731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20080107 YEAR OF FEE PAYMENT : 12
EP1007089 B1	20080829	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20080201 YEAR OF FEE PAYMENT : 12
EP1007089 B1	20090227	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20080116 YEAR OF FEE PAYMENT : 12
EP1007089 B1	20090724	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : PT REF LEGAL EVENT CODE : MM4A TEXT : LAPSE DUE TO NON-PAYMENT OF FEES EFFECTIVE DATE : 20090717
EP1007089 B1	20090831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20090131
EP1007089 B1	20090831	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL

EP1007089 B1	20090915	LSLE	-EUG	SE: EUROPEAN PATENT HAS LAPSED	REF COUNTRY CODE : EP
EP1007089 B1	20090923	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20090117
EP1007089 B1	20091001	LSLE	-NLV4	NL: LAPSED OR ANULLED DUE TO NON-PAYMENT OF THE ANNUAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20090801
EP1007089 B1	20091019	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DK REF LEGAL EVENT CODE : EBP
EP1007089 B1	20091030	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20090117
EP1007089 B1	20091030	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20090131
EP1007089 B1	20091030	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20090801
EP1007089 B1	20091030	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20090117
EP1007089 B1	20091030	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20090131
EP1007089 B1	20091030	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20090717
EP1007089 B1	20091030	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SI REF LEGAL EVENT CODE : KO00 EFFECTIVE DATE : 20090827
EP1007089 B1	20091127	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20091030
EP1007089 B1	20091130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20090117
EP1007089 B1	20091130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20090801
EP1007089 B1	20100129	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20090119

EP1007089 B1	20100226	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20090804
EP1007089 B1	20100226	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20090131
EP1007089 B1	20100329	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20090119
EP1007089 B1	20100430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20090119
EP1007089 B1	20100430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20090202
EP1007089 B1	20100730	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20090731
EP1007089 B1	20110331	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20090117
EP1007089 B1	20110429	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20090117
EP1007089 B1	20110531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20090118
EP1007089 B1	20170117	PEXP		Calculated Patent Term Expiry	
EP1282444 A1	20030212	LSPB	+	published / reissued	
EP1282444 A1	20030212	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20021122
EP1282444 A1	20040630	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	EFFECTIVE DATE : 20040513
EP1282444 A1	20041027	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20040913
EP1282444 A1	20061122	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20061122
EP1282444 A1	20061122	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED	COUNTRY OF REF DOCUMENT : CH NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A

				VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20061122
EP1282444 A1	20061122	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20061122
EP1282444 A1	20061122	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20061122
EP1282444 A1	20061122	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20061122
EP1282444 A1	20061122	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP1282444 A1	20061215	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1282444 A1	20061229	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP1282444 A1	20070222	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20070222
EP1282444 A1	20070222	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20070222
EP1282444 A1	20070423	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20070423
EP1282444 A1	20070501	LSLE	-NLV1	NL: LAPSED OR ANNULLED DUE TO FAILURE TO FULFILL THE REQUIREMENTS OF ART. 29P AND 29M OF THE PATENTS ACT	REF COUNTRY CODE : EP
EP1282444 A1	20070615	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP1282444 A1	20070716	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2277597 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP1282444 A1	20071031	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20070823
EP1282444 A1	20080131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20071031 YEAR OF FEE PAYMENT : 8

EP1282444 A1	20080131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20071026 YEAR OF FEE PAYMENT : 8
EP1282444 A1	20080229	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20071017 YEAR OF FEE PAYMENT : 8
EP1282444 A1	20080331	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20071102 YEAR OF FEE PAYMENT : 8
EP1282444 A1	20080430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20070223
EP1282444 A1	20080530	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20071031
EP1282444 A1	20081031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20071005
EP1282444 A1	20090430	LSLE	-BERE	BE: LAPSED	PARTYTYPE : OWNER REF COUNTRY CODE : EP OWNER : SMITHKLINE BEECHAM CORP. EFFECTIVE DATE : 20081031
EP1282444 A1	20090430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20081018 YEAR OF FEE PAYMENT : 9
EP1282444 A1	20090630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20081029 YEAR OF FEE PAYMENT : 9
EP1282444 A1	20090831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20061122
EP1282444 A1	20090831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20090501
EP1282444 A1	20090831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20081005
EP1282444 A1	20090831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20071005
EP1282444 A1	20090930	LSLE	-PG25	LAPSED IN A CONTRACTING	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONOFLAPSE : LAPSE

				STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20081031
EP1282444 A1	20091230	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20081006
EP1282444 A1	20100129	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20081006
EP1282444 A1	20100723	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20100630
EP1282444 A1	20100730	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20091102
EP1282444 A1	20101130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20091005
EP1282444 B1	20061122	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1282444 B1	20201005	PEXP		Calculated Patent Term Expiry	
EP1825864 A2	20070829	LSPB	+	published / reissued	
EP1825864 A2	20070829	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20061120
EP1825864 A3	20071205	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20071102
EP1825864 A3	20080521	LSFE	+AKX	DESIGNATION FEES PAID	COUNTRY OF REF DOCUMENT : AT COUNTRY OF REF DOCUMENT : BE COUNTRY OF REF DOCUMENT : CH COUNTRY OF REF DOCUMENT : CY COUNTRY OF REF DOCUMENT : DE COUNTRY OF REF DOCUMENT : DK COUNTRY OF REF DOCUMENT : ES COUNTRY OF REF DOCUMENT : FI COUNTRY OF REF DOCUMENT : FR COUNTRY OF REF DOCUMENT : GB COUNTRY OF REF DOCUMENT : GR COUNTRY OF REF DOCUMENT : IE COUNTRY OF REF DOCUMENT : IT COUNTRY OF REF DOCUMENT : LI COUNTRY OF REF DOCUMENT : LU COUNTRY OF REF DOCUMENT : MC COUNTRY OF REF DOCUMENT : NL COUNTRY OF REF DOCUMENT : PT COUNTRY OF REF DOCUMENT : SE
EP1825864 A3	20080521	LSFE	+AXX	PAYMENT OF EXTENSION FEES	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20061120
EP1825864 A3	20100331	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : GLAXOSMITHKLINE LLC
EP1825864 A3	20101027	LSRE	D18D	APPLICATION DEEMED TO BE WITHDRAWN (DELETED)	
EP1825864 A3	20101103	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20100427
EP1825864 A3	20140502	LSWD	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HK REF LEGAL EVENT CODE : WD REF DOCUMENT NUMBER : 1109339 COUNTRY OF REF DOCUMENT : HK

EP1832297 A1	20070912	LSPB	+	published / reissued	
EP1832297 A1	20070912	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20060620
EP1832297 A1	20071212	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20071112
EP1832297 A1	20080521	LSFE	+AKX	DESIGNATION FEES PAID	COUNTRY OF REF DOCUMENT : AT COUNTRY OF REF DOCUMENT : BE COUNTRY OF REF DOCUMENT : CH COUNTRY OF REF DOCUMENT : DE COUNTRY OF REF DOCUMENT : DK COUNTRY OF REF DOCUMENT : ES COUNTRY OF REF DOCUMENT : FI COUNTRY OF REF DOCUMENT : FR COUNTRY OF REF DOCUMENT : GB COUNTRY OF REF DOCUMENT : GR COUNTRY OF REF DOCUMENT : IE COUNTRY OF REF DOCUMENT : IT COUNTRY OF REF DOCUMENT : LI COUNTRY OF REF DOCUMENT : LU COUNTRY OF REF DOCUMENT : MC COUNTRY OF REF DOCUMENT : NL COUNTRY OF REF DOCUMENT : PT COUNTRY OF REF DOCUMENT : SE
EP1832297 A1	20080521	LSFE	+AXX	PAYMENT OF EXTENSION FEES	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20060620
EP1832297 A1	20100127	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20090801
EP1832297 A1	20140808	LSWD	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HK REF LEGAL EVENT CODE : WD REF DOCUMENT NUMBER : 1107932 COUNTRY OF REF DOCUMENT : HK
ES2267131 T3	20070301	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2267131 T3	20170117	PEXP		Calculated Patent Term Expiry	
ES2277597 T3	20070716	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2277597 T3	20201005	PEXP		Calculated Patent Term Expiry	
HK1029513 A1	20070404	LSPB	+	published / reissued	
HK1029513 A1	20110902	LSLE	-PC	PATENT CEASED (I.E. PATENT HAS LAPSED DUE TO THE FAILURE TO PAY THE RENEWAL FEE)	EFFECTIVE DATE : 20110117
HK1029513 A1	20201121	PEXP		Calculated Patent Term Expiry	
HK1029513 B	20070404	LSGT	+	granted / extensions (spc, cpc, pte)	
HK1029513 B	20201121	PEXP		Calculated Patent Term Expiry	
HK1107932 A1	20080425	LSPB	+	published / reissued	
HK1107932 A3	20080425	LSPB	+	published / reissued	
HK1109339 A1	20080606	LSPB	+	published / reissued	
HK1109339 A3	20080606	LSPB	+	published / reissued	
HU0301804 AB	20030828	LSPB	+	published / reissued	
HU225874 B1	20071128	LSGT	+	granted / extensions (spc, cpc, pte)	
HU225874 B1	20090728	LSLE	-MM4A	LAPSE OF DEFINITIVE PATENT PROTECTION DUE TO NON-PAYMENT OF FEES	

HU225874 B1	20201005	PEXP		Calculated Patent Term Expiry	
HU225903 B1	20071228	LSGT	+	granted / extensions (spc, cpc, pte)	
HU225903 B1	20090928	LSLE	-MM4A	LAPSE OF DEFINITIVE PATENT PROTECTION DUE TO NON-PAYMENT OF FEES	
HU225903 B1	20170117	PEXP		Calculated Patent Term Expiry	
HU9900396 AB	19990528	LSPB	+	published / reissued	
ID17156 A	19971204	LSPB	+	published / reissued	
IN00116DE1997 A	20050311	LSPB	+	published / reissued	
IN06368DN2007 A	20070831	LSPB	+	published / reissued	
JP2000503210 T2	20000321	LSPB	+	published / reissued	
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JP2000503210 T2	20070206	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20070206
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KR19990077329 A	20020117	LSES	A201	REQUEST FOR EXAMINATION
KR19990077329 A	20020117	LSRE	AMND	AMENDMENT
KR19990077329 A	20040730	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL
KR19990077329 A	20041216	LSRE	AMND	AMENDMENT
KR19990077329 A	20050629	LSRV	-E601	DECISION TO REFUSE APPLICATION
KR19990077329 A	20050926	LSRE	AMND	AMENDMENT
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KR19990077329 A	20060213	LSGT	+GRNT	WRITTEN DECISION TO GRANT
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KR20030034071 A	20061031	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL
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KR20070116192 A	20080205	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL
KR20070116192 A	20081030	LSRV	-E601	DECISION TO REFUSE APPLICATION
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MXPA02011385 A1	20040126	LSPB	+	published / reissued
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NO20025463 A	20030109	LSPB	+	published / reissued
NO20025463 A	20090525	LSRV	-FC2A	WITHDRAWAL,

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NO983284 A	19980916	LSPB	+	published / reissued	
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US2001018052 AA	20010830	LSPB	+	published / reissued	
US2001018052 AA	20030630	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2002136725 AA	20020926	LSPB	+	published / reissued	
US2002136725 AA	20031103	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2002146411 AA	20021010	LSPB	+	published / reissued	

US2002146411 AA	20051212	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
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US2003235587 AA	20060112	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2004146511 AA	20040729	LSPB	+	published / reissued	
US2004146511 AA	20070315	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2005037006 AA	20050217	LSPB	+	published / reissued	
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US2006057140 AA	20080411	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2007003553 AA	20070104	LSPB	+	published / reissued	
US2007003553 AA	20080626	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : THE UNIVERSITY OF VERMONT AND STATE AGRICULTURE CO OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:SMITHKLINE BEECHAM CORPORATION; REEL/FRAME:021147/0798 EFFECTIVE DATE : 20080606
US2007003553 AA	20090424	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
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US2007190059 AA	20091015	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2007224198 AA	20070927	LSPB	+	published / reissued	
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					ASSIGNOR:SMITHKLINE BEECHAM CORPORATION; REEL/FRAME:021147/0798 EFFECTIVE DATE : 20080606
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US6005091 A	19970919	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : UNIVERSITY OF VERMONT AND STATE AGRICULTURAL COLLE OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:CHURCH, WILLIAM ROBERT; REEL/FRAME:008711/0188 EFFECTIVE DATE : 19970331
US6005091 A	20030529	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6005091 A	20070517	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
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US6005091 A	20120116	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
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US6391299 BA	20050928	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
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				Maintenance Fees Under 37 CFR 1.362	
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US6391299 BA	20190625	PEXP		Calculated Patent Term Expiry	
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WO0187339 A1	20011122	LSPB	+	published / reissued	
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WO0187339 A1	20021113	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 152831 COUNTRY OF REF DOCUMENT : IL
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WO9726010 A1	19980729	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1997903837 COUNTRY OF REF DOCUMENT : EP
WO9726010 A1	19981007	LSNE	-122	EP: PCT APPLICATION NON-ENTRY IN EUROPEAN PHASE	REF COUNTRY CODE : WO
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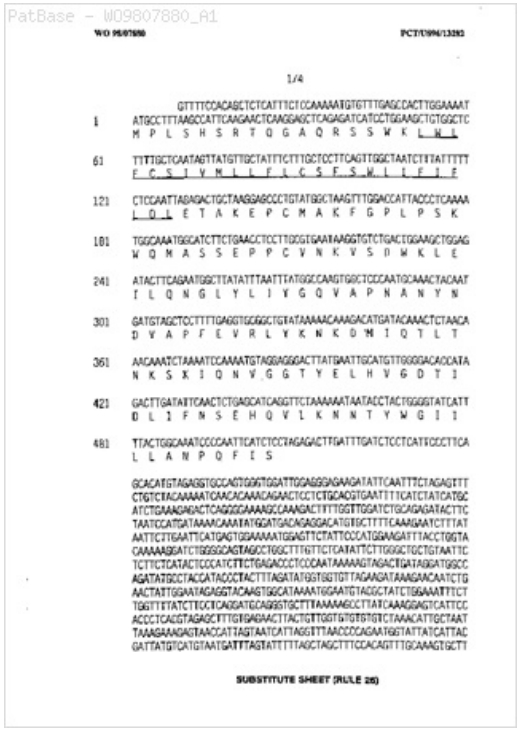
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3) Family number: 10622002 (WO9807880A1)

Title: HUMAN ENDOKINE ALPHA

Abstract: The present invention concerns a novel member of the tumor necrosis factor (TNF) family of cytokines. In particular, isolated nucleic acid molecules are provided encoding the endokine alpha protein. Endokine alpha polypeptides are also provided, as are vectors, host cells and recombinant methods for producing the same. Also provided are diagnostic and therapeutic methods concerning TNF family-related disorders.

Classifications:
International (IPC 8-9): A61K38/00 A61K39/395 A61P35/04 A61P37/02 B21D11/20 B21D13/02 C07H21/04 C07K1/00 C07K14/52 C07K14/525 C07K16/24 C12N1/00 C12N1/20 C12N1/21 C12N15/00 C12N15/09 C12N15/12 C12N15/19 C12P21/02 C12P21/06 C12Q1/68 G01N33/53 (Advanced/Invention);
A61K38/00 A61K39/395 B21D11/20 C12N15/09 C12N15/12 C12R1/19 (Advanced/Non-invention);
A61K39/395 A61P35/00 A61P37/00 B21D11/00 B21D13/00 C07H21/00 C07K1/00 C07K14/435 C07K16/18 C12N1/00 C12N1/20 C12N1/21 C12N15/00 C12N15/09 C12N15/12 C12P21/02 C12P21/06 C12Q1/68 (Core/Invention);
A61K38/00 (Core/Non-invention)
International (IPC 1-7): A61K39/395 A61P35/04 A61P37/02 B21D11/20 C07H21/04 C07K1/00 C07K14/52 C07K14/525 C07K16/24 C12N1/00 C12N1/20 C12N1/21 C12N15/00 C12N15/09 C12N15/12 C12N15/19 C12P21/02 C12P21/06
CPC: C07K14/5255 A61K38/00 C07K14/52 B21D11/08 B21D13/02 B21D11/20
European: B21D11/08 B21D11/20 B21D13/02 C07K14/52 C07K14/525B K61K38/00 M07K205/00 M07K207/00



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Publication number	Publication date	Application number	Application date
AT412740 E	20081115	AT19960928886T	19960816
AU199668478 A1	19980306	AU19960068478	19960816
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EP2025682 A2	20090218	EP20080018826	19960816
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ES2316153 T3	20090401	ES19960928886T	19960816
JP2000516474 T2	20001212	JP19980510675T	19960816
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KR20000070536 A	20001125	KR19997006781	19980127
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SE9700271 A	19971222	SE19970000271D	19970128
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SE9700271 L	19971222	SE19970000271	19970128
WO9807880 A1	19980226	WO1996US13282	19960816
WO9832553 A1	19980730	WO1998SE00121	19980127

Priority:

AU19960068478 19960816	AU20010053937 19960816	AU20030257892 19960816
EP20080018826 19960816	EP19960928886 19960816	WO1996EP13282 19960816
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AU20070202630 20070608		

Probable Assignee: HUMAN GENOME SCIENCES INC

Assignee(s): (std): BAUMBACH THORKILD ; HUMAN GENOME SCIENCES INC ; NI JIAN ; THORKILD BAUMBACH ; ROSEN CRAIG A ; YU GUO LIANG

Inventor(s): (std): CRAIG A ROSEN ; ROSEN CRAIG A ; YU GUO LIANG ; NI JUAN ; JIAN NI ; NI JIAN ; ROSEN CRAIG ; NL JIAN ; JIAN NL ; BAUMBACH THORKILD ; GUO LIANG YU

Inventor(s): JUAN NI ; THORKILD BAUMBACH ; ROSEN CRAIGA

Agent(s): WRAYS; WRAYS PTY LTD; MBM INTELLECTUAL PROPERTY LAW LLP; VOSSIUS AND PARTNER

Designated states: AM AT AU AZ BA BE BF BG BJ BR BY CA CF CG CH CI CM CN CU CZ DE DK EE ES FI FR GA GB GE GH GM GN GR HU IE IL IS IT JP KE KG KP KR KZ LI LK LR LS LT LU LV MC MD MG ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SN SZ TD TG TJ TM TR UA UG US UZ VN YU ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT412740 E	20081115	LSGT	+	granted / extensions (spc, cpc, pte)	
AT412740 E	20090615	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	REF DOCUMENT NUMBER : 0961831 COUNTRY OF REF DOCUMENT : EP
AT412740 E	20160816	PEXP		Calculated Patent Term Expiry	
AU199668478 A1	19980306	LSPB	+	published / reissued	
AU199857892 A1	19980818	LSPB	+	published / reissued	
AU200153937 A1	20010816	LSPB	+	published / reissued	
AU2003257892 AA	20031120	LSPB	+	published / reissued	
AU2003257892 AA	20070712	LSLE	-MK5	APPLICATION LAPSED SECTION 142(2)(E) - PATENT REQUEST AND COMPL. SPECIFICATION NOT ACCEPTED	
AU2007202630 AA	20070628	LSPB	+	published / reissued	
AU2007202630 BB	20100422	LSGT	+	granted / extensions (spc, cpc, pte)	
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AU2007202630 BH	20120315	LSLE	-MK14	PATENT CEASED SECTION 143(A) (ANNUAL FEES NOT PAID) OR EXPIRED	
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EP0961831 A4	20030827	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20030709
EP0961831 A4	20061129	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20030709
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EP2025682 A3	20100127	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20091214
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JP2000516474 T2	20061130	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20061109
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WO9807880 A1	19990213	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1019997001248 COUNTRY OF REF DOCUMENT : KR
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WO9832553 A1	20001220	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1998901662 COUNTRY OF REF DOCUMENT : EP
WO9832553 A1	20020801	LSWD	-WWW	WIPO INFORMATION:	REF DOCUMENT

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WO9832553 A1	20030128	LSWD	-WWW	WIPO INFORMATION: WITHDRAWN IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1019997006781 COUNTRY OF REF DOCUMENT : KR

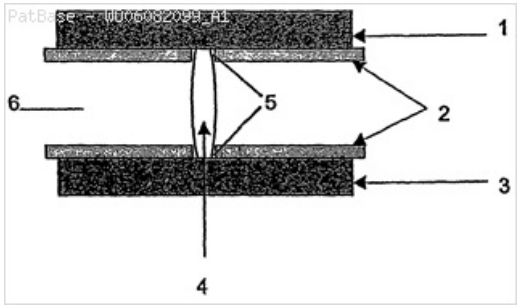
4) Family number: 31522006 (US2005031546A)

Title: ABUSE-PROFFED DOSAGE FORM

Abstract: The present invention relates to an abuse-proofed, thermoformed dosage form containing, in addition to one or more active ingredients with abuse potential optionally together with physiologically acceptable auxiliary substances, at least one synthetic or natural polymer with a breaking strength of at least 500 N and to a process for the production thereof.

FDA Data:

Application number	Active ingredient	Proprietary name	Applicant	Date of approval
022272	OXYCODONE HYDROCHLORIDE	OXYCONTIN	PURDUE PHARMA LP	Apr 5, 2010
200533	TAPENTADOL HYDROCHLORIDE	NUCYNTA ER	DEPO NF	Aug 25, 2011
200533	TAPENTADOL HYDROCHLORIDE	NUCYNTA ER	DEPOMED INC	Aug 25, 2011
200533	TAPENTADOL HYDROCHLORIDE	NUCYNTA ER	JANSSEN PHARMS	Aug 25, 2011
200533	TAPENTADOL HYDROCHLORIDE	NUCYNTA ER	ORTHO MCNEIL JANSSEN	Aug 25, 2011
201655	OXYMORPHONE HYDROCHLORIDE	OPANA ER	ENDO PHARMS	Dec 9, 2011
206627	HYDROCODONE BITARTRATE	HYSINGLA	PURDUE PHARMA LP	Nov 20, 2014



Classifications:
International (IPC 8-9): A61K9/22 A01N43/42 A61J3/00 A61J3/06 A61J3/07 A61J3/10 A61K A61K31/00 A61K31/135 A61K31/137 A61K31/16 A61K31/277 A61K31/4164 A61K31/439 A61K31/4418 A61K31/4422 A61K31/4458 A61K31/4725 A61K31/485 A61K31/513 A61K31/515 A61K31/55 A61K31/551 A61K31/5513 A61K31/554 A61K36/18 A61K36/67 A61K36/74 A61K36/81 A61K36/8962 A61K36/9066 A61K36/9068 A61K45/00 A61K45/06 A61K47/10 A61K47/30 A61K47/32 A61K47/34 A61K47/36 A61K47/38 A61K47/44 A61K49/00 A61K551/00 A61K9/00 A61K9/10 A61K9/14 A61K9/16 A61K9/20 A61K9/26 A61K9/28 A61K9/44 A61K9/48 A61K9/52 A61P1/00 A61P13/00 A61P17/00 A61P19/00 A61P25/00 A61P25/02 A61P25/04 A61P25/30 A61P25/36 A61P27/00 A61P29/00 A61P37/00 A61P5/00 A61P7/00 A61P9/00 B06B1/02 B29B7/00 B29B9/02 B29B9/12 B29C43/00 B29C43/02 B29C47/00 B29C47/06 B29C47/40 B29C47/60 B30B11/16 B30B11/34 C12Q1/68 (Advanced/Invention);
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A61J3/06 A61J3/10 (Core/Non-invention);
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Family:

Publication number	Publication date	Application number	Application date
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Priority:

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US20180145936 20180928		

Probable Assignee: GRUNENTHAL GMBH

Assignee(s): (std): KUGELMANN HEINRICH ; GRUENENTHAL GMBH ; GRUENENTHAL CHEMIE ; GR NENTHAL GMBH ; GRJUNENTAL GMBKH ; ARKENAU ELISABETH ; ARKENAU MARIC ELISABETH ; ASHWORTH JUDY ; BARTHOLOMAEUS JOHANNES ; BARTHOLOMAUS JOHANNES ; GRNENTHAL GMBH

Assignee(s): DEUTSCHE BANK NEW YORK BRANCH COLLATERAL AGENT AG AS ; ASTORA WOMEN S HEALTH HOLDINGS LLC ; GRUNENTHAL GMBH ; JPMORGAN CHASE BANK NA ADMINISTRATIVE AGENT AS ; MORGAN STANLEY SENIOR FUNDING INC ADMINISTRATIVE A ; ENDO PHARMACEUTICALS INC ; MORGAN STANLEY SENIOR FUNDING INC ADMINISTRATIVE AGENT AS ; ENDO PHARMACEUTICALS SOLUTIONS INC

Inventor(s): (std): BARTHOLOMAEUS JOHANNES ; ARKENAU ELISABETH ; ARKENAU MARIC ELISABETH ; ARKENAU MARIC ELISABETH DR ; ASHWORTH JUDY ; BARTHOLOMOUS JOHANNES ; ARKENAU MERIAE ELISABETH ; HEINRICH BARTHOLOMAEUS JOHANNE ; BARTHOLOMAEUS JOHANNES DR ; BARTHOLAM USJOHANNES ; JOHANNES ARKENAU MARIC ELISABE ; JOHANNES BARTHOLOMOS ; JUDY ASHWORTH ; ASHUORT DZHUDI ; BARTOLOMOJS IOGANNES ; JOHANNES BARTHOLOMAEUS ; JOHANNES ARKENAU ELISABETH BAR ; BARTHOLOMAS JOHANNES ; MARIC ELISABETH ARKENAU ; BARTHOLOMAEUS JOHANNESS ; BARTHOLOMAEUS JOHANNES KUGELMA ; KUGELMANN HEINRICH ; BARTHOLOMAUS JOHANNES ; ASHWORTH DR JUDY ; BARTHOLOMUS JOHANNES ; BARTHOLOMAUS JOHANNES DR ; ELISABETH ARKENAU MARIC ; ELISABETH ARKENAU MARIC DR ; ARKENAU MARITS EHLIZABET ; BARTOLOMEHUS IOGANNES ; KUGEL MANN GENRIKH ; HEINRICH KUGELMANN ; JOHANNES BARTHOLOMOUS ; ELISABETH ARKENAU MERIAE ; JOHANNES BARTHOLOMAUS ; JUDY ASHWORTH DR ; JOHANNES BARTHOLOMAEUS DR ; BARTHOLOMEUS JOHANNES ; ELISABETH ARKENAU ; ASHWORTH JUDY DR ; BARTHOLOMAUS JOHANNES KUGELMAN ; ARKENAU ELIZABETH ; ARKENAU MARIC ELIZABETH

Inventor(s): ELIZABETH ARKENAU MARIC ; BARTHOLOMAUS JOHANNES KUGELMANN HEINRICH ; JOHANNES BARTHOLOMEUS ; BARTHOLOMAEUS JOHANNES KUGELMANN HEINRICH ARKENAU MARIC ELISABETH DR ; ARKENAU MARI AND 262 ELISABETH ; BARTHOLOMAEUS JOHANNES KUGELMANN HEINRICH ARKENAU ; HEINRICH ; JOHANNES ; BARTHOLOMAUS ; BARTHOLOMAUS JOHANNES ARKENAU ELISABETH ; BARTHOLOMAUS JOHANNES ASHWORTH JUDY ARKENAU MARIC ELISABETH HEINRICH KUGELMANN ; KUGELMANN ; ELISABETH DR ARKENAU MARIC ; BARTHOLOMOS JOHANNES ; KUGEL'MANN GENRIKH ; ARKENAU-MARITS EHLIZABET ; ARKENAU ELISABETH BARTHOLOMAEUS JOHANNES ; USJOHANNES BARTHOLAM ; BARTHOLOMAEUS JOHANNES KUGELMANN HEINRICH

Agent(s): COLLISON AND CO; ALLENS PATENT AND TRADE MARK ATTORNEYS; SPRUSON AND FERGUSON; SIM AND MCBURNEY; FETHERSTONHAUGH AND CO; BORDEN LADNER GERVAIS LLP; SMART AND BIGGAR; CLARKE; KUTZENBERGER WOLFF AND PARTNER PATENTANWALTSPARTNERSCHAFT MBB; BUELLE JAN; KUTZENBERGER HELGA; AZNAREZ PABLO; WILLIAMS DAVIS HILL AND CO; WENPING AND CO; REINHOLD COHN AND PARTNERS; DR SHLOMO COHEN AND CO; TUGBA DERYA YILMAZ; HALISE BETUEL ATABAY VARLIK; CEREN AYYUEREK; PERMAN AND GREEN; NORRIS MCLAUGHLIN AND MARCUS PA; BRISCOE KURT G NORRIS MCLAUGHLIN AND MARCUS PA; NORRIS MCLAUGHLIN AND MARCUS P A; NORRIS MCLAUGHLIN PA

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AR045352 AA	20051026	LSPB	+	published / reissued	

AR045352 AA	20151029	LSRV	-FC	REFUSAL	
AR045353 AA	20051026	LSPB	+	published / reissued	
AR045353 AA	20160114	LSRV	-FC	REFUSAL	
AR046994 AA	20060104	LSPB	+	published / reissued	
AR046994 AA	20161019	LSRV	-FC	REFUSAL	
AR049083 AA	20060628	LSPB	+	published / reissued	
AR049083 AA	20080624	LSWD	-FB	SUSPENSION OF GRANTING PROCEDURE	
AR049839 AA	20060906	LSPB	+	published / reissued	
AR054328 AA	20070620	LSPB	+	published / reissued	
AR054328 AA	20170426	LSRV	-FC	REFUSAL	
AR107985 AB	20180704	LSPB	+	published / reissued	
AR107985 AB	20370327	PEXP		Calculated Patent Term Expiry	
AT356618 E	20070415	LSGT	+	granted / extensions (spc, cpc, pte)	
AT356618 E	20240805	PEXP		Calculated Patent Term Expiry	
AT365545 E	20070715	LSGT	+	granted / extensions (spc, cpc, pte)	
AT365545 E	20240805	PEXP		Calculated Patent Term Expiry	
AT447942 E	20091115	LSGT	+	granted / extensions (spc, cpc, pte)	
AT447942 E	20241223	PEXP		Calculated Patent Term Expiry	
AT517610 E	20110815	LSGT	+	granted / extensions (spc, cpc, pte)	
AT517610 E	20250420	PEXP		Calculated Patent Term Expiry	
AU2004264666 AA	20050224	LSPB	+	published / reissued	
AU2004264666 AA	20060309	LSRE	DA3	AMENDMENTS MADE SECTION 104	TEXT : THE NATURE OF THE AMENDMENT IS: AMEND THE INVENTION TITLE TO READ ABUSE-PROOFED DOSAGE FORM
AU2004264666 AA	20060316	LSRE	DA3	AMENDMENTS MADE SECTION 104	TEXT : THE NATURE OF THE AMENDMENT IS: ADD CO-INVENTOR ARKENAU-MARIC, ELISABETH
AU2004264666 AA	20060316	LSRE	DA3	AMENDMENTS MADE SECTION 104	TEXT : THE NATURE OF THE AMENDMENT IS: AMEND THE NAME OF THE APPLICANT FROM GRUNENTHAL GMBH TO GRUENENTHAL GMBH
AU2004264666 BB	20091015	LSGT	+	granted / extensions (spc, cpc, pte)	
AU2004264666 BB	20100211	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU2004264666 BB	20240805	PEXP		Calculated Patent Term Expiry	
AU2004264667 AA	20050224	LSPB	+	published / reissued	
AU2004264667 AA	20060316	LSRE	DA3	AMENDMENTS MADE SECTION 104	TEXT : THE NATURE OF THE AMENDMENT IS: ADD CO-INVENTOR ARKENAU-MARIC, ELISABETH
AU2004264667 AA	20060413	LSRE	DA3	AMENDMENTS MADE SECTION 104	TEXT : THE NATURE OF THE AMENDMENT IS: AMEND THE NAME OF THE APPLICANT FROM GRUNENTHAL GMBH TO GRUENENTHAL GMBH
AU2004264667 BB	20081106	LSGT	+	granted / extensions (spc, cpc, pte)	
AU2004264667 BB	20090305	LSGT	+FGA	LETTERS PATENT	

				SEALED OR GRANTED (STANDARD PATENT)	
AU2004264667 BB	20140508	LSGT	+NC	EXTENSION OF TERM REQUESTED FOR STANDARD PATENT (SECT. 70)	TEXT : PRODUCT NAME: OXYCONTIN OXYCODONE HYDROCHLORIDE FILING DATE : 20131022
AU2004264667 BB	20140828	LSGT	+NDA	EXTENSION OF TERM FOR STANDARD PATENT ACCEPTED (SECT.70)	TEXT : PRODUCT NAME: OXYCONTIN OXYCODONE HYDROCHLORIDE FILING DATE : 20131022
AU2004264667 BB	20140828	LSRV	-NDR	EXTENSION OF TERM OF STANDARD PATENTS, SECTION 70: REFUSAL	TEXT : PRODUCT NAME: OXYCONTIN OXYCODONE HYDROCHLORIDE ADDRESS FOR SERVICE IN AUSTRALIA: ALLENS PATENT & TRADE MARK ATTORNEYS DEUTSCHE BANK PLACE CORNER HUNTER AND PHILLIP STREETS SYDNEY NSW 2000 FILING DATE : 20131022
AU2004264667 BB	20150122	LSGT	+NDB	EXTENSION OF TERM FOR STANDARD PATENT GRANTED (SECT.76)	TEXT : PRODUCT NAME: OXYCONTIN OXYCODONE HYDROCHLORIDE FILING DATE : 20131022 EXTENSION DATE : 20281022
AU2004264667 BB	20281022	PEXP		Calculated Patent Term Expiry	
AU2004308653 AA	20050714	LSPB	+	published / reissued	
AU2004308653 AA	20060713	LSRE	DA3	AMENDMENTS MADE SECTION 104	TEXT : THE NATURE OF THE AMENDMENT IS: AMEND THE INVENTION TITLE TO READ PROCESS FOR THE PRODUCTION OF AN ABUSE- PROOFED DOSAGE FORM
AU2004308653 AA	20060713	LSAS	TC	CHANGE OF APPLICANT'S NAME (SEC. 104)	PARTYTYPE : OWNER OWNER : GRUENENTHAL GMBH OLDPARTY : FORMER NAME: GRUNENTHAL GMBH
AU2004308653 BB	20090903	LSGT	+	granted / extensions (spc, cpc, pte)	
AU2004308653 BB	20100107	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU2004308653 BB	20241223	PEXP		Calculated Patent Term Expiry	
AU2006210145 AA	20060810	LSPB	+	published / reissued	
AU2006210145 AA	20091001	LSRE	DA3	AMENDMENTS MADE SECTION 104	TEXT : THE NATURE OF THE AMENDMENT IS: ADD THE CO-INVENTOR KUGELMANN, HEINRICH
AU2006210145 BB	20110609	LSGT	+	granted / extensions (spc, cpc, pte)	
AU2006210145 BB	20260206	PEXP		Calculated Patent Term Expiry	
AU2006210145 BI	20110630	LSPB	SREP	SPECIFICATION REPUBLISHED	
AU2006210145 BI	20111027	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
BRPI0413318 A	20061010	LSPB	+	published / reissued	
BRPI0413318 A	20160920	LSES	B07D	TECHNICAL EXAMINATION (OPINION) RELATED TO ARTICLE 229 OF INDUSTRIAL PROPERTY LAW	
BRPI0413318 A	20180306	LSES	B07A	TECHNICAL EXAMINATION (OPINION): PUBLICATION OF TECHNICAL EXAMINATION (OPINION)	
BRPI0413318 A	20180918	LSES	B65X	NOTIFICATION OF REQUIREMENT FOR	

				PRIORITY EXAMINATION OF PATENT APPLICATION	
BRPI0413318 A	20190416	LSGT	B09A	DECISION: INTENTION TO GRANT	
BRPI0413318 A	20190514	LSGT	+B16A	PATENT OR CERTIFICATE OF ADDITION OF INVENTION GRANTED	TEXT : PRAZO DE VALIDADE: 10 (DEZ) ANOS CONTADOS A PARTIR DE 14/05/2019, OBSERVADAS AS CONDICOES LEGAIS. (CO) 10 (DEZ) ANOS CONTADOS A PARTIR DE 14/05/2019, OBSERVADAS AS CONDICOES LEGAIS
BRPI0413318 B1	20240805	PEXP		Calculated Patent Term Expiry	
BRPI0413361 A	20061010	LSPB	+	published / reissued	
BRPI0413361 A	20160920	LSES	B07D	TECHNICAL EXAMINATION (OPINION) RELATED TO ARTICLE 229 OF INDUSTRIAL PROPERTY LAW	
BRPI0413361 A	20180306	LSES	B07A	TECHNICAL EXAMINATION (OPINION): PUBLICATION OF TECHNICAL EXAMINATION (OPINION)	
BRPI0413361 A	20180424	LSES	B65X	NOTIFICATION OF REQUIREMENT FOR PRIORITY EXAMINATION OF PATENT APPLICATION	
BRPI0413361 A	20181030	LSGT	B09A	DECISION: INTENTION TO GRANT	
BRPI0413361 A	20181211	LSGT	+B16A	PATENT OR CERTIFICATE OF ADDITION OF INVENTION GRANTED	TEXT : PRAZO DE VALIDADE: 10 (DEZ) ANOS CONTADOS A PARTIR DE 11/12/2018, OBSERVADAS AS CONDICOES LEGAIS.
BRPI0413361 B1	20240805	PEXP		Calculated Patent Term Expiry	
BRPI0606145 A2	20170919	LSES	B07D	TECHNICAL EXAMINATION (OPINION) RELATED TO ARTICLE 229 OF INDUSTRIAL PROPERTY LAW	
BRPI0606145 A2	20180619	LSES	B07A	TECHNICAL EXAMINATION (OPINION): PUBLICATION OF TECHNICAL EXAMINATION (OPINION)	
BRPI0606145 A2	20190716	LSGT	B09A	DECISION: INTENTION TO GRANT	
CA2534925 AA	20060206	LSPB	+	published / reissued	
CA2534925 AA	20090730	LSES	+EEER	EXAMINATION REQUEST	
CA2534925 AA	20150930	LSLE	-FZDE	DEAD	EFFECTIVE DATE : 20150805
CA2534932 AA	20060206	LSPB	+	published / reissued	
CA2534932 AA	20090729	LSES	+EEER	EXAMINATION REQUEST	
CA2534932 AA	20150112	LSLE	-FZDE	DEAD	EFFECTIVE DATE : 20141117
CA2534932 AA	20150930	LSLE	-FZDE	DEAD	EFFECTIVE DATE : 20150805
CA2551231 AA	20060622	LSPB	+	published / reissued	
CA2551231 AA	20091124	LSES	+EEER	EXAMINATION REQUEST	

CA2551231 AA	20160203	LSLE	-FZDE	DEAD	EFFECTIVE DATE : 20151223
CA2595954 AA	20070725	LSPB	+	published / reissued	
CA2595954 AA	20100316	LSES	+EEER	EXAMINATION REQUEST	
CA2595954 C	20110118	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2595954 C	20260206	PEXP		Calculated Patent Term Expiry	
CL2004002016 A1	20050520	LSPB	+	published / reissued	
CL2004002017 A1	20050520	LSPB	+	published / reissued	
CL2004003308 A1	20050930	LSPB	+	published / reissued	
CL2006000259 A1	20060707	LSPB	+	published / reissued	
CL47789 B	20110825	LSGT	+	granted / extensions (spc, cpc, pte)	
CL47789 B	20260825	PEXP		Calculated Patent Term Expiry	
CL52741 B	20160720	LSGT	+	granted / extensions (spc, cpc, pte)	
CL52741 B	20260206	PEXP		Calculated Patent Term Expiry	
CN100577150 C	20100106	LSGT	+	granted / extensions (spc, cpc, pte)	
CN100577150 C	20100106	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN100577150 C	20240805	PEXP		Calculated Patent Term Expiry	
CN101010071 A	20070801	LSPB	+	published / reissued	
CN101010071 A	20070801	LSPB	+C06	PUBLICATION	
CN101010071 A	20070801	LSPB	PB01	公开 (The publication of application)	TEXT : 公开 (DISCLOSURE)
CN101010071 B	20120523	LSGT	+	granted / extensions (spc, cpc, pte)	
CN101010071 B	20120523	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN101010071 B	20120523	LSGT	+GR01	授权 (The grant of patent right)	TEXT : 授权 (AUTHORIZATION)
CN101010071 B	20120808	LSRE	C53	CORRECTION OF PATENT FOR INVENTION OR PATENT APPLICATION	
CN101010071 B	20120808	LSRE	COR	CHANGE OF BIBLIOGRAPHIC DATA	TEXT : CORRECT: INVENTOR; FROM: ARKENAU ELISABETH BARTHOLOMOUS JOHANNES TO: ARKENAU ELISABETH BARTHOLOMOUS JOHANNES KUGELMANN HEINRICH
CN101010071 B	20190614	LSLE	-CF01	未缴年费专利权终止 (Termination of patent right due to unpaid annual fee)	TEXT : 专利权的终止 (TERMINATION OF PATENT RIGHT) EFFECTIVE DATE : 20180629
CN101010071 B	20190614	LSLE	-CF01	TERMINATION OF PATENT RIGHT DUE TO NON-PAYMENT OF ANNUAL FEE	
CN101010071 B	20250629	PEXP		Calculated Patent Term Expiry	
CN101175482 A	20080507	LSPB	+	published / reissued	
CN101175482 A	20080507	LSPB	+C06	PUBLICATION	
CN101175482 B	20130918	LSGT	+	granted / extensions (spc, cpc, pte)	
CN101175482 B	20130918	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN101175482 B	20260206	PEXP		Calculated Patent Term Expiry	
CN1863513 A	20061115	LSPB	+	published / reissued	

CN1863513 A	20061115	LSPB	+C06	PUBLICATION	
CN1863513 B	20130116	LSGT	+	granted / extensions (spc, cpc, pte)	
CN1863513 B	20130116	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
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CN1863514 A	20061115	LSPB	+C06	PUBLICATION	
CN1917862 A	20070221	LSPB	+	published / reissued	
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CN1917862 B	20110803	LSGT	+	granted / extensions (spc, cpc, pte)	
CN1917862 B	20110803	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN1917862 B	20241223	PEXP		Calculated Patent Term Expiry	
CN1980643 A	20070613	LSPB	+	published / reissued	
CN1980643 A	20070613	LSPB	+C06	PUBLICATION	
CN1980643 B	20120530	LSGT	+	granted / extensions (spc, cpc, pte)	
CN1980643 B	20120530	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN1980643 B	20120808	LSRE	C53	CORRECTION OF PATENT FOR INVENTION OR PATENT APPLICATION	
CN1980643 B	20120808	LSRE	COR	CHANGE OF BIBLIOGRAPHIC DATA	TEXT : CORRECT: INVENTOR; FROM: ARKENAU ELISABETH BARTHOLOMOUS JOHANNES TO: ARKENAU ELISABETH BARTHOLOMOUS JOHANNES KUGELMANN HEINRICH
CN1980643 B	20190405	LSLE	-CF01	TERMINATION OF PATENT RIGHT DUE TO NON-PAYMENT OF ANNUAL FEE	
CN1980643 B	20250420	PEXP		Calculated Patent Term Expiry	
CY1107644 T1	20130418	LSGT	+	granted / extensions (spc, cpc, pte)	
CY1107644 T1	20270604	PEXP		Calculated Patent Term Expiry	
CY1107738 T1	20130418	LSGT	+	granted / extensions (spc, cpc, pte)	
CY1107738 T1	20270917	PEXP		Calculated Patent Term Expiry	
CY1110609 T1	20150429	LSGT	+	granted / extensions (spc, cpc, pte)	
CY1114062 T1	20160727	LSGT	+	granted / extensions (spc, cpc, pte)	
CY1114062 T1	20330619	PEXP		Calculated Patent Term Expiry	
CY1117294 T1	20170426	LSGT	+	granted / extensions (spc, cpc, pte)	
CY1117294 T1	20360321	PEXP		Calculated Patent Term Expiry	
CY1118914 T1	20180110	LSGT	+	granted / extensions (spc, cpc, pte)	
CY1118914 T1	20370529	PEXP		Calculated Patent Term Expiry	
CY1119598 T1	20180404	LSGT	+	granted / extensions (spc, cpc, pte)	
CY1119598 T1	20371114	PEXP		Calculated Patent Term Expiry	
DE102004020220 A1	20051110	LSPB	+	published / reissued	
DE102004020220 A1	20051110	LSES	+OM8	SEARCH REPORT	

				AVAILABLE AS TO PARAGRAPH 43 LIT. 1 SENTENCE 1 PATENT LAW	
DE102004020220 A1	20110601	LSES	+8110	REQUEST FOR EXAMINATION PARAGRAPH 44	
DE102004020220 A1	20110601	LSES	+R012	REQUEST FOR EXAMINATION VALIDLY FILED	EFFECTIVE DATE : 20110323
DE102004020220 A1	20140213	LSDW	-R119	APPLICATION DEEMED WITHDRAWN, OR IP RIGHT LAPSED, DUE TO NON-PAYMENT OF RENEWAL FEE	EFFECTIVE DATE : 20131101
DE102004032051 A1	20060119	LSPB	+	published / reissued	
DE102004032051 A1	20060119	LSES	+OM8	SEARCH REPORT AVAILABLE AS TO PARAGRAPH 43 LIT. 1 SENTENCE 1 PATENT LAW	
DE102004032051 A1	20110721	LSES	+R012	REQUEST FOR EXAMINATION VALIDLY FILED	EFFECTIVE DATE : 20110505
DE102004032051 A1	20150203	LSDW	-R119	APPLICATION DEEMED WITHDRAWN, OR IP RIGHT LAPSED, DUE TO NON-PAYMENT OF RENEWAL FEE	
DE102004032051 A1	20150430	LSDW	-R119	APPLICATION DEEMED WITHDRAWN, OR IP RIGHT LAPSED, DUE TO NON-PAYMENT OF RENEWAL FEE	EFFECTIVE DATE : 20150203
DE102005005446 A1	20060810	LSPB	+	published / reissued	
DE102005005446 A1	20060810	LSES	+OM8	SEARCH REPORT AVAILABLE AS TO PARAGRAPH 43 LIT. 1 SENTENCE 1 PATENT LAW	
DE102005005446 A1	20120315	LSES	+R012	REQUEST FOR EXAMINATION VALIDLY FILED	EFFECTIVE DATE : 20120113
DE10336400 A1	20050324	LSPB	+	published / reissued	
DE10336400 A1	20050324	LSES	+OM8	SEARCH REPORT AVAILABLE AS TO PARAGRAPH 43 LIT. 1 SENTENCE 1 PATENT LAW	
DE10336400 A1	20101104	LSLE	-8141	DISPOSAL/NO REQUEST FOR EXAMINATION	
DE10361596 A1	20050929	LSPB	+	published / reissued	
DE10361596 A1	20050929	LSES	+OM8	SEARCH REPORT AVAILABLE AS TO PARAGRAPH 43 LIT. 1 SENTENCE 1 PATENT LAW	
DE10361596 A1	20110324	LSLE	-8141	DISPOSAL/NO REQUEST FOR EXAMINATION	
DE502004003234 D1	20080313	LSOP	-8363	OPPOSITION AGAINST THE PATENT	
DE502004003234 D1	20100506	LSGT	+8365	FULLY VALID AFTER OPPOSITION PROCEEDINGS	
DE502004004205 D1	20080619	LSOP	-8363	OPPOSITION AGAINST THE PATENT	
DE502004004205 D1	20100506	LSGT	+8365	FULLY VALID AFTER OPPOSITION PROCEEDINGS	
DE502004010368 D1	20101202	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	

DE502004015124 D1	20160217	LSAS	R081	CHANGE OF APPLICANT/PATENTEE	PARTYTYPE : OWNER OLDPARTY : GRÜNENTHAL GMBH, 52078 AACHEN, DE
DE502005011687 D1	20181101	LSDW	-R119	APPLICATION DEEMED WITHDRAWN, OR IP RIGHT LAPSED, DUE TO NON-PAYMENT OF RENEWAL FEE	
DE502005013210 D1	20121024	LSAS	R081	CHANGE OF APPLICANT/PATENTEE	PARTYTYPE : OWNER OLDPARTY : GRÜNENTHAL GMBH, 52078 AACHEN, DE
DE502005013210 D1	20190101	LSDW	-R119	APPLICATION DEEMED WITHDRAWN, OR IP RIGHT LAPSED, DUE TO NON-PAYMENT OF RENEWAL FEE	
DK1658054 T3	20071001	LSGT	+	granted / extensions (spc, cpc, pte)	
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DK1699440 T3	20100329	LSGT	+	granted / extensions (spc, cpc, pte)	
DK1699440 T3	20241223	PEXP		Calculated Patent Term Expiry	
DK1842533 T3	20130527	LSGT	+	granted / extensions (spc, cpc, pte)	
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DK1842533 T3	20240805	PEXP		Calculated Patent Term Expiry	
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DK1845956 T3	20170710	LSGT	+	granted / extensions (spc, cpc, pte)	
DK1845956 T3	20260206	PEXP		Calculated Patent Term Expiry	
DK1859789 T3	20160411	LSGT	+	granted / extensions (spc, cpc, pte)	
DK1859789 T3	20160411	LSGT	+	granted / extensions (spc, cpc, pte)	
DK1859789 T3	20240805	PEXP		Calculated Patent Term Expiry	
DK1859789 T3	20240805	PEXP		Calculated Patent Term Expiry	
DK2478896 T3	20171120	LSGT	+	granted / extensions (spc, cpc, pte)	
DK2478896 T3	20260206	PEXP		Calculated Patent Term Expiry	
ECSP066345 A	20060830	LSPB	+	published / reissued	
ECSP066346 A	20060830	LSPB	+	published / reissued	
EP1658054 A1	20060524	LSPB	+	published / reissued	
EP1658054 A1	20060524	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20060306
EP1658054 A1	20151030	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20150713 YEAR OF FEE PAYMENT : 12
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EP1658054 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM	COUNTRY OF REF DOCUMENT : BG PAYMENT DATE : 20160614

				NATIONAL OFFICE TO EPO]	YEAR OF FEE PAYMENT : 13
EP1658054 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20160616 YEAR OF FEE PAYMENT : 13
EP1658054 A1	20160930	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20160801 YEAR OF FEE PAYMENT : 13
EP1658054 A1	20160930	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20160810 YEAR OF FEE PAYMENT : 13
EP1658054 A1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20160803 YEAR OF FEE PAYMENT : 13
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EP1658054 A1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20160809 YEAR OF FEE PAYMENT : 13
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EP1658054 A1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY PAYMENT DATE : 20160706 YEAR OF FEE PAYMENT : 13
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EP1658054 A1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20160714 YEAR OF FEE PAYMENT : 13
EP1658054 A1	20161230	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20160712 YEAR OF FEE PAYMENT : 13
EP1658054 A1	20161230	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20160624 YEAR OF FEE PAYMENT : 13

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EP1658054 B1	20070808	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D TEXT : LANGUAGE OF EP DOCUMENT: GERMAN
EP1658054 B1	20070927	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : RO REF LEGAL EVENT CODE : EPE
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EP1658054 B1	20071026	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HK REF LEGAL EVENT CODE : GR REF DOCUMENT NUMBER : 1095081 COUNTRY OF REF DOCUMENT : HK
EP1658054 B1	20071228	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HU REF LEGAL EVENT CODE : AG4A REF DOCUMENT NUMBER : E002018 COUNTRY OF REF DOCUMENT : HU
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EP1658054 B1	20160712	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 13
EP1658054 B1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20160627 YEAR OF FEE PAYMENT : 13
EP1658054 B1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20160809 YEAR OF FEE PAYMENT : 13
EP1658054 B1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20160810 YEAR OF FEE PAYMENT : 13

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EP1658054 B1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20160804 YEAR OF FEE PAYMENT : 13
EP1658054 B1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20160811 YEAR OF FEE PAYMENT : 13
EP1658054 B1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20160714 YEAR OF FEE PAYMENT : 13
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EP1658054 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20170615 YEAR OF FEE PAYMENT : 14
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EP1658054 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG PAYMENT DATE : 20170615 YEAR OF FEE PAYMENT : 14
EP1658054 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20170613 YEAR OF FEE PAYMENT : 14
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EP1658054 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170714 YEAR OF FEE PAYMENT : 14
EP1658054 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20170901 YEAR OF FEE PAYMENT : 14
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EP1658054 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20170725 YEAR OF FEE PAYMENT : 14
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EP1658054 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20170623 YEAR OF FEE PAYMENT : 14
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EP1658054 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20170706 YEAR OF FEE PAYMENT : 14
EP1658054 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20170810 YEAR OF FEE PAYMENT : 14
EP1658054 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20170711 YEAR OF FEE PAYMENT : 14
EP1658054 B1	20180712	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 15
EP1658054 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK PAYMENT DATE : 20180627 YEAR OF FEE PAYMENT : 15

EP1658054 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20180614 YEAR OF FEE PAYMENT : 15
EP1658054 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20180726 YEAR OF FEE PAYMENT : 15
EP1658054 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20180627 YEAR OF FEE PAYMENT : 15
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EP1658054 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20180815 YEAR OF FEE PAYMENT : 15
EP1658054 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180831 YEAR OF FEE PAYMENT : 15
EP1658054 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20180809 YEAR OF FEE PAYMENT : 15
EP1658054 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20180823 YEAR OF FEE PAYMENT : 15
EP1658054 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20180712 YEAR OF FEE PAYMENT : 15
EP1658054 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20180903 YEAR OF FEE PAYMENT : 15
EP1658054 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20180717 YEAR OF FEE PAYMENT : 15
EP1658054 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20180810 YEAR OF FEE PAYMENT : 15
EP1658054 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20180620 YEAR OF FEE PAYMENT : 15
EP1658054 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20180810 YEAR OF FEE PAYMENT : 15
EP1658054 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20180801 YEAR OF FEE PAYMENT : 15

				EPO]	
EP1658054 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20180725 YEAR OF FEE PAYMENT : 15
EP1658054 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20180801 YEAR OF FEE PAYMENT : 15
EP1658054 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20180809 YEAR OF FEE PAYMENT : 15
EP1658054 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20180817 YEAR OF FEE PAYMENT : 15
EP1658054 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20180713 YEAR OF FEE PAYMENT : 15
EP1658054 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20180716 YEAR OF FEE PAYMENT : 15
EP1658054 B1	20181231	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20180803 YEAR OF FEE PAYMENT : 15
EP1658054 B1	20190131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY PAYMENT DATE : 20180706 YEAR OF FEE PAYMENT : 15
EP1658054 B1	20240805	PEXP		Calculated Patent Term Expiry	
EP1658055 A1	20060524	LSPB	+	published / reissued	
EP1658055 A1	20060524	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20060306
EP1658055 A1	20151030	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20150713 YEAR OF FEE PAYMENT : 12
EP1658055 A1	20160229	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20150811 YEAR OF FEE PAYMENT : 12
EP1658055 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG PAYMENT DATE : 20160614 YEAR OF FEE PAYMENT : 13
EP1658055 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20160616 YEAR OF FEE PAYMENT : 13
EP1658055 A1	20160930	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20160810 YEAR OF FEE PAYMENT : 13
EP1658055 A1	20160930	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20160801 YEAR OF FEE PAYMENT : 13
EP1658055 A1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20160831 YEAR OF FEE PAYMENT : 13
EP1658055 A1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : EE PAYMENT DATE : 20160727

				[ANNOUNCED FROM NATIONAL OFFICE TO EPO]	YEAR OF FEE PAYMENT : 13
EP1658055 A1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20160812 YEAR OF FEE PAYMENT : 13
EP1658055 A1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20160809 YEAR OF FEE PAYMENT : 13
EP1658055 A1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20160822 YEAR OF FEE PAYMENT : 13
EP1658055 A1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20160803 YEAR OF FEE PAYMENT : 13
EP1658055 A1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK PAYMENT DATE : 20160706 YEAR OF FEE PAYMENT : 13
EP1658055 A1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20160712 YEAR OF FEE PAYMENT : 13
EP1658055 A1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20160722 YEAR OF FEE PAYMENT : 13
EP1658055 A1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20160708 YEAR OF FEE PAYMENT : 13
EP1658055 A1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20160714 YEAR OF FEE PAYMENT : 13
EP1658055 A1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY PAYMENT DATE : 20160706 YEAR OF FEE PAYMENT : 13
EP1658055 A1	20161230	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20160624 YEAR OF FEE PAYMENT : 13
EP1658055 A1	20161230	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20160712 YEAR OF FEE PAYMENT : 13
EP1658055 B1	20070314	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1658055 B1	20070314	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D TEXT : NOT ENGLISH
EP1658055 B1	20070413	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1658055 B1	20070502	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D TEXT : LANGUAGE OF EP DOCUMENT: GERMAN
EP1658055 B1	20070614	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : RO REF LEGAL EVENT CODE : EPE
EP1658055 B1	20070723	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : EP REF DOCUMENT NUMBER :

					20070401705 COUNTRY OF REF DOCUMENT : GR
EP1658055 B1	20070928	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HK REF LEGAL EVENT CODE : GR REF DOCUMENT NUMBER : 1095082 COUNTRY OF REF DOCUMENT : HK
EP1658055 B1	20071116	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2285497 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP1658055 B1	20080123	LSOP	-26	OPPOSITION FILED	PARTYTYPE : OPPONENT OPPONENT : PURDUE PHARMA LP EFFECTIVE DATE : 20071214
EP1658055 B1	20080303	LSOP	-NLR1	NL: OPPOSITION HAS BEEN FILED WITH THE EPO	PARTYTYPE : OPPONENT REF COUNTRY CODE : EP OPPONENT : PURDUE PHARMA LP
EP1658055 B1	20080430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20070831
EP1658055 B1	20080630	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HU REF LEGAL EVENT CODE : AG4A REF DOCUMENT NUMBER : E002900 COUNTRY OF REF DOCUMENT : HU
EP1658055 B1	20100324	LSRE	+27O	OPPOSITION REJECTED	EFFECTIVE DATE : 20091021
EP1658055 B1	20110328	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : HU OWNER : GRUENENTHAL GMBH., DE REF LEGAL EVENT CODE : HC9C
EP1658055 B1	20160712	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 13
EP1658055 B1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20160628 YEAR OF FEE PAYMENT : 13
EP1658055 B1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20160809 YEAR OF FEE PAYMENT : 13
EP1658055 B1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20160810 YEAR OF FEE PAYMENT : 13
EP1658055 B1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20160711 YEAR OF FEE PAYMENT : 13
EP1658055 B1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20160811 YEAR OF FEE PAYMENT : 13
EP1658055 B1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20160725 YEAR OF FEE PAYMENT : 13

EP1658055 B1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20160804 YEAR OF FEE PAYMENT : 13
EP1658055 B1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20160714 YEAR OF FEE PAYMENT : 13
EP1658055 B1	20170714	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 14
EP1658055 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20170615 YEAR OF FEE PAYMENT : 14
EP1658055 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG PAYMENT DATE : 20170615 YEAR OF FEE PAYMENT : 14
EP1658055 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20170613 YEAR OF FEE PAYMENT : 14
EP1658055 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20170626 YEAR OF FEE PAYMENT : 14
EP1658055 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20170724 YEAR OF FEE PAYMENT : 14
EP1658055 B1	20170929	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20170814 YEAR OF FEE PAYMENT : 14
EP1658055 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170714 YEAR OF FEE PAYMENT : 14
EP1658055 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20170802 YEAR OF FEE PAYMENT : 14
EP1658055 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20170714 YEAR OF FEE PAYMENT : 14
EP1658055 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20170824 YEAR OF FEE PAYMENT : 14
EP1658055 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE PAYMENT DATE : 20170726 YEAR OF FEE PAYMENT : 14
EP1658055 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20170809 YEAR OF FEE PAYMENT : 14
EP1658055 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20170901 YEAR OF FEE PAYMENT : 14
EP1658055 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20170711 YEAR OF FEE PAYMENT : 14
EP1658055 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO	COUNTRY OF REF DOCUMENT :

				NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	CY PAYMENT DATE : 20170710 YEAR OF FEE PAYMENT : 14
EP1658055 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170831 YEAR OF FEE PAYMENT : 14
EP1658055 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20170814 YEAR OF FEE PAYMENT : 14
EP1658055 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK PAYMENT DATE : 20170703 YEAR OF FEE PAYMENT : 14
EP1658055 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20170711 YEAR OF FEE PAYMENT : 14
EP1658055 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20170706 YEAR OF FEE PAYMENT : 14
EP1658055 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20170802 YEAR OF FEE PAYMENT : 14
EP1658055 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20170810 YEAR OF FEE PAYMENT : 14
EP1658055 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20170623 YEAR OF FEE PAYMENT : 14
EP1658055 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20170725 YEAR OF FEE PAYMENT : 14
EP1658055 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20170810 YEAR OF FEE PAYMENT : 14
EP1658055 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20170809 YEAR OF FEE PAYMENT : 14
EP1658055 B1	20180712	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 15
EP1658055 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK PAYMENT DATE : 20180627 YEAR OF FEE PAYMENT : 15
EP1658055 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20180627 YEAR OF FEE PAYMENT : 15
EP1658055 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG PAYMENT DATE : 20180615 YEAR OF FEE PAYMENT : 15
EP1658055 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20180726 YEAR OF FEE PAYMENT : 15
EP1658055 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20180614

				[ANNOUNCED FROM NATIONAL OFFICE TO EPO]	YEAR OF FEE PAYMENT : 15
EP1658055 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20180612 YEAR OF FEE PAYMENT : 15
EP1658055 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20180823 YEAR OF FEE PAYMENT : 15
EP1658055 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20180809 YEAR OF FEE PAYMENT : 15
EP1658055 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20180815 YEAR OF FEE PAYMENT : 15
EP1658055 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE PAYMENT DATE : 20180721 YEAR OF FEE PAYMENT : 15
EP1658055 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180831 YEAR OF FEE PAYMENT : 15
EP1658055 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20180712 YEAR OF FEE PAYMENT : 15
EP1658055 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20180903 YEAR OF FEE PAYMENT : 15
EP1658055 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20180801 YEAR OF FEE PAYMENT : 15
EP1658055 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20180809 YEAR OF FEE PAYMENT : 15
EP1658055 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20180817 YEAR OF FEE PAYMENT : 15
EP1658055 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20180801 YEAR OF FEE PAYMENT : 15
EP1658055 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20180725 YEAR OF FEE PAYMENT : 15
EP1658055 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20180810 YEAR OF FEE PAYMENT : 15
EP1658055 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20180620 YEAR OF FEE PAYMENT : 15
EP1658055 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20180717 YEAR OF FEE PAYMENT : 15
EP1658055 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : DK

				[ANNOUNCED FROM NATIONAL OFFICE TO EPO]	PAYMENT DATE : 20180810 YEAR OF FEE PAYMENT : 15
EP1658055 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20180716 YEAR OF FEE PAYMENT : 15
EP1658055 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20180713 YEAR OF FEE PAYMENT : 15
EP1658055 B1	20181231	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20180803 YEAR OF FEE PAYMENT : 15
EP1658055 B1	20190131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY PAYMENT DATE : 20180706 YEAR OF FEE PAYMENT : 15
EP1658055 B1	20240805	PEXP		Calculated Patent Term Expiry	
EP1699440 A1	20060913	LSPB	+	published / reissued	
EP1699440 A1	20060913	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20060724
EP1699440 A1	20140228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20131122 YEAR OF FEE PAYMENT : 10
EP1699440 A1	20160129	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20151112 YEAR OF FEE PAYMENT : 12
EP1699440 A1	20160129	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG PAYMENT DATE : 20151027 YEAR OF FEE PAYMENT : 12
EP1699440 A1	20160229	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20151204 YEAR OF FEE PAYMENT : 12
EP1699440 A1	20160229	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20151222 YEAR OF FEE PAYMENT : 12
EP1699440 A1	20160229	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20151123 YEAR OF FEE PAYMENT : 12
EP1699440 A1	20160229	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20151211 YEAR OF FEE PAYMENT : 12
EP1699440 A1	20160229	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20151112 YEAR OF FEE PAYMENT : 12
EP1699440 A1	20160229	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20151113 YEAR OF FEE PAYMENT : 12
EP1699440 A1	20160229	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20151015 YEAR OF FEE PAYMENT : 12
EP1699440 A1	20160229	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20151125 YEAR OF FEE PAYMENT : 12

EP1699440 A1	20160429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20151221 YEAR OF FEE PAYMENT : 12
EP1699440 A1	20160429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20151231 YEAR OF FEE PAYMENT : 12
EP1699440 B1	20091111	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1699440 B1	20091111	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D TEXT : NOT ENGLISH
EP1699440 B1	20091113	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1699440 B1	20091209	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP1699440 B1	20100211	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : RO REF LEGAL EVENT CODE : EPE
EP1699440 B1	20100322	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : EP REF DOCUMENT NUMBER : 20100400336 COUNTRY OF REF DOCUMENT : GR
EP1699440 B1	20100409	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HK REF LEGAL EVENT CODE : GR REF DOCUMENT NUMBER : 1099511 COUNTRY OF REF DOCUMENT : HK
EP1699440 B1	20100414	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2336571 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP1699440 B1	20100430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IS NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20100311
EP1699440 B1	20100628	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HU REF LEGAL EVENT CODE : AG4A REF DOCUMENT NUMBER : E007342 COUNTRY OF REF DOCUMENT : HU
EP1699440 B1	20100730	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20100701
EP1699440 B1	20101020	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20100812
EP1699440 B1	20151110	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 12
EP1699440 B1	20161111	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 13
EP1699440 B1	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20161212

				[ANNOUNCED FROM NATIONAL OFFICE TO EPO]	YEAR OF FEE PAYMENT : 13
EP1699440 B1	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20161129 YEAR OF FEE PAYMENT : 13
EP1699440 B1	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20161111 YEAR OF FEE PAYMENT : 13
EP1699440 B1	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20161212 YEAR OF FEE PAYMENT : 13
EP1699440 B1	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20161221 YEAR OF FEE PAYMENT : 13
EP1699440 B1	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20161213 YEAR OF FEE PAYMENT : 13
EP1699440 B1	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20161124 YEAR OF FEE PAYMENT : 13
EP1699440 B1	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE PAYMENT DATE : 20161128 YEAR OF FEE PAYMENT : 13
EP1699440 B1	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY PAYMENT DATE : 20161108 YEAR OF FEE PAYMENT : 13
EP1699440 B1	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20161213 YEAR OF FEE PAYMENT : 13
EP1699440 B1	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK PAYMENT DATE : 20161121 YEAR OF FEE PAYMENT : 13
EP1699440 B1	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20161209 YEAR OF FEE PAYMENT : 13
EP1699440 B1	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20161212 YEAR OF FEE PAYMENT : 13
EP1699440 B1	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LT PAYMENT DATE : 20161118 YEAR OF FEE PAYMENT : 13
EP1699440 B1	20170228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20161220 YEAR OF FEE PAYMENT : 13
EP1699440 B1	20170228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20161213 YEAR OF FEE PAYMENT : 13
EP1699440 B1	20170228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20161125 YEAR OF FEE PAYMENT : 13
EP1699440 B1	20170228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20161024

				[ANNOUNCED FROM NATIONAL OFFICE TO EPO]	YEAR OF FEE PAYMENT : 13
EP1699440 B1	20170228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG PAYMENT DATE : 20161021 YEAR OF FEE PAYMENT : 13
EP1699440 B1	20170228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20161110 YEAR OF FEE PAYMENT : 13
EP1699440 B1	20170228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20161116 YEAR OF FEE PAYMENT : 13
EP1699440 B1	20170228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20161221 YEAR OF FEE PAYMENT : 13
EP1699440 B1	20170228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20161118 YEAR OF FEE PAYMENT : 13
EP1699440 B1	20170228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20161111 YEAR OF FEE PAYMENT : 13
EP1699440 B1	20170228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20161013 YEAR OF FEE PAYMENT : 13
EP1699440 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20161231 YEAR OF FEE PAYMENT : 13
EP1699440 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20161201 YEAR OF FEE PAYMENT : 13
EP1699440 B1	20171113	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 14
EP1699440 B1	20180131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20171113 YEAR OF FEE PAYMENT : 14
EP1699440 B1	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20171220 YEAR OF FEE PAYMENT : 14
EP1699440 B1	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20171212 YEAR OF FEE PAYMENT : 14
EP1699440 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20171231 YEAR OF FEE PAYMENT : 14
EP1699440 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20180102 YEAR OF FEE PAYMENT : 14
EP1699440 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20171221 YEAR OF FEE PAYMENT : 14
EP1699440 B1	20180716	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : EE REF LEGAL EVENT CODE : MM4A REF DOCUMENT NUMBER : E004129

					COUNTRY OF REF DOCUMENT : EE EFFECTIVE DATE : 20171231
EP1699440 B1	20180725	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : LT REF LEGAL EVENT CODE : MM4D EFFECTIVE DATE : 20171223
EP1699440 B1	20180730	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DK REF LEGAL EVENT CODE : EBP EFFECTIVE DATE : 20171231
EP1699440 B1	20180731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20171223
EP1699440 B1	20180731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180625
EP1699440 B1	20180731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20171223
EP1699440 B1	20180731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20171223
EP1699440 B1	20180815	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MM01 REF DOCUMENT NUMBER : 447942 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20171223
EP1699440 B1	20180831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20171223
EP1699440 B1	20180831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20171224
EP1699440 B1	20180903	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SK REF LEGAL EVENT CODE : MM4A REF DOCUMENT NUMBER : E 6787 COUNTRY OF REF DOCUMENT : SK EFFECTIVE DATE : 20171223
EP1699440 B1	20180919	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP1699440 B1	20180928	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180101
EP1699440 B1	20180928	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20171223
EP1699440 B1	20180928	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SI REF LEGAL EVENT CODE : KO00 EFFECTIVE DATE : 20180806

EP1699440 B1	20181031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20171231
EP1699440 B1	20181031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20171223
EP1699440 B1	20181031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20171223
EP1699440 B1	20181031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20171224
EP1699440 B1	20181130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180705
EP1699440 B1	20181130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20171231
EP1699440 B1	20181130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20171223
EP1699440 B1	20181130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20171224
EP1699440 B1	20181130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20171223
EP1699440 B1	20190131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180706
EP1699440 B1	20190131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20171231
EP1699440 B1	20190228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20181219 YEAR OF FEE PAYMENT : 15
EP1699440 B1	20190228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20181121 YEAR OF FEE PAYMENT : 15

EP1699440 B1	20190228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20181217 YEAR OF FEE PAYMENT : 15
EP1699440 B1	20190430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20171223
EP1699440 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20181220 YEAR OF FEE PAYMENT : 15
EP1699440 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20181231 YEAR OF FEE PAYMENT : 15
EP1699440 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20190102 YEAR OF FEE PAYMENT : 15
EP1699440 B1	20241223	PEXP		Calculated Patent Term Expiry	
EP1740156 A1	20070110	LSPB	+	published / reissued	
EP1740156 A1	20070110	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20061122
EP1740156 A1	20160429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20160318 YEAR OF FEE PAYMENT : 12
EP1740156 A1	20160429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK PAYMENT DATE : 20160315 YEAR OF FEE PAYMENT : 12
EP1740156 A1	20160429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20160311 YEAR OF FEE PAYMENT : 12
EP1740156 A1	20160531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20160314 YEAR OF FEE PAYMENT : 12
EP1740156 A1	20160531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20160309 YEAR OF FEE PAYMENT : 12
EP1740156 A1	20160531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20160314 YEAR OF FEE PAYMENT : 12
EP1740156 A1	20160630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20160411 YEAR OF FEE PAYMENT : 12
EP1740156 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20160411 YEAR OF FEE PAYMENT : 12
EP1740156 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20160430 YEAR OF FEE PAYMENT : 12
EP1740156 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20160420 YEAR OF FEE PAYMENT : 12
EP1740156 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO	COUNTRY OF REF DOCUMENT :

				NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	CZ PAYMENT DATE : 20160405 YEAR OF FEE PAYMENT : 12
EP1740156 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20160411 YEAR OF FEE PAYMENT : 12
EP1740156 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20160420 YEAR OF FEE PAYMENT : 12
EP1740156 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20160314 YEAR OF FEE PAYMENT : 12
EP1740156 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20160418 YEAR OF FEE PAYMENT : 12
EP1740156 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20160330 YEAR OF FEE PAYMENT : 12
EP1740156 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20160317 YEAR OF FEE PAYMENT : 12
EP1740156 B1	20110727	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1740156 B1	20110727	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D TEXT : NOT ENGLISH
EP1740156 B1	20110729	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1740156 B1	20110810	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : T3
EP1740156 B1	20110915	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 502005011687 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20110915
EP1740156 B1	20111104	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HK REF LEGAL EVENT CODE : GR REF DOCUMENT NUMBER : 1100639 COUNTRY OF REF DOCUMENT : HK
EP1740156 B1	20111110	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2367907 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) : EFFECTIVE DATE : 20111110
EP1740156 B1	20111228	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HU REF LEGAL EVENT CODE : AG4A REF DOCUMENT NUMBER : E011926 COUNTRY OF REF DOCUMENT : HU
EP1740156 B1	20120131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20110727

EP1740156 B1	20120131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IS NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20111127
EP1740156 B1	20120131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20110727
EP1740156 B1	20120131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20110727
EP1740156 B1	20120229	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20111028
EP1740156 B1	20120229	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20110727
EP1740156 B1	20120531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20110727
EP1740156 B1	20120531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20110727
EP1740156 B1	20120629	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20110727
EP1740156 B1	20120704	LSGT	D26N	NO OPPOSITION FILED (DELETED)	
EP1740156 B1	20250420	PEXP		Calculated Patent Term Expiry	
EP1740156 B8	20120711	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20120502
EP1740156 B8	20120830	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 502005011687 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20120502

EP1740156 B8	20121105	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : SK OWNER : KUGELMANN HEINRICH, AACHEN, DE REF LEGAL EVENT CODE : TC4A REF DOCUMENT NUMBER : E 10150 COUNTRY OF REF DOCUMENT : SK EFFECTIVE DATE : 20120920
EP1740156 B8	20121105	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : SK OWNER : ARKENAU-MARIC ELISABETH, DR., KOELN, DE REF LEGAL EVENT CODE : TC4A REF DOCUMENT NUMBER : E 10150 COUNTRY OF REF DOCUMENT : SK EFFECTIVE DATE : 20120920
EP1740156 B8	20121105	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : SK OWNER : BARTHOLOMAEUS JOHANNES, AACHEN, DE REF LEGAL EVENT CODE : TC4A REF DOCUMENT NUMBER : E 10150 COUNTRY OF REF DOCUMENT : SK EFFECTIVE DATE : 20120920
EP1740156 B8	20121130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120430
EP1740156 B8	20130628	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20111027
EP1740156 B8	20140530	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120420
EP1740156 B8	20160309	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 12
EP1740156 B8	20170313	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 13
EP1740156 B8	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170313 YEAR OF FEE PAYMENT : 13
EP1740156 B8	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK PAYMENT DATE : 20170313 YEAR OF FEE PAYMENT : 13
EP1740156 B8	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20170329 YEAR OF FEE PAYMENT : 13
EP1740156 B8	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20170313 YEAR OF FEE PAYMENT : 13
EP1740156 B8	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20170314 YEAR OF FEE PAYMENT : 13

EP1740156 B8	20170630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20170317 YEAR OF FEE PAYMENT : 13
EP1740156 B8	20170630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20170322 YEAR OF FEE PAYMENT : 13
EP1740156 B8	20170630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20170412 YEAR OF FEE PAYMENT : 13
EP1740156 B8	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20170419 YEAR OF FEE PAYMENT : 13
EP1740156 B8	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170430 YEAR OF FEE PAYMENT : 13
EP1740156 B8	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20170412 YEAR OF FEE PAYMENT : 13
EP1740156 B8	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20170410 YEAR OF FEE PAYMENT : 13
EP1740156 B8	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20170327 YEAR OF FEE PAYMENT : 13
EP1740156 B8	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20170418 YEAR OF FEE PAYMENT : 13
EP1740156 B8	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20170327 YEAR OF FEE PAYMENT : 13
EP1740156 B8	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20170420 YEAR OF FEE PAYMENT : 13
EP1740156 B8	20170929	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20170322 YEAR OF FEE PAYMENT : 13
EP1740156 B8	20181101	LSDW	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R119 REF DOCUMENT NUMBER : 502005011687 COUNTRY OF REF DOCUMENT : DE
EP1740156 B8	20181130	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP1740156 B8	20181215	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MM01 REF DOCUMENT NUMBER : 517610 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20180420
EP1740156 B8	20181226	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20180420
EP1740156 B8	20190108	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SK REF LEGAL EVENT CODE : MM4A REF DOCUMENT NUMBER : E

					10150 COUNTRY OF REF DOCUMENT : SK EFFECTIVE DATE : 20180420
EP1740156 B8	20190123	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP1740156 B8	20190131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180421
EP1740156 B8	20190131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20181101
EP1740156 B8	20190131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180501
EP1740156 B8	20190131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180420
EP1740156 B8	20190131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180420
EP1740156 B8	20190131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20181022
EP1740156 B8	20190131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180420
EP1740156 B8	20190131	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SI REF LEGAL EVENT CODE : KO00 EFFECTIVE DATE : 20181204
EP1740156 B8	20190228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180430
EP1740156 B8	20190228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180421
EP1740156 B8	20190228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180420
EP1740156 B8	20190228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180430

EP1740156 B8	20190228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180430
EP1740156 B8	20190430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180430
EP1740156 B8	20190430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180420
EP1740156 B8	20190430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180420
EP1765298 A1	20070328	LSPB	+	published / reissued	
EP1765298 A1	20070328	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20070201
EP1765298 A1	20090826	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20090723
EP1765298 A1	20140829	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20121024
EP1765298 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20160629 YEAR OF FEE PAYMENT : 12
EP1765298 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20160608 YEAR OF FEE PAYMENT : 12
EP1765298 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20160511 YEAR OF FEE PAYMENT : 12
EP1765298 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20160613 YEAR OF FEE PAYMENT : 12
EP1765298 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20160609 YEAR OF FEE PAYMENT : 12
EP1765298 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20160610 YEAR OF FEE PAYMENT : 12
EP1765298 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20160525 YEAR OF FEE PAYMENT : 12
EP1765298 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK PAYMENT DATE : 20160606 YEAR OF FEE PAYMENT : 12
EP1765298 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20160516 YEAR OF FEE PAYMENT : 12

				NATIONAL OFFICE TO EPO]	
EP1765298 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20160413 YEAR OF FEE PAYMENT : 12
EP1765298 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20160527 YEAR OF FEE PAYMENT : 12
EP1765298 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20160525 YEAR OF FEE PAYMENT : 12
EP1765298 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20160523 YEAR OF FEE PAYMENT : 12
EP1765298 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20160627 YEAR OF FEE PAYMENT : 12
EP1765298 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20160425 YEAR OF FEE PAYMENT : 12
EP1765298 A1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20160621 YEAR OF FEE PAYMENT : 12
EP1765298 A1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20160630 YEAR OF FEE PAYMENT : 12
EP1765298 B1	20121024	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1765298 B1	20121024	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D TEXT : NOT ENGLISH
EP1765298 B1	20121031	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1765298 B1	20121115	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 580515 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20121115
EP1765298 B1	20121121	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D TEXT : LANGUAGE OF EP DOCUMENT: GERMAN
EP1765298 B1	20121121	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : T3
EP1765298 B1	20121220	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 502005013210 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20121220
EP1765298 B1	20121228	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2393787 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) : EFFECTIVE DATE : 20121228

EP1765298 B1	20130430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20121024
EP1765298 B1	20130430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20121024
EP1765298 B1	20130430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IS NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20130224
EP1765298 B1	20130531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20130125
EP1765298 B1	20130531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20121024
EP1765298 B1	20130607	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HK REF LEGAL EVENT CODE : GR REF DOCUMENT NUMBER : 1107931 COUNTRY OF REF DOCUMENT : HK
EP1765298 B1	20130729	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HU REF LEGAL EVENT CODE : AG4A REF DOCUMENT NUMBER : E016017 COUNTRY OF REF DOCUMENT : HU
EP1765298 B1	20130731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20121024
EP1765298 B1	20130731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20130124
EP1765298 B1	20130731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20121024
EP1765298 B1	20130830	LSLE	-PG25	LAPSED IN A CONTRACTING STATE	COUNTRY OF REF DOCUMENT : RO

				[ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20121024
EP1765298 B1	20131002	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20130725
EP1765298 B1	20131128	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 502005013210 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20130725
EP1765298 B1	20140131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20121024
EP1765298 B1	20140731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20121024
EP1765298 B1	20150731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20130629
EP1765298 B1	20160516	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 12
EP1765298 B1	20170511	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 13
EP1765298 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20170609 YEAR OF FEE PAYMENT : 13
EP1765298 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20170613 YEAR OF FEE PAYMENT : 13
EP1765298 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170511 YEAR OF FEE PAYMENT : 13
EP1765298 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20170628 YEAR OF FEE PAYMENT : 13
EP1765298 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20170614 YEAR OF FEE PAYMENT : 13
EP1765298 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK PAYMENT DATE : 20170601 YEAR OF FEE PAYMENT : 13
EP1765298 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20170619 YEAR OF FEE PAYMENT : 13
EP1765298 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO	COUNTRY OF REF DOCUMENT : PT

				NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	PAYMENT DATE : 20170627 YEAR OF FEE PAYMENT : 13
EP1765298 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20170413 YEAR OF FEE PAYMENT : 13
EP1765298 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20170614 YEAR OF FEE PAYMENT : 13
EP1765298 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20170511 YEAR OF FEE PAYMENT : 13
EP1765298 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20170525 YEAR OF FEE PAYMENT : 13
EP1765298 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20170424 YEAR OF FEE PAYMENT : 13
EP1765298 B1	20170929	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20170601 YEAR OF FEE PAYMENT : 13
EP1765298 B1	20170929	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20170524 YEAR OF FEE PAYMENT : 13
EP1765298 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20170704 YEAR OF FEE PAYMENT : 13
EP1765298 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170630 YEAR OF FEE PAYMENT : 13
EP1765298 B1	20190101	LSDW	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R119 REF DOCUMENT NUMBER : 502005013210 COUNTRY OF REF DOCUMENT : DE
EP1765298 B1	20190131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20181231
EP1765298 B1	20190131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180629
EP1765298 B1	20190131	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP1765298 B1	20190215	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MM01 REF DOCUMENT NUMBER : 580515 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20180629
EP1765298 B1	20190227	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20180629

EP1765298 B1	20190301	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SK REF LEGAL EVENT CODE : MM4A REF DOCUMENT NUMBER : E 13084 COUNTRY OF REF DOCUMENT : SK EFFECTIVE DATE : 20180629
EP1765298 B1	20190329	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180701
EP1765298 B1	20190329	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SI REF LEGAL EVENT CODE : KO00 EFFECTIVE DATE : 20190215
EP1765298 B1	20190403	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP1765298 B1	20190430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180630
EP1765298 B1	20190430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180629
EP1765298 B1	20190430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20190101
EP1765298 B1	20190430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180630
EP1765298 B1	20190430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180629
EP1765298 B1	20190430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180629
EP1765298 B1	20190430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180630
EP1765298 B1	20190430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180629
EP1765298 B1	20190430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180630
EP1765298 B1	20250629	PEXP		Calculated Patent Term Expiry	
EP1842533 A2	20071010	LSPB	+	published / reissued	

EP1842533 A2	20151030	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20150713 YEAR OF FEE PAYMENT : 12
EP1842533 A2	20160229	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20150811 YEAR OF FEE PAYMENT : 12
EP1842533 A2	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG PAYMENT DATE : 20160614 YEAR OF FEE PAYMENT : 13
EP1842533 A2	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20160630 YEAR OF FEE PAYMENT : 13
EP1842533 A2	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20160616 YEAR OF FEE PAYMENT : 13
EP1842533 A2	20160930	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20160801 YEAR OF FEE PAYMENT : 13
EP1842533 A2	20160930	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20160810 YEAR OF FEE PAYMENT : 13
EP1842533 A2	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20160822 YEAR OF FEE PAYMENT : 13
EP1842533 A2	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20160831 YEAR OF FEE PAYMENT : 13
EP1842533 A2	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20160809 YEAR OF FEE PAYMENT : 13
EP1842533 A2	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE PAYMENT DATE : 20160727 YEAR OF FEE PAYMENT : 13
EP1842533 A2	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20160812 YEAR OF FEE PAYMENT : 13
EP1842533 A2	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20160803 YEAR OF FEE PAYMENT : 13
EP1842533 A2	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK PAYMENT DATE : 20160706 YEAR OF FEE PAYMENT : 13
EP1842533 A2	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20160722 YEAR OF FEE PAYMENT : 13
EP1842533 A2	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20160712 YEAR OF FEE PAYMENT : 13
EP1842533 A2	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20160708 YEAR OF FEE PAYMENT : 13

EP1842533 A2	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY PAYMENT DATE : 20160706 YEAR OF FEE PAYMENT : 13
EP1842533 A2	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20160714 YEAR OF FEE PAYMENT : 13
EP1842533 A2	20161230	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20160712 YEAR OF FEE PAYMENT : 13
EP1842533 A2	20161230	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20160624 YEAR OF FEE PAYMENT : 13
EP1842533 A3	20080625	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20080514
EP1842533 A3	20080723	LSFE	+AKX	DESIGNATION FEES PAID	COUNTRY OF REF DOCUMENT : AT COUNTRY OF REF DOCUMENT : BE COUNTRY OF REF DOCUMENT : BG COUNTRY OF REF DOCUMENT : CH COUNTRY OF REF DOCUMENT : CY COUNTRY OF REF DOCUMENT : CZ COUNTRY OF REF DOCUMENT : DE COUNTRY OF REF DOCUMENT : DK COUNTRY OF REF DOCUMENT : EE COUNTRY OF REF DOCUMENT : ES COUNTRY OF REF DOCUMENT : FI COUNTRY OF REF DOCUMENT : FR COUNTRY OF REF DOCUMENT : GB COUNTRY OF REF DOCUMENT : GR COUNTRY OF REF DOCUMENT : HU COUNTRY OF REF DOCUMENT : IE COUNTRY OF REF DOCUMENT : IT COUNTRY OF REF DOCUMENT : LI COUNTRY OF REF DOCUMENT : LU COUNTRY OF REF DOCUMENT : MC COUNTRY OF REF DOCUMENT : NL COUNTRY OF REF DOCUMENT : PL COUNTRY OF REF DOCUMENT : PT COUNTRY OF REF DOCUMENT : RO COUNTRY OF REF DOCUMENT : SE COUNTRY OF REF DOCUMENT : SI COUNTRY OF REF DOCUMENT : SK COUNTRY OF REF DOCUMENT : TR
EP1842533 A3	20080723	LSFE	+AXX	PAYMENT OF EXTENSION FEES	COUNTRY OF REF DOCUMENT : HR PAYMENT DATE : 20080514
EP1842533 A3	20080723	LSFE	+AXX	PAYMENT OF EXTENSION FEES	COUNTRY OF REF DOCUMENT : LT PAYMENT DATE : 20080514
EP1842533 A3	20080723	LSFE	+AXX	PAYMENT OF EXTENSION FEES	COUNTRY OF REF DOCUMENT : LV PAYMENT DATE : 20080514
EP1842533 A3	20120208	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20120111
EP1842533 B1	20130501	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1842533 B1	20130501	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D TEXT : NOT ENGLISH
EP1842533 B1	20130515	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1842533 B1	20130515	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 609450 COUNTRY OF REF DOCUMENT : AT

					KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20130515
EP1842533 B1	20130522	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D TEXT : LANGUAGE OF EP DOCUMENT: GERMAN
EP1842533 B1	20130611	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2407143 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) : EFFECTIVE DATE : 20130611
EP1842533 B1	20130627	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : RO REF LEGAL EVENT CODE : EPE
EP1842533 B1	20130627	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 502004014153 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20130627
EP1842533 B1	20130710	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : T3
EP1842533 B1	20130830	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : EP REF DOCUMENT NUMBER : 20130401170 COUNTRY OF REF DOCUMENT : GR EFFECTIVE DATE : 20130711
EP1842533 B1	20130906	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HK REF LEGAL EVENT CODE : GR REF DOCUMENT NUMBER : 1113744 COUNTRY OF REF DOCUMENT : HK
EP1842533 B1	20130930	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HU REF LEGAL EVENT CODE : AG4A REF DOCUMENT NUMBER : E016597 COUNTRY OF REF DOCUMENT : HU
EP1842533 B1	20140409	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20140204
EP1842533 B1	20140515	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 502004014153 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20140204
EP1842533 B1	20160712	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 13
EP1842533 B1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20160628 YEAR OF FEE PAYMENT : 13
EP1842533 B1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20160809 YEAR OF FEE PAYMENT : 13
EP1842533 B1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20160810 YEAR OF FEE PAYMENT : 13
EP1842533 B1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20160725

				[ANNOUNCED FROM NATIONAL OFFICE TO EPO]	YEAR OF FEE PAYMENT : 13
EP1842533 B1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20160711 YEAR OF FEE PAYMENT : 13
EP1842533 B1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20160811 YEAR OF FEE PAYMENT : 13
EP1842533 B1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20160804 YEAR OF FEE PAYMENT : 13
EP1842533 B1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20160714 YEAR OF FEE PAYMENT : 13
EP1842533 B1	20170714	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 14
EP1842533 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20170615 YEAR OF FEE PAYMENT : 14
EP1842533 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20170630 YEAR OF FEE PAYMENT : 14
EP1842533 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG PAYMENT DATE : 20170615 YEAR OF FEE PAYMENT : 14
EP1842533 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20170724 YEAR OF FEE PAYMENT : 14
EP1842533 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20170626 YEAR OF FEE PAYMENT : 14
EP1842533 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20170613 YEAR OF FEE PAYMENT : 14
EP1842533 B1	20170929	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20170814 YEAR OF FEE PAYMENT : 14
EP1842533 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20170824 YEAR OF FEE PAYMENT : 14
EP1842533 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170831 YEAR OF FEE PAYMENT : 14
EP1842533 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20170814 YEAR OF FEE PAYMENT : 14
EP1842533 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY PAYMENT DATE : 20170710 YEAR OF FEE PAYMENT : 14
EP1842533 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : SK PAYMENT DATE : 20170703

				[ANNOUNCED FROM NATIONAL OFFICE TO EPO]	YEAR OF FEE PAYMENT : 14
EP1842533 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20170714 YEAR OF FEE PAYMENT : 14
EP1842533 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20170802 YEAR OF FEE PAYMENT : 14
EP1842533 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE PAYMENT DATE : 20170726 YEAR OF FEE PAYMENT : 14
EP1842533 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170714 YEAR OF FEE PAYMENT : 14
EP1842533 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20170809 YEAR OF FEE PAYMENT : 14
EP1842533 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20170901 YEAR OF FEE PAYMENT : 14
EP1842533 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20170711 YEAR OF FEE PAYMENT : 14
EP1842533 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20170711 YEAR OF FEE PAYMENT : 14
EP1842533 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20170810 YEAR OF FEE PAYMENT : 14
EP1842533 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20170802 YEAR OF FEE PAYMENT : 14
EP1842533 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20170623 YEAR OF FEE PAYMENT : 14
EP1842533 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20170706 YEAR OF FEE PAYMENT : 14
EP1842533 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20170809 YEAR OF FEE PAYMENT : 14
EP1842533 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20170725 YEAR OF FEE PAYMENT : 14
EP1842533 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20170810 YEAR OF FEE PAYMENT : 14
EP1842533 B1	20180712	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 15
EP1842533 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM	COUNTRY OF REF DOCUMENT : SK PAYMENT DATE : 20180627 YEAR OF FEE PAYMENT : 15

				NATIONAL OFFICE TO EPO]	
EP1842533 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20180627 YEAR OF FEE PAYMENT : 15
EP1842533 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20180726 YEAR OF FEE PAYMENT : 15
EP1842533 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20180614 YEAR OF FEE PAYMENT : 15
EP1842533 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20180612 YEAR OF FEE PAYMENT : 15
EP1842533 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG PAYMENT DATE : 20180615 YEAR OF FEE PAYMENT : 15
EP1842533 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20180823 YEAR OF FEE PAYMENT : 15
EP1842533 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE PAYMENT DATE : 20180721 YEAR OF FEE PAYMENT : 15
EP1842533 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180831 YEAR OF FEE PAYMENT : 15
EP1842533 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20180809 YEAR OF FEE PAYMENT : 15
EP1842533 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20180815 YEAR OF FEE PAYMENT : 15
EP1842533 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20180712 YEAR OF FEE PAYMENT : 15
EP1842533 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20180903 YEAR OF FEE PAYMENT : 15
EP1842533 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20180730 YEAR OF FEE PAYMENT : 15
EP1842533 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20180716 YEAR OF FEE PAYMENT : 15
EP1842533 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20180713 YEAR OF FEE PAYMENT : 15
EP1842533 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20180801 YEAR OF FEE PAYMENT : 15
EP1842533 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20180725 YEAR OF FEE PAYMENT : 15

				NATIONAL OFFICE TO EPO]	
EP1842533 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20180801 YEAR OF FEE PAYMENT : 15
EP1842533 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20180620 YEAR OF FEE PAYMENT : 15
EP1842533 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20180717 YEAR OF FEE PAYMENT : 15
EP1842533 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20180810 YEAR OF FEE PAYMENT : 15
EP1842533 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20180810 YEAR OF FEE PAYMENT : 15
EP1842533 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20180817 YEAR OF FEE PAYMENT : 15
EP1842533 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20180809 YEAR OF FEE PAYMENT : 15
EP1842533 B1	20181231	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20180803 YEAR OF FEE PAYMENT : 15
EP1842533 B1	20190131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY PAYMENT DATE : 20180706 YEAR OF FEE PAYMENT : 15
EP1842533 B1	20240805	PEXP		Calculated Patent Term Expiry	
EP1845956 A1	20071024	LSPB	+	published / reissued	
EP1845956 A1	20071024	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20070904
EP1845956 A1	20100526	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20100423
EP1845956 A1	20161019	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20160919
EP1845956 B1	20170322	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1845956 B1	20170322	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D TEXT : NOT ENGLISH
EP1845956 B1	20170331	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1845956 B1	20170415	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 877022 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20170415
EP1845956 B1	20170419	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D TEXT : LANGUAGE OF EP DOCUMENT: GERMAN
EP1845956 B1	20170427	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096

					REF DOCUMENT NUMBER : 502006015425 COUNTRY OF REF DOCUMENT : DE
EP1845956 B1	20170621	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : RO REF LEGAL EVENT CODE : EPE
EP1845956 B1	20170808	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2629303 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) : EFFECTIVE DATE : 20170808
EP1845956 B1	20170828	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HU REF LEGAL EVENT CODE : AG4A REF DOCUMENT NUMBER : E032099 COUNTRY OF REF DOCUMENT : HU
EP1845956 B1	20171102	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : EP REF DOCUMENT NUMBER : 20170401370 COUNTRY OF REF DOCUMENT : GR EFFECTIVE DATE : 20171023
EP1845956 B1	20171219	LSOP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R026 REF DOCUMENT NUMBER : 502006015425 COUNTRY OF REF DOCUMENT : DE
EP1845956 B1	20180111	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 13
EP1845956 B1	20180124	LSOP	-26	OPPOSITION FILED	PARTYTYPE : OPPONENT OPPONENT : G. L. PHARMA GMBH EFFECTIVE DATE : 20171219
EP1845956 B1	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20180124 YEAR OF FEE PAYMENT : 13
EP1845956 B1	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20171213 YEAR OF FEE PAYMENT : 13
EP1845956 B1	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20171228 YEAR OF FEE PAYMENT : 13
EP1845956 B1	20180330	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20180214 YEAR OF FEE PAYMENT : 13
EP1845956 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180123 YEAR OF FEE PAYMENT : 13
EP1845956 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20180131 YEAR OF FEE PAYMENT : 13
EP1845956 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20180112 YEAR OF FEE PAYMENT : 13
EP1845956 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20180213 YEAR OF FEE PAYMENT : 13

EP1845956 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20180209 YEAR OF FEE PAYMENT : 13
EP1845956 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LT PAYMENT DATE : 20180119 YEAR OF FEE PAYMENT : 13
EP1845956 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20180212 YEAR OF FEE PAYMENT : 13
EP1845956 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20180105 YEAR OF FEE PAYMENT : 13
EP1845956 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20180301 YEAR OF FEE PAYMENT : 13
EP1845956 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LV PAYMENT DATE : 20180126 YEAR OF FEE PAYMENT : 13
EP1845956 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20180110 YEAR OF FEE PAYMENT : 13
EP1845956 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20180108 YEAR OF FEE PAYMENT : 13
EP1845956 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20180202 YEAR OF FEE PAYMENT : 13
EP1845956 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20180213 YEAR OF FEE PAYMENT : 13
EP1845956 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20180212 YEAR OF FEE PAYMENT : 13
EP1845956 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK PAYMENT DATE : 20180103 YEAR OF FEE PAYMENT : 13
EP1845956 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG PAYMENT DATE : 20171229 YEAR OF FEE PAYMENT : 13
EP1845956 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE PAYMENT DATE : 20180126 YEAR OF FEE PAYMENT : 13
EP1845956 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20180111 YEAR OF FEE PAYMENT : 13
EP1845956 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20180221 YEAR OF FEE PAYMENT : 13
EP1845956 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20180116 YEAR OF FEE PAYMENT : 13

EP1845956 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20180130 YEAR OF FEE PAYMENT : 13
EP1845956 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20180125 YEAR OF FEE PAYMENT : 13
EP1845956 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20180201 YEAR OF FEE PAYMENT : 13
EP1845956 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IS PAYMENT DATE : 20180108 YEAR OF FEE PAYMENT : 13
EP1845956 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY PAYMENT DATE : 20180109 YEAR OF FEE PAYMENT : 13
EP1845956 B1	20190131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE PAYMENT DATE : 20181229 YEAR OF FEE PAYMENT : 14
EP1845956 B1	20190131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20181214 YEAR OF FEE PAYMENT : 14
EP1845956 B1	20190228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG PAYMENT DATE : 20181220 YEAR OF FEE PAYMENT : 14
EP1845956 B1	20190228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20181217 YEAR OF FEE PAYMENT : 14
EP1845956 B1	20190329	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20190214 YEAR OF FEE PAYMENT : 14
EP1845956 B1	20190329	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20190124 YEAR OF FEE PAYMENT : 14
EP1845956 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IS PAYMENT DATE : 20190109 YEAR OF FEE PAYMENT : 14
EP1845956 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LT PAYMENT DATE : 20190128 YEAR OF FEE PAYMENT : 14
EP1845956 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20190118 YEAR OF FEE PAYMENT : 14
EP1845956 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20190122 YEAR OF FEE PAYMENT : 14
EP1845956 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20190111 YEAR OF FEE PAYMENT : 14
EP1845956 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20190114 YEAR OF FEE PAYMENT : 14

EP1845956 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20190221 YEAR OF FEE PAYMENT : 14
EP1845956 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20190129 YEAR OF FEE PAYMENT : 14
EP1845956 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20190211 YEAR OF FEE PAYMENT : 14
EP1845956 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20190206 YEAR OF FEE PAYMENT : 14
EP1845956 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20190211 YEAR OF FEE PAYMENT : 14
EP1845956 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20190215 YEAR OF FEE PAYMENT : 14
EP1845956 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20190301 YEAR OF FEE PAYMENT : 14
EP1845956 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY PAYMENT DATE : 20190108 YEAR OF FEE PAYMENT : 14
EP1845956 B1	20190531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20190114 YEAR OF FEE PAYMENT : 14
EP1845956 B1	20190531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20190125 YEAR OF FEE PAYMENT : 14
EP1845956 B1	20190531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20190107 YEAR OF FEE PAYMENT : 14
EP1845956 B1	20190531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20190128 YEAR OF FEE PAYMENT : 14
EP1845956 B1	20190531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20190212 YEAR OF FEE PAYMENT : 14
EP1845956 B1	20190531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20190110 YEAR OF FEE PAYMENT : 14
EP1845956 B1	20190531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20190212 YEAR OF FEE PAYMENT : 14
EP1845956 B1	20190531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LV PAYMENT DATE : 20190206 YEAR OF FEE PAYMENT : 14
EP1845956 B1	20190628	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK PAYMENT DATE : 20190102 YEAR OF FEE PAYMENT : 14

EP1845956 B1	20260206	PEXP		Calculated Patent Term Expiry	
EP1859789 A1	20071128	LSPB	+	published / reissued	
EP1859789 A1	20080709	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20080528
EP1859789 A1	20080806	LSFE	+AKX	DESIGNATION FEES PAID	COUNTRY OF REF DOCUMENT : AT COUNTRY OF REF DOCUMENT : BE COUNTRY OF REF DOCUMENT : BG COUNTRY OF REF DOCUMENT : CH COUNTRY OF REF DOCUMENT : CY COUNTRY OF REF DOCUMENT : CZ COUNTRY OF REF DOCUMENT : DE COUNTRY OF REF DOCUMENT : DK COUNTRY OF REF DOCUMENT : EE COUNTRY OF REF DOCUMENT : ES COUNTRY OF REF DOCUMENT : FI COUNTRY OF REF DOCUMENT : FR COUNTRY OF REF DOCUMENT : GB COUNTRY OF REF DOCUMENT : GR COUNTRY OF REF DOCUMENT : HU COUNTRY OF REF DOCUMENT : IE COUNTRY OF REF DOCUMENT : IT COUNTRY OF REF DOCUMENT : LI COUNTRY OF REF DOCUMENT : LU COUNTRY OF REF DOCUMENT : MC COUNTRY OF REF DOCUMENT : NL COUNTRY OF REF DOCUMENT : PL COUNTRY OF REF DOCUMENT : PT COUNTRY OF REF DOCUMENT : RO COUNTRY OF REF DOCUMENT : SE COUNTRY OF REF DOCUMENT : SI COUNTRY OF REF DOCUMENT : SK COUNTRY OF REF DOCUMENT : TR
EP1859789 A1	20080806	LSFE	+AXX	PAYMENT OF EXTENSION FEES	COUNTRY OF REF DOCUMENT : HR PAYMENT DATE : 20080528
EP1859789 A1	20080806	LSFE	+AXX	PAYMENT OF EXTENSION FEES	COUNTRY OF REF DOCUMENT : LT PAYMENT DATE : 20080528
EP1859789 A1	20080806	LSFE	+AXX	PAYMENT OF EXTENSION FEES	COUNTRY OF REF DOCUMENT : LV PAYMENT DATE : 20080528
EP1859789 A1	20120208	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20120111
EP1859789 A1	20151007	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20150910
EP1859789 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20160630 YEAR OF FEE PAYMENT : 13
EP1859789 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG PAYMENT DATE : 20160614 YEAR OF FEE PAYMENT : 13
EP1859789 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20160615 YEAR OF FEE PAYMENT : 13
EP1859789 A1	20160930	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20160801 YEAR OF FEE PAYMENT : 13
EP1859789 A1	20160930	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20160810 YEAR OF FEE PAYMENT : 13
EP1859789 A1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : EE PAYMENT DATE : 20160727

				[ANNOUNCED FROM NATIONAL OFFICE TO EPO]	YEAR OF FEE PAYMENT : 13
EP1859789 A1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20160803 YEAR OF FEE PAYMENT : 13
EP1859789 A1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20160812 YEAR OF FEE PAYMENT : 13
EP1859789 A1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20160809 YEAR OF FEE PAYMENT : 13
EP1859789 A1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20160831 YEAR OF FEE PAYMENT : 13
EP1859789 A1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20160822 YEAR OF FEE PAYMENT : 13
EP1859789 A1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20160714 YEAR OF FEE PAYMENT : 13
EP1859789 A1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK PAYMENT DATE : 20160706 YEAR OF FEE PAYMENT : 13
EP1859789 A1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20160722 YEAR OF FEE PAYMENT : 13
EP1859789 A1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20160712 YEAR OF FEE PAYMENT : 13
EP1859789 A1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY PAYMENT DATE : 20160706 YEAR OF FEE PAYMENT : 13
EP1859789 A1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20160708 YEAR OF FEE PAYMENT : 13
EP1859789 A1	20161230	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20160624 YEAR OF FEE PAYMENT : 13
EP1859789 A1	20161230	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20160712 YEAR OF FEE PAYMENT : 13
EP1859789 B1	20160217	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1859789 B1	20160217	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D TEXT : NOT ENGLISH
EP1859789 B1	20160229	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1859789 B1	20160309	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D TEXT : LANGUAGE OF EP DOCUMENT: GERMAN
EP1859789 B1	20160315	LSNP	REG	REFERENCE TO A	REF COUNTRY CODE : AT

				NATIONAL CODE	REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 775295 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20160315
EP1859789 B1	20160324	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 502004015124 COUNTRY OF REF DOCUMENT : DE
EP1859789 B1	20160510	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : RO REF LEGAL EVENT CODE : EPE
EP1859789 B1	20160530	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2572166 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) : EFFECTIVE DATE : 20160530
EP1859789 B1	20160712	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 13
EP1859789 B1	20160715	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : EP REF DOCUMENT NUMBER : 20160400508 COUNTRY OF REF DOCUMENT : GR EFFECTIVE DATE : 20160505
EP1859789 B1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20160628 YEAR OF FEE PAYMENT : 13
EP1859789 B1	20161028	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HU REF LEGAL EVENT CODE : AG4A REF DOCUMENT NUMBER : E027301 COUNTRY OF REF DOCUMENT : HU
EP1859789 B1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20160809 YEAR OF FEE PAYMENT : 13
EP1859789 B1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20160810 YEAR OF FEE PAYMENT : 13
EP1859789 B1	20161118	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 502004015124 COUNTRY OF REF DOCUMENT : DE
EP1859789 B1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20160714 YEAR OF FEE PAYMENT : 13
EP1859789 B1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20160725 YEAR OF FEE PAYMENT : 13
EP1859789 B1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20160711 YEAR OF FEE PAYMENT : 13
EP1859789 B1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20160804 YEAR OF FEE PAYMENT : 13

				EPO]	
EP1859789 B1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20160811 YEAR OF FEE PAYMENT : 13
EP1859789 B1	20170125	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20161118
EP1859789 B1	20170714	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 14
EP1859789 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20170615 YEAR OF FEE PAYMENT : 14
EP1859789 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20170630 YEAR OF FEE PAYMENT : 14
EP1859789 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20170626 YEAR OF FEE PAYMENT : 14
EP1859789 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG PAYMENT DATE : 20170615 YEAR OF FEE PAYMENT : 14
EP1859789 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20170613 YEAR OF FEE PAYMENT : 14
EP1859789 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20170724 YEAR OF FEE PAYMENT : 14
EP1859789 B1	20170929	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20170814 YEAR OF FEE PAYMENT : 14
EP1859789 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20170714 YEAR OF FEE PAYMENT : 14
EP1859789 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20170711 YEAR OF FEE PAYMENT : 14
EP1859789 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE PAYMENT DATE : 20170726 YEAR OF FEE PAYMENT : 14
EP1859789 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170714 YEAR OF FEE PAYMENT : 14
EP1859789 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20170814 YEAR OF FEE PAYMENT : 14
EP1859789 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY PAYMENT DATE : 20170710 YEAR OF FEE PAYMENT : 14
EP1859789 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20170824 YEAR OF FEE PAYMENT : 14
EP1859789 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20170809

				[ANNOUNCED FROM NATIONAL OFFICE TO EPO]	YEAR OF FEE PAYMENT : 14
EP1859789 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20170901 YEAR OF FEE PAYMENT : 14
EP1859789 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170831 YEAR OF FEE PAYMENT : 14
EP1859789 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK PAYMENT DATE : 20170703 YEAR OF FEE PAYMENT : 14
EP1859789 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20170802 YEAR OF FEE PAYMENT : 14
EP1859789 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20170725 YEAR OF FEE PAYMENT : 14
EP1859789 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20170810 YEAR OF FEE PAYMENT : 14
EP1859789 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20170809 YEAR OF FEE PAYMENT : 14
EP1859789 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20170810 YEAR OF FEE PAYMENT : 14
EP1859789 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20170711 YEAR OF FEE PAYMENT : 14
EP1859789 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20170623 YEAR OF FEE PAYMENT : 14
EP1859789 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20170706 YEAR OF FEE PAYMENT : 14
EP1859789 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20170802 YEAR OF FEE PAYMENT : 14
EP1859789 B1	20180712	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 15
EP1859789 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK PAYMENT DATE : 20180627 YEAR OF FEE PAYMENT : 15
EP1859789 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20180627 YEAR OF FEE PAYMENT : 15
EP1859789 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20180614 YEAR OF FEE PAYMENT : 15
EP1859789 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20180612

				[ANNOUNCED FROM NATIONAL OFFICE TO EPO]	YEAR OF FEE PAYMENT : 15
EP1859789 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG PAYMENT DATE : 20180615 YEAR OF FEE PAYMENT : 15
EP1859789 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20180726 YEAR OF FEE PAYMENT : 15
EP1859789 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20180712 YEAR OF FEE PAYMENT : 15
EP1859789 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20180809 YEAR OF FEE PAYMENT : 15
EP1859789 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE PAYMENT DATE : 20180721 YEAR OF FEE PAYMENT : 15
EP1859789 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180831 YEAR OF FEE PAYMENT : 15
EP1859789 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20180730 YEAR OF FEE PAYMENT : 15
EP1859789 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20180823 YEAR OF FEE PAYMENT : 15
EP1859789 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20180903 YEAR OF FEE PAYMENT : 15
EP1859789 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20180815 YEAR OF FEE PAYMENT : 15
EP1859789 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20180817 YEAR OF FEE PAYMENT : 15
EP1859789 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20180717 YEAR OF FEE PAYMENT : 15
EP1859789 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20180810 YEAR OF FEE PAYMENT : 15
EP1859789 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20180725 YEAR OF FEE PAYMENT : 15
EP1859789 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20180810 YEAR OF FEE PAYMENT : 15
EP1859789 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20180801 YEAR OF FEE PAYMENT : 15
EP1859789 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : TR

				[ANNOUNCED FROM NATIONAL OFFICE TO EPO]	PAYMENT DATE : 20180731 YEAR OF FEE PAYMENT : 15
EP1859789 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20180620 YEAR OF FEE PAYMENT : 15
EP1859789 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20180809 YEAR OF FEE PAYMENT : 15
EP1859789 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20180716 YEAR OF FEE PAYMENT : 15
EP1859789 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20180713 YEAR OF FEE PAYMENT : 15
EP1859789 B1	20181231	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20180803 YEAR OF FEE PAYMENT : 15
EP1859789 B1	20190131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY PAYMENT DATE : 20180706 YEAR OF FEE PAYMENT : 15
EP1859789 B1	20240805	PEXP		Calculated Patent Term Expiry	
EP2478896 A1	20120725	LSPB	+	published / reissued	
EP2478896 A1	20130227	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20130110
EP2478896 A1	20150930	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20150902
EP2478896 A1	20170426	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20170327
EP2478896 B1	20170906	LSGT	+	granted / extensions (spc, cpc, pte)	
EP2478896 B1	20170906	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D TEXT : NOT ENGLISH
EP2478896 B1	20170915	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP2478896 B1	20170915	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 925107 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20170915
EP2478896 B1	20171004	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D TEXT : LANGUAGE OF EP DOCUMENT: GERMAN
EP2478896 B1	20171019	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 502006015659 COUNTRY OF REF DOCUMENT : DE
EP2478896 B1	20171127	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : RO REF LEGAL EVENT CODE : EPE
EP2478896 B1	20180111	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 13
EP2478896 B1	20180123	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER :

					2651016 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) : EFFECTIVE DATE : 20180123
EP2478896 B1	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20171228 YEAR OF FEE PAYMENT : 13
EP2478896 B1	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20180124 YEAR OF FEE PAYMENT : 13
EP2478896 B1	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20171213 YEAR OF FEE PAYMENT : 13
EP2478896 B1	20180330	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20180214 YEAR OF FEE PAYMENT : 13
EP2478896 B1	20180427	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HK REF LEGAL EVENT CODE : GR REF DOCUMENT NUMBER : 1171671 COUNTRY OF REF DOCUMENT : HK
EP2478896 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20180112 YEAR OF FEE PAYMENT : 13
EP2478896 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20180213 YEAR OF FEE PAYMENT : 13
EP2478896 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20180105 YEAR OF FEE PAYMENT : 13
EP2478896 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LT PAYMENT DATE : 20180119 YEAR OF FEE PAYMENT : 13
EP2478896 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180123 YEAR OF FEE PAYMENT : 13
EP2478896 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20180209 YEAR OF FEE PAYMENT : 13
EP2478896 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20180212 YEAR OF FEE PAYMENT : 13
EP2478896 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20180301 YEAR OF FEE PAYMENT : 13
EP2478896 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20180131 YEAR OF FEE PAYMENT : 13
EP2478896 B1	20180502	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HU REF LEGAL EVENT CODE : AG4A REF DOCUMENT NUMBER : E035492 COUNTRY OF REF DOCUMENT : HU

EP2478896 B1	20180507	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : EP REF DOCUMENT NUMBER : 20170403059 COUNTRY OF REF DOCUMENT : GR EFFECTIVE DATE : 20180420
EP2478896 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20180221 YEAR OF FEE PAYMENT : 13
EP2478896 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20180125 YEAR OF FEE PAYMENT : 13
EP2478896 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IS PAYMENT DATE : 20180108 YEAR OF FEE PAYMENT : 13
EP2478896 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20180116 YEAR OF FEE PAYMENT : 13
EP2478896 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20180108 YEAR OF FEE PAYMENT : 13
EP2478896 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20180202 YEAR OF FEE PAYMENT : 13
EP2478896 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20180213 YEAR OF FEE PAYMENT : 13
EP2478896 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20180111 YEAR OF FEE PAYMENT : 13
EP2478896 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG PAYMENT DATE : 20171229 YEAR OF FEE PAYMENT : 13
EP2478896 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20180201 YEAR OF FEE PAYMENT : 13
EP2478896 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK PAYMENT DATE : 20180103 YEAR OF FEE PAYMENT : 13
EP2478896 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20180130 YEAR OF FEE PAYMENT : 13
EP2478896 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE PAYMENT DATE : 20180126 YEAR OF FEE PAYMENT : 13
EP2478896 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LV PAYMENT DATE : 20180126 YEAR OF FEE PAYMENT : 13
EP2478896 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20180110 YEAR OF FEE PAYMENT : 13
EP2478896 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20180212 YEAR OF FEE PAYMENT : 13

				NATIONAL OFFICE TO EPO]	
EP2478896 B1	20180607	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 502006015659 COUNTRY OF REF DOCUMENT : DE
EP2478896 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY PAYMENT DATE : 20180109 YEAR OF FEE PAYMENT : 13
EP2478896 B1	20180815	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20180607
EP2478896 B1	20190131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE PAYMENT DATE : 20181229 YEAR OF FEE PAYMENT : 14
EP2478896 B1	20190131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20181212 YEAR OF FEE PAYMENT : 14
EP2478896 B1	20190228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20181217 YEAR OF FEE PAYMENT : 14
EP2478896 B1	20190228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG PAYMENT DATE : 20181220 YEAR OF FEE PAYMENT : 14
EP2478896 B1	20190329	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20190124 YEAR OF FEE PAYMENT : 14
EP2478896 B1	20190329	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20190214 YEAR OF FEE PAYMENT : 14
EP2478896 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20190118 YEAR OF FEE PAYMENT : 14
EP2478896 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20190211 YEAR OF FEE PAYMENT : 14
EP2478896 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LT PAYMENT DATE : 20190128 YEAR OF FEE PAYMENT : 14
EP2478896 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20190301 YEAR OF FEE PAYMENT : 14
EP2478896 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY PAYMENT DATE : 20190108 YEAR OF FEE PAYMENT : 14
EP2478896 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20190206 YEAR OF FEE PAYMENT : 14
EP2478896 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20190221 YEAR OF FEE PAYMENT : 14
EP2478896 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20190129 YEAR OF FEE PAYMENT : 14

EP2478896 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20190114 YEAR OF FEE PAYMENT : 14
EP2478896 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20190111 YEAR OF FEE PAYMENT : 14
EP2478896 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20190122 YEAR OF FEE PAYMENT : 14
EP2478896 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20190211 YEAR OF FEE PAYMENT : 14
EP2478896 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IS PAYMENT DATE : 20190109 YEAR OF FEE PAYMENT : 14
EP2478896 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20190215 YEAR OF FEE PAYMENT : 14
EP2478896 B1	20190531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20190212 YEAR OF FEE PAYMENT : 14
EP2478896 B1	20190531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20190128 YEAR OF FEE PAYMENT : 14
EP2478896 B1	20190531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20190212 YEAR OF FEE PAYMENT : 14
EP2478896 B1	20190531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20190110 YEAR OF FEE PAYMENT : 14
EP2478896 B1	20190531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20190107 YEAR OF FEE PAYMENT : 14
EP2478896 B1	20190531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LV PAYMENT DATE : 20190206 YEAR OF FEE PAYMENT : 14
EP2478896 B1	20190531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20190125 YEAR OF FEE PAYMENT : 14
EP2478896 B1	20190531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20190114 YEAR OF FEE PAYMENT : 14
EP2478896 B1	20190628	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK PAYMENT DATE : 20190102 YEAR OF FEE PAYMENT : 14
EP2478896 B1	20260206	PEXP		Calculated Patent Term Expiry	
ES2285497 T3	20071116	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2285497 T3	20240805	PEXP		Calculated Patent Term Expiry	
ES2289542 T3	20080201	LSGT	+	granted / extensions	

				(spc, cpc, pte)	
ES2289542 T3	20240805	PEXP		Calculated Patent Term Expiry	
ES2336571 T3	20100414	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2336571 T3	20241223	PEXP		Calculated Patent Term Expiry	
ES2367907 T3	20111110	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2367907 T3	20250420	PEXP		Calculated Patent Term Expiry	
ES2393787 T3	20121228	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2393787 T3	20250629	PEXP		Calculated Patent Term Expiry	
ES2407143 T3	20130611	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2407143 T3	20240805	PEXP		Calculated Patent Term Expiry	
ES2572166 T3	20160530	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2572166 T3	20240805	PEXP		Calculated Patent Term Expiry	
ES2629303 T3	20170808	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2629303 T3	20260206	PEXP		Calculated Patent Term Expiry	
ES2651016 T3	20180123	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2651016 T3	20260206	PEXP		Calculated Patent Term Expiry	
HK1095081 A1	20070427	LSPB	+	published / reissued	
HK1095081 A1	20071026	LSPB	+	published / reissued	
HK1095081 A1	20261124	PEXP		Calculated Patent Term Expiry	
HK1095081 A1	20261124	PEXP		Calculated Patent Term Expiry	
HK1095081 A3	20070427	LSPB	+	published / reissued	
HK1095081 B	20071026	LSGT	+	granted / extensions (spc, cpc, pte)	
HK1095081 B	20261124	PEXP		Calculated Patent Term Expiry	
HK1095082 A1	20070427	LSPB	+	published / reissued	
HK1095082 A1	20070928	LSPB	+	published / reissued	
HK1095082 A1	20261124	PEXP		Calculated Patent Term Expiry	
HK1095082 A1	20261124	PEXP		Calculated Patent Term Expiry	
HK1095082 A3	20070427	LSPB	+	published / reissued	
HK1095082 B	20070928	LSGT	+	granted / extensions (spc, cpc, pte)	
HK1095082 B	20261124	PEXP		Calculated Patent Term Expiry	
HK1099511 A1	20070817	LSPB	+	published / reissued	
HK1099511 A1	20100409	LSPB	+	published / reissued	
HK1099511 A1	20180720	LSLE	-PC	PATENT CEASED (I.E. PATENT HAS LAPSED DUE TO THE FAILURE TO PAY THE RENEWAL FEE)	EFFECTIVE DATE : 20171223
HK1099511 A1	20180720	LSLE	-PC	PATENT CEASED (I.E. PATENT HAS LAPSED DUE TO THE FAILURE TO PAY THE RENEWAL FEE)	EFFECTIVE DATE : 20171223
HK1099511 A1	20270313	PEXP		Calculated Patent Term Expiry	

HK1099511 A1	20270313	PEXP		Calculated Patent Term Expiry	
HK1099511 A3	20070817	LSPB	+	published / reissued	
HK1099511 B	20100409	LSGT	+	granted / extensions (spc, cpc, pte)	
HK1099511 B	20270313	PEXP		Calculated Patent Term Expiry	
HK1100639 A1	20111104	LSPB	+	published / reissued	
HK1100639 A1	20130516	LSRE	AM	AMENDED SPECIFICATION (ACCORDING SECT 146 OF PATENT LAW)	TEXT : ADDITION OF INVENTOR: KUGELMANN, HEINRICH - REQUEST FOR CORRECTION ALLOWED ON 15.05.2013 EFFECTIVE DATE : 20130515
HK1100639 A1	20181116	LSLE	-PC	PATENT CEASED (I.E. PATENT HAS LAPSED DUE TO THE FAILURE TO PAY THE RENEWAL FEE)	EFFECTIVE DATE : 20180420
HK1100639 A1	20270228	PEXP		Calculated Patent Term Expiry	
HK1100639 A3	20070928	LSPB	+	published / reissued	
HK1107931 A1	20080425	LSPB	+	published / reissued	
HK1107931 A1	20130607	LSPB	+	published / reissued	
HK1107931 A1	20130419	LSRE	AM	AMENDED SPECIFICATION (ACCORDING SECT 146 OF PATENT LAW)	TEXT : ADDITION OF INVENTOR: KUGELMANN, HEINRICH - REQUEST FOR CORRECTION ALLOWED ON 16.04.2013 EFFECTIVE DATE : 20130416
HK1107931 A1	20130419	LSRE	AM	AMENDED SPECIFICATION (ACCORDING SECT 146 OF PATENT LAW)	TEXT : ADDITION OF INVENTOR: KUGELMANN, HEINRICH - REQUEST FOR CORRECTION ALLOWED ON 16.04.2013 EFFECTIVE DATE : 20130416
HK1107931 A1	20190125	LSLE	-PC	PATENT CEASED (I.E. PATENT HAS LAPSED DUE TO THE FAILURE TO PAY THE RENEWAL FEE)	EFFECTIVE DATE : 20180629
HK1107931 A1	20190125	LSLE	-PC	PATENT CEASED (I.E. PATENT HAS LAPSED DUE TO THE FAILURE TO PAY THE RENEWAL FEE)	EFFECTIVE DATE : 20180629
HK1107931 A1	20270928	PEXP		Calculated Patent Term Expiry	
HK1107931 A1	20270928	PEXP		Calculated Patent Term Expiry	
HK1107931 A3	20080425	LSPB	+	published / reissued	
HK1107931 B	20130607	LSGT	+	granted / extensions (spc, cpc, pte)	
HK1107931 B	20270928	PEXP		Calculated Patent Term Expiry	
HK1113744 A1	20081017	LSPB	+	published / reissued	
HK1113744 A1	20130906	LSPB	+	published / reissued	
HK1113744 A1	20280407	PEXP		Calculated Patent Term Expiry	
HK1113744 A1	20280407	PEXP		Calculated Patent Term Expiry	
HK1113744 A3	20081017	LSPB	+	published / reissued	
HK1113744 B	20130906	LSGT	+	granted / extensions (spc, cpc, pte)	
HK1113744 B	20280407	PEXP		Calculated Patent Term Expiry	
HK1115051 A1	20081121	LSPB	+	published / reissued	
HK1115051 A1	20161111	LSPB	+	published / reissued	
HK1115051 A1	20280430	PEXP		Calculated Patent Term Expiry	
HK1115051 A1	20280430	PEXP		Calculated Patent	

				Term Expiry
HK1115051 A3	20081121	LSPB	+	published / reissued
HK1115051 B	20161111	LSGT	+	granted / extensions (spc, cpc, pte)
HK1115051 B	20280430	PEXP		Calculated Patent Term Expiry
HK1171671 A1	20130405	LSPB	+	published / reissued
HK1171671 B	20180427	LSGT	+	granted / extensions (spc, cpc, pte)
HK1171671 B	20321205	PEXP		Calculated Patent Term Expiry
HR20070272 T3	20070731	LSGT	+	granted / extensions (spc, cpc, pte)
HR20070272 T3	20270612	PEXP		Calculated Patent Term Expiry
HR20070456 T3	20071130	LSGT	+	granted / extensions (spc, cpc, pte)
HR20070456 T3	20270927	PEXP		Calculated Patent Term Expiry
HR20130453 T1	20130630	LSPB	+	published / reissued
HR20160390 T1	20160520	LSPB	+	published / reissued
HR20170746 T1	20170811	LSPB	+	published / reissued
HR20171695 T1	20171215	LSPB	+	published / reissued
HU027301 T2	20161028	LSPB	+	published / reissued
HU032099 T2	20170828	LSPB	+	published / reissued
HU035492 T2	20180502	LSPB	+	published / reissued
IL173478 A1	20110228	LSPB	+	published / reissued
IL173478 A1	20110731	LSGT	+FF	PATENT GRANTED
IL173478 A1	20140630	LSFE	+KB	PATENT RENEWED
IL173478 A1	20180731	LSFE	+KB	PATENT RENEWED
IL173558 A1	20120229	LSPB	+	published / reissued
IL173558 A1	20120628	LSGT	+FF	PATENT GRANTED
IL173558 A1	20120731	LSFE	+KB	PATENT RENEWED
IL173558 A1	20140630	LSFE	+KB	PATENT RENEWED
IL173558 A1	20180731	LSFE	+KB	PATENT RENEWED
IL176296 A0	20110228	LSGT	+FF	PATENT GRANTED
IL176296 A0	20110331	LSFE	+KB	PATENT RENEWED
IL176296 A0	20181231	LSFE	+KB	PATENT RENEWED
IL176296 A1	20101031	LSPB	+	published / reissued
IL178787 A1	20140130	LSPB	+	published / reissued
IL178787 A1	20140528	LSGT	+FF	PATENT GRANTED
IL178787 A1	20140528	LSFE	+KB	PATENT RENEWED
IL178787 A1	20150331	LSFE	+KB	PATENT RENEWED
IL180335 A1	20131031	LSPB	+	published / reissued
IL180335 A1	20140227	LSGT	+FF	PATENT GRANTED
IL180335 A1	20140227	LSFE	+KB	PATENT RENEWED
IL185018 A1	20170629	LSPB	+	published / reissued
IL185018 A1	20171031	LSGT	+FF	PATENT GRANTED
IL185018 A1	20180731	LSLE	-MM9K	PATENT NOT IN FORCE DUE TO NON-PAYMENT OF RENEWAL FEES
IN02728KN2007 A	20070831	LSPB	+	published / reissued
IN06286DN2006 A	20070831	LSPB	+	published / reissued
IN07961DN2006 A	20070427	LSPB	+	published / reissued
IN265327 B	20150220	LSGT	+	granted / extensions (spc, cpc, pte)

IN265327 B	20261026	PEXP		Calculated Patent Term Expiry	
IN269665 B	20151106	LSGT	+	granted / extensions (spc, cpc, pte)	
IN269665 B	20261228	PEXP		Calculated Patent Term Expiry	
IN272820 B	20160429	LSGT	+	granted / extensions (spc, cpc, pte)	
IN272820 B	20270724	PEXP		Calculated Patent Term Expiry	
JP2007501201 T2	20070125	LSPB	+	published / reissued	
JP2007501201 T2	20070413	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20070412
JP2007501201 T2	20070512	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A821 EFFECTIVE DATE : 20070412
JP2007501201 T2	20070802	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20070801
JP2007501201 T2	20110316	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20110315
JP2007501201 T2	20110616	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20110615
JP2007501201 T2	20120203	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2007501201 T2	20120208	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20120207
JP2007501201 T2	20120209	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01
JP2007501201 T2	20120301	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20120224
JP2007501201 T2	20120302	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP2007501201 T2	20120302	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP2007501202 T2	20070125	LSPB	+	published / reissued	
JP2007501202 T2	20070413	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20070412
JP2007501202 T2	20070802	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20070801
JP2007501202 T2	20110316	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20110315
JP2007501202 T2	20110616	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20110615
JP2007501202 T2	20120203	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2007501202 T2	20120208	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT	TEXT : JAPANESE INTERMEDIATE CODE: A01

				OR TO GRANT A REGISTRATION (UTILITY MODEL)	EFFECTIVE DATE : 20120207
JP2007501202 T2	20120209	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01
JP2007501202 T2	20120301	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20120224
JP2007501202 T2	20120302	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP2007501202 T2	20120302	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP2007516998 T2	20070628	LSPB	+	published / reissued	
JP2007516998 T2	20071220	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20071219
JP2007516998 T2	20110406	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20110405
JP2007516998 T2	20111005	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20111004
JP2007516998 T2	20111130	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2007516998 T2	20111205	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20111202
JP2007516998 T2	20111208	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01
JP2007516998 T2	20120105	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20111220
JP2007516998 T2	20120106	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP2007516998 T2	20120112	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP2007533692 T2	20071122	LSPB	+	published / reissued	
JP2007533692 T2	20080415	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20080414
JP2007533692 T2	20110629	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20110628
JP2007533692 T2	20111229	LSRE	A524	WRITTEN SUBMISSION OF COPY OF AMENDMENT UNDER SECTION 19 (PCT)	TEXT : JAPANESE INTERMEDIATE CODE: A524 EFFECTIVE DATE : 20111228
JP2007533692 T2	20120613	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20120612
JP2007533692 T2	20120629	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A821 EFFECTIVE DATE : 20120612

JP2007533692 T2	20120629	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2007533692 T2	20120717	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20120713
JP2007533692 T2	20120719	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01
JP2007533692 T2	20120816	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20120808
JP2007533692 T2	20120817	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP2007533692 T2	20120820	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP2008528654 T2	20080731	LSPB	+	published / reissued	
JP2008528654 T2	20090121	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20090120
JP2008528654 T2	20091128	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20091127
JP2008528654 T2	20091217	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A821 EFFECTIVE DATE : 20091127
JP2008528654 T2	20111011	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20111011
JP2008528654 T2	20120204	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20120203
JP2008528654 T2	20121002	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20121002
JP2008528654 T2	20121122	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20121121
JP2008528654 T2	20121221	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2008528654 T2	20130122	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20130122
JP2008528654 T2	20130221	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20130213
JP2008528654 T2	20130222	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP2008528654 T2	20130225	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP4895821 B2	20120314	LSGT	+	granted / extensions (spc, cpc, pte)	
JP4895821 B2	20111227	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP4895821 B2	20150108	LSFE	R20	特許料納付書 (Patent fee payment form)	

JP4895821 B2	20150113	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4895821 B2	20160104	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4895821 B2	20160112	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4895821 B2	20170105	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4895821 B2	20170110	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4895821 B2	20180104	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4895821 B2	20180116	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4895821 B2	20181227	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4895821 B2	20190108	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4895821 B2	20241223	PEXP		Calculated Patent Term Expiry	
JP4939217 B2	20120523	LSGT	+	granted / extensions (spc, cpc, pte)	
JP4939217 B2	20120228	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP4939217 B2	20140911	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP4939217 B2	20140917	LSGT	R153	特許存続期間延長登録通知書 (Extended registration notice for patent duration)	
JP4939217 B2	20140917	LSGT	+R153	GRANT OF PATENT TERM EXTENSION	TEXT : JAPANESE INTERMEDIATE CODE: R153
JP4939217 B2	20141211	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4939217 B2	20141216	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4939217 B2	20150108	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4939217 B2	20150123	LSRV	R260	却下理由通知書 (年金) (Rejection reason notice (pension))	
JP4939217 B2	20150402	LSLE	R270	手続却下の処分 (年金) (Disposition of procedure rejection (pension))	
JP4939217 B2	20151203	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4939217 B2	20151208	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4939217 B2	20160104	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4939217 B2	20160125	LSRV	R260	却下理由通知書 (年金) (Rejection reason notice (pension))	
JP4939217 B2	20160318	LSLE	R270	手続却下の処分 (年金) (Disposition of procedure rejection (pension))	
JP4939217 B2	20161201	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4939217 B2	20161206	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4939217 B2	20170105	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4939217 B2	20170120	LSRV	R260	却下理由通知書 (年金)	

				(Rejection reason notice (pension))	
JP4939217 B2	20170330	LSLE	R270	手続却下の処分 (年金) (Disposition of procedure rejection (pension))	
JP4939217 B2	20171124	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4939217 B2	20171207	LSFE	R21	特許料納付書 (補充) (Patent fee payment form (replenishment))	
JP4939217 B2	20171207	LSLE	R280	納付書補充指令書 (Payment refilling order form)	
JP4939217 B2	20171219	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4939217 B2	20180104	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4939217 B2	20180126	LSRV	R260	却下理由通知書 (年金) (Rejection reason notice (pension))	
JP4939217 B2	20180413	LSLE	R270	手続却下の処分 (年金) (Disposition of procedure rejection (pension))	
JP4939217 B2	20181213	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4939217 B2	20181218	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4939217 B2	20181227	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4939217 B2	20190118	LSRV	R260	却下理由通知書 (年金) (Rejection reason notice (pension))	
JP4939217 B2	20190329	LSLE	R270	手続却下の処分 (年金) (Disposition of procedure rejection (pension))	
JP4939217 B2	20240805	PEXP		Calculated Patent Term Expiry	
JP4939218 B2	20120523	LSGT	+	granted / extensions (spc, cpc, pte)	
JP4939218 B2	20120228	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP4939218 B2	20150305	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4939218 B2	20150310	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4939218 B2	20160303	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4939218 B2	20160308	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4939218 B2	20170302	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4939218 B2	20170307	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4939218 B2	20180301	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4939218 B2	20180306	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4939218 B2	20180802	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP4939218 B2	20180808	LSGT	R153	特許存続期間延長登録通知書 (Extended registration notice for patent duration)	
JP4939218 B2	20180808	LSGT	+R153	GRANT OF PATENT TERM EXTENSION	TEXT : JAPANESE INTERMEDIATE CODE: R153

JP4939218 B2	20181227	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4939218 B2	20190108	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4939218 B2	20240805	PEXP		Calculated Patent Term Expiry	
JP5064209 B2	20121031	LSGT	+	granted / extensions (spc, cpc, pte)	
JP5064209 B2	20120814	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP5064209 B2	20150730	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5064209 B2	20150804	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5064209 B2	20160728	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5064209 B2	20160802	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5064209 B2	20170803	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5064209 B2	20170808	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5064209 B2	20180817	LSLE	-LAPS	CANCELLATION BECAUSE OF NO PAYMENT OF ANNUAL FEES	
JP5064209 B2	20250420	PEXP		Calculated Patent Term Expiry	
JP5202963 B2	20130605	LSGT	+	granted / extensions (spc, cpc, pte)	
JP5202963 B2	20130124	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP5202963 B2	20130219	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP5202963 B2	20160128	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5202963 B2	20160202	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5202963 B2	20170202	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5202963 B2	20170207	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5202963 B2	20180201	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5202963 B2	20180206	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5202963 B2	20190131	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5202963 B2	20190205	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5202963 B2	20260206	PEXP		Calculated Patent Term Expiry	
KR101160813 B1	20120705	LSGT	+	granted / extensions (spc, cpc, pte)	
KR101160813 B1	20150515	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20150515 YEAR OF FEE PAYMENT : 4
KR101160813 B1	20160517	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20160517 YEAR OF FEE PAYMENT : 5
KR101160813 B1	20170522	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20170522 YEAR OF FEE PAYMENT : 6

KR101160813 B1	20180529	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20180529 YEAR OF FEE PAYMENT : 7
KR101160813 B1	20240805	PEXP		Calculated Patent Term Expiry	
KR101266925 B1	20130531	LSGT	+	granted / extensions (spc, cpc, pte)	
KR101266925 B1	20160419	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20160419 YEAR OF FEE PAYMENT : 4
KR101266925 B1	20170420	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20170420 YEAR OF FEE PAYMENT : 5
KR101266925 B1	20180417	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20180417 YEAR OF FEE PAYMENT : 6
KR101266925 B1	20190417	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20190417 YEAR OF FEE PAYMENT : 7
KR101266925 B1	20240805	PEXP		Calculated Patent Term Expiry	
KR101299928 B1	20130827	LSGT	+	granted / extensions (spc, cpc, pte)	
KR101299928 B1	20160720	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20160720 YEAR OF FEE PAYMENT : 4
KR101299928 B1	20170719	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20170719 YEAR OF FEE PAYMENT : 5
KR101299928 B1	20180718	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20180718 YEAR OF FEE PAYMENT : 6
KR101299928 B1	20190718	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20190718 YEAR OF FEE PAYMENT : 7
KR101299928 B1	20260206	PEXP		Calculated Patent Term Expiry	
KR20060069832 A	20060622	LSPB	+	published / reissued	
KR20060069832 A	20090731	LSES	A201	REQUEST FOR EXAMINATION	
KR20060069832 A	20110511	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR20060069832 A	20130426	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
KR20060069832 A	20130516	LSGT	+GRNT	WRITTEN DECISION TO GRANT	
KR20070017459 A	20070212	LSPB	+	published / reissued	
KR20070017459 A	20090729	LSES	A201	REQUEST FOR EXAMINATION	
KR20070017459 A	20090729	LSRE	AMND	AMENDMENT	
KR20070017459 A	20110516	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR20070017459 A	20110816	LSRE	AMND	AMENDMENT	
KR20070017459 A	20120302	LSRV	-E601	DECISION TO REFUSE APPLICATION	
KR20070017459 A	20120404	LSRE	AMND	AMENDMENT	
KR20070017459 A	20120605	LSGT	+B701	DECISION TO GRANT	
KR20070017459 A	20120622	LSGT	+GRNT	WRITTEN DECISION TO GRANT	
KR20070111510 A	20071121	LSPB	+	published / reissued	
KR20070111510 A	20110201	LSES	A201	REQUEST FOR EXAMINATION	
KR20070111510 A	20130729	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
KR20070111510 A	20130820	LSGT	+GRNT	WRITTEN DECISION	

				TO GRANT	
KR20120104199 A	20120920	LSPB	+	published / reissued	
KR20120104199 A	20120601	LSES	A201	REQUEST FOR EXAMINATION	
KR20120104199 A	20120622	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR20120104199 A	20121231	LSRV	-E601	DECISION TO REFUSE APPLICATION	
LT1845956 T	20170612	LSGT	+	granted / extensions (spc, cpc, pte)	
LT1845956 T	20260206	PEXP		Calculated Patent Term Expiry	
LT2478896 T	20171227	LSGT	+	granted / extensions (spc, cpc, pte)	
LT2478896 T	20260206	PEXP		Calculated Patent Term Expiry	
MX2007009393 A1	20070816	LSPB	+	published / reissued	
MX2007009393 A1	20141024	LSGT	+FG	GRANT OR REGISTRATION	
MXPA06001452 A1	20070402	LSPB	+	published / reissued	
MXPA06001452 A1	20081008	LSGT	+FG	GRANT OR REGISTRATION	
NO20061054 A	20060303	LSPB	+	published / reissued	
NO20061055 A	20060303	LSPB	+	published / reissued	
NO20074412 A	20071102	LSPB	+	published / reissued	
NO338235 B1	20160808	LSGT	+	granted / extensions (spc, cpc, pte)	
NO338235 B1	20260303	PEXP		Calculated Patent Term Expiry	
NO339522 B1	20161227	LSGT	+	granted / extensions (spc, cpc, pte)	
NO339522 B1	20260303	PEXP		Calculated Patent Term Expiry	
NO342922 B1	20180903	LSGT	+	granted / extensions (spc, cpc, pte)	
NO342922 B1	20270829	PEXP		Calculated Patent Term Expiry	
NZ545200 A	20091127	LSPB	+	published / reissued	
NZ545200 A	20080829	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	
NZ545200 A	20100326	LSGT	+PSEA	PATENT SEALED	
NZ545200 A	20110826	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	
NZ545200 A	20140627	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	TEXT : PATENT RENEWED FOR 3 YEARS UNTIL 05 AUG 2017 BY CPA GLOBAL EFFECTIVE DATE : 20140620
NZ545200 A	20170630	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	TEXT : PATENT RENEWED FOR 1 YEAR UNTIL 05 AUG 2018 BY CPA GLOBAL EFFECTIVE DATE : 20170622
NZ545200 A	20180629	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	TEXT : PATENT RENEWED FOR 1 YEAR UNTIL 05 AUG 2019 BY CPA GLOBAL EFFECTIVE DATE : 20180622
NZ545200 A	20190628	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	TEXT : PATENT RENEWED FOR 1 YEAR UNTIL 05 AUG 2020 BY CPA GLOBAL EFFECTIVE DATE : 20190620
NZ545202 A	20100326	LSPB	+	published / reissued	
NZ545202 A	20080829	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	
NZ545202 A	20100730	LSGT	+PSEA	PATENT SEALED	

NZ545202 A	20110826	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	
NZ545202 A	20140627	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	TEXT : PATENT RENEWED FOR 3 YEARS UNTIL 05 AUG 2017 BY CPA GLOBAL EFFECTIVE DATE : 20140620
NZ545202 A	20170630	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	TEXT : PATENT RENEWED FOR 1 YEAR UNTIL 05 AUG 2018 BY CPA GLOBAL EFFECTIVE DATE : 20170622
NZ545202 A	20180629	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	TEXT : PATENT RENEWED FOR 1 YEAR UNTIL 05 AUG 2019 BY CPA GLOBAL EFFECTIVE DATE : 20180622
NZ545202 A	20190628	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	TEXT : PATENT RENEWED FOR 1 YEAR UNTIL 05 AUG 2020 BY CPA GLOBAL EFFECTIVE DATE : 20190620
NZ560203 A	20100930	LSPB	+	published / reissued	
NZ560203 A	20100226	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	
NZ560203 A	20110128	LSGT	+PSEA	PATENT SEALED	
NZ560203 A	20130125	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	TEXT : PATENT RENEWED FOR 3 YEARS UNTIL 06 FEB 2016 BY CPA GLOBAL EFFECTIVE DATE : 20130103
NZ560203 A	20160129	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	TEXT : PATENT RENEWED FOR 1 YEAR UNTIL 06 FEB 2017 BY CPA GLOBAL EFFECTIVE DATE : 20151224
NZ560203 A	20170127	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	TEXT : PATENT RENEWED FOR 1 YEAR UNTIL 06 FEB 2018 BY CPA GLOBAL EFFECTIVE DATE : 20161223
NZ560203 A	20180126	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	TEXT : PATENT RENEWED FOR 1 YEAR UNTIL 06 FEB 2019 BY CPA GLOBAL EFFECTIVE DATE : 20171222
NZ560203 A	20181221	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	TEXT : PATENT RENEWED FOR 1 YEAR UNTIL 06 FEB 2020 BY CPA GLOBAL EFFECTIVE DATE : 20181220
PE01952006 A1	20060510	LSPB	+	published / reissued	
PE01952006 A1	20061220	LSWD	-FA	ABANDONMENT OR WITHDRAWAL	
PE03532005 A1	20050710	LSPB	+	published / reissued	
PE03532005 A1	20080130	LSGT	+FG	GRANT, REGISTRATION	
PE04822006 A1	20060804	LSPB	+	published / reissued	
PE04822006 A1	20091230	LSGT	+FG	GRANT, REGISTRATION	
PE04822006 A1	20190130	LSWD	-FD	APPLICATION DECLARED VOID OR LAPSED	
PE07282005 A1	20051110	LSPB	+	published / reissued	
PE07282005 A1	20090713	LSGT	+FG	GRANT, REGISTRATION	
PE08142005 A1	20051110	LSPB	+	published / reissued	
PE08142005 A1	20090910	LSRV	-FC	REFUSAL	
PE08142005 A1	20120618	LSGT	+FG	GRANT, REGISTRATION	
PE08142005 A1	20180828	LSWD	-FD	APPLICATION DECLARED VOID OR LAPSED	
PE10872006 A1	20061215	LSPB	+	published / reissued	

PE10872006 A1	20100125	LSRV	-FC	REFUSAL
PL1845956 T3	20170831	LSGT	+	granted / extensions (spc, cpc, pte)
PL2478896 T3	20180228	LSGT	+	granted / extensions (spc, cpc, pte)
PT1658054 T	20070918	LSGT	+	granted / extensions (spc, cpc, pte)
PT1658054 T	20240805	PEXP		Calculated Patent Term Expiry
PT1658055 T	20070724	LSGT	+	granted / extensions (spc, cpc, pte)
PT1658055 T	20240805	PEXP		Calculated Patent Term Expiry
PT1699440 T	20100217	LSGT	+	granted / extensions (spc, cpc, pte)
PT1699440 T	20241223	PEXP		Calculated Patent Term Expiry
PT1740156 T	20110818	LSGT	+	granted / extensions (spc, cpc, pte)
PT1740156 T	20250420	PEXP		Calculated Patent Term Expiry
PT1765298 T	20121212	LSGT	+	granted / extensions (spc, cpc, pte)
PT1765298 T	20250629	PEXP		Calculated Patent Term Expiry
PT1842533 T	20130517	LSGT	+	granted / extensions (spc, cpc, pte)
PT1842533 T	20240805	PEXP		Calculated Patent Term Expiry
PT1845956 T	20170704	LSGT	+	granted / extensions (spc, cpc, pte)
PT1845956 T	20260206	PEXP		Calculated Patent Term Expiry
PT2478896 T	20171115	LSGT	+	granted / extensions (spc, cpc, pte)
PT2478896 T	20260206	PEXP		Calculated Patent Term Expiry
RU2006106725 A	20071220	LSPB	+	published / reissued
RU2006106726 A	20071220	LSPB	+	published / reissued
RU2007132975 A	20090420	LSPB	+	published / reissued
RU2010119291 A	20111120	LSPB	+	published / reissued
RU2339365 C2	20081127	LSGT	+	granted / extensions (spc, cpc, pte)
RU2339365 C2	20240805	PEXP		Calculated Patent Term Expiry
RU2354357 C2	20090510	LSGT	+	granted / extensions (spc, cpc, pte)
RU2354357 C2	20240805	PEXP		Calculated Patent Term Expiry
RU2399371 C2	20100920	LSGT	+	granted / extensions (spc, cpc, pte)
RU2399371 C2	20260206	PEXP		Calculated Patent Term Expiry
RU2461381 C2	20120920	LSGT	+	granted / extensions (spc, cpc, pte)
RU2461381 C2	20300514	PEXP		Calculated Patent Term Expiry
SI1658054 T1	20071031	LSGT	+	granted / extensions (spc, cpc, pte)
SI1658054 T1	20240805	PEXP		Calculated Patent Term Expiry
SI1658055 T1	20070831	LSGT	+	granted / extensions (spc, cpc, pte)
SI1658055 T1	20240805	PEXP		Calculated Patent Term Expiry
SI1699440 T1	20100331	LSGT	+	granted / extensions (spc, cpc, pte)

SI1699440 T1	20241223	PEXP		Calculated Patent Term Expiry	
SI1740156 T1	20110930	LSGT	+	granted / extensions (spc, cpc, pte)	
SI1740156 T1	20250420	PEXP		Calculated Patent Term Expiry	
SI1765298 T1	20121231	LSGT	+	granted / extensions (spc, cpc, pte)	
SI1765298 T1	20250629	PEXP		Calculated Patent Term Expiry	
SI1842533 T1	20130628	LSGT	+	granted / extensions (spc, cpc, pte)	
SI1842533 T1	20240805	PEXP		Calculated Patent Term Expiry	
SI1845956 T1	20170731	LSGT	+	granted / extensions (spc, cpc, pte)	
SI1845956 T1	20260206	PEXP		Calculated Patent Term Expiry	
SI1859789 T1	20160630	LSGT	+	granted / extensions (spc, cpc, pte)	
SI1859789 T1	20240805	PEXP		Calculated Patent Term Expiry	
SI2478896 T1	20171229	LSGT	+	granted / extensions (spc, cpc, pte)	
SI2478896 T1	20260206	PEXP		Calculated Patent Term Expiry	
TR201604789 T4	20160523	LSGT	+	granted / extensions (spc, cpc, pte)	
TR201604789 T4	20240805	PEXP		Calculated Patent Term Expiry	
TR201707400 T4	20170621	LSGT	+	granted / extensions (spc, cpc, pte)	
TR201707400 T4	20260206	PEXP		Calculated Patent Term Expiry	
TR201717600 T4	20171221	LSGT	+	granted / extensions (spc, cpc, pte)	
TR201717600 T4	20260206	PEXP		Calculated Patent Term Expiry	
TW200640501 A	20061201	LSPB	+	published / reissued	
TWI381860 B	20130111	LSGT	+	granted / extensions (spc, cpc, pte)	
TWI381860 B	20260206	PEXP		Calculated Patent Term Expiry	
US10058548 BB	20180828	LSGT	+	granted / extensions (spc, cpc, pte)	
US10058548 BB	20170315	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRUENENTHAL GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BARTHOLOMAEUS, JOHANNES; KUGELMANN, HEINRICH; ARKENAU-MARIC, ELISABETH; SIGNING DATES FROM 20130412 TO 20130424; REEL/FRAME:041580/0224
US10058548 BB	20180808	LSGT	PAT1	Patented Case	
US10058548 BB	20370315	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
US10130591 BB	20181120	LSGT	+	granted / extensions (spc, cpc, pte)	
US10130591 BB	20160914	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRUENENTHAL GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BARTHOLOMAEUS, JOHANNES; KUGELMANN, HEINRICH; ARKENAU-MARIC, ELISABETH; SIGNING DATES FROM

					20150530 TO 20150815; REEL/FRAME:039740/0755
US10130591 BB	20181031	LSGT	PAT1	Patented Case	
US10130591 BB	20360914	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
US2005031546 AA	20050210	LSPB	+	published / reissued	
US2005031546 AA	20060522	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRUNENTHAL GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ARKENAU-MARIC, ELISABETH; REEL/FRAME:017910/0832 EFFECTIVE DATE : 20060510
US2005031546 AA	20101209	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : JPMORGAN CHASE BANK, N.A., AS ADMINISTRATIVE AGENT OLDPARTY : CONFIRMATORY GRANT OF SECURITY INTEREST IN UNITED STATES PATENTS (EXCLUSIVELY LICENSED PATENTS); ASSIGNOR:ENDO PHARMACEUTICALS INC.; REEL/FRAME:025456/0172 EFFECTIVE DATE : 20101130
US2005031546 AA	20110708	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MORGAN STANLEY SENIOR FUNDING, INC., AS ADMINISTRA OLDPARTY : SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS; ASSIGNOR:ENDO PHARMACEUTICALS INC.; REEL/FRAME:026561/0978 EFFECTIVE DATE : 20110617
US2005031546 AA	20110712	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS INC., PENNSYLVANIA OLDPARTY : RELEASE OF SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS RECORDED AT REEL/FRAME 25456/172; ASSIGNOR:JPMORGAN CHASE BANK N.A., AS ADMINISTRATIVE AGENT; REEL/FRAME:026577/0357 EFFECTIVE DATE : 20110617
US2005031546 AA	20120125	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2005236741 AA	20051027	LSPB	+	published / reissued	
US2005236741 AA	20041206	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRUNENTHAL GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ARKENAU, ELISABETH; BARTHOLOMAEUS, JOHANNES; REEL/FRAME:016042/0312 EFFECTIVE DATE : 20041111
US2005236741 AA	20101209	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : JPMORGAN CHASE BANK, N.A., AS ADMINISTRATIVE AGENT OLDPARTY : CONFIRMATORY GRANT OF SECURITY INTEREST IN UNITED STATES PATENTS (EXCLUSIVELY LICENSED PATENTS); ASSIGNOR:ENDO PHARMACEUTICALS INC.; REEL/FRAME:025456/0172 EFFECTIVE DATE : 20101130
US2005236741 AA	20110708	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MORGAN STANLEY SENIOR FUNDING, INC., AS ADMINISTRA OLDPARTY : SECURITY INTEREST IN EXCLUSIVELY LICENSED

					PATENTS; ASSIGNOR:ENDO PHARMACEUTICALS INC.; REEL/FRAME:026561/0978 EFFECTIVE DATE : 20110617
US2005236741 AA	20110712	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS INC., PENNSYLVANIA OLDPARTY : RELEASE OF SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS RECORDED AT REEL/FRAME 25456/172; ASSIGNOR:JPMORGAN CHASE BANK N.A., AS ADMINISTRATIVE AGENT; REEL/FRAME:026577/0357 EFFECTIVE DATE : 20110617
US2005236741 AA	20140303	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS SOLUTIONS INC., PENNSYLVANIA OLDPARTY : RELEASE OF PATENT SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS; ASSIGNOR:MORGAN STANLEY SENIOR FUNDING, INC., AS ADMINISTRATIVE AGENT; REEL/FRAME:032380/0157 EFFECTIVE DATE : 20140228
US2005236741 AA	20140320	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : DEUTSCHE BANK AG NEW YORK BRANCH, AS COLLATERAL AG OLDPARTY : GRANT OF SECURITY INTEREST IN LICENSED PATENTS; ASSIGNOR:ENDO PHARMACEUTICALS, INC.; REEL/FRAME:032491/0620 EFFECTIVE DATE : 20140228
US2005236741 AA	20140324	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS INC., PENNSYLVANIA OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE NAME OF RECEIVING PARTY IN RELEASE OF PATENT SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS PREVIOUSLY RECORDED ON REEL 032380 FRAME 0157. ASSIGNOR(S) HEREBY CONFIRMS THE RELEASE OF SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS.; ASSIGNOR:MORGAN STANLEY SENIOR FUNDING, INC., AS ADMINISTRATIVE AGENT; REEL/FRAME:032513/0255 EFFECTIVE DATE : 20140228
US2005236741 AA	20140616	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2005236741 AA	20170428	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS SOLUTIONS, INC., PENNSYLVANIA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK AG NEW YORK BRANCH; REEL/FRAME:042362/0001 EFFECTIVE DATE : 20170427
US2005236741 AA	20170428	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ASTORA WOMEN'S HEALTH HOLDINGS, LLC, PENNSYLVANIA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK AG NEW YORK BRANCH; REEL/FRAME:042362/0001 EFFECTIVE DATE : 20170427
US2005236741 AA	20170428	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS, INC.,

					PENNSYLVANIA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK AG NEW YORK BRANCH; REEL/FRAME:042362/0001 EFFECTIVE DATE : 20170427
US2006002859 AA	20060105	LSPB	+	published / reissued	
US2006002859 AA	20081117	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRUENENTHAL GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ARKENAU, ELISABETH, DR.; BARTHOLOMAUS, JOHANNES, DR.; REEL/FRAME:021842/0654 EFFECTIVE DATE : 20040911
US2006002859 AA	20101209	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : JPMORGAN CHASE BANK, N.A., AS ADMINISTRATIVE AGENT OLDPARTY : CONFIRMATORY GRANT OF SECURITY INTEREST IN UNITED STATES PATENTS (EXCLUSIVELY LICENSED PATENTS); ASSIGNOR:ENDO PHARMACEUTICALS INC.; REEL/FRAME:025456/0172 EFFECTIVE DATE : 20101130
US2006002859 AA	20110708	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MORGAN STANLEY SENIOR FUNDING, INC., AS ADMINISTRA OLDPARTY : SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS; ASSIGNOR:ENDO PHARMACEUTICALS INC.; REEL/FRAME:026561/0978 EFFECTIVE DATE : 20110617
US2006002859 AA	20110712	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS INC., PENNSYLVANIA OLDPARTY : RELEASE OF SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS RECORDED AT REEL/FRAME 25456/172; ASSIGNOR:JPMORGAN CHASE BANK N.A., AS ADMINISTRATIVE AGENT; REEL/FRAME:026577/0357 EFFECTIVE DATE : 20110617
US2006002859 AA	20120125	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2006193782 AA	20060831	LSPB	+	published / reissued	
US2006193782 AA	20060510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRUNENTHAL GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BARTHOLOMAUS, JOHANNES DR.; KUGELMANN, HEINRICH; ARKENAU-MARIC, ELISABETH; REEL/FRAME:017877/0168; SIGNING DATES FROM 20060420 TO 20060421
US2006193782 AA	20101209	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : JPMORGAN CHASE BANK, N.A., AS ADMINISTRATIVE AGENT OLDPARTY : CONFIRMATORY GRANT OF SECURITY INTEREST IN UNITED STATES PATENTS (EXCLUSIVELY LICENSED PATENTS); ASSIGNOR:ENDO PHARMACEUTICALS INC.; REEL/FRAME:025456/0172 EFFECTIVE DATE : 20101130
US2006193782 AA	20110708	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MORGAN STANLEY SENIOR FUNDING, INC., AS ADMINISTRA

					OLDPARTY : SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS; ASSIGNOR:ENDO PHARMACEUTICALS INC.; REEL/FRAME:026561/0978 EFFECTIVE DATE : 20110617
US2006193782 AA	20110712	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS INC., PENNSYLVANIA OLDPARTY : RELEASE OF SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS RECORDED AT REEL/FRAME 25456/172; ASSIGNOR:JPMORGAN CHASE BANK N.A., AS ADMINISTRATIVE AGENT; REEL/FRAME:026577/0357 EFFECTIVE DATE : 20110617
US2006193782 AA	20140115	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2006193782 AA	20140303	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS SOLUTIONS INC., PENNSYLVANIA OLDPARTY : RELEASE OF PATENT SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS; ASSIGNOR:MORGAN STANLEY SENIOR FUNDING, INC., AS ADMINISTRATIVE AGENT; REEL/FRAME:032380/0157 EFFECTIVE DATE : 20140228
US2006193782 AA	20140320	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : DEUTSCHE BANK AG NEW YORK BRANCH, AS COLLATERAL AG OLDPARTY : GRANT OF SECURITY INTEREST IN LICENSED PATENTS; ASSIGNOR:ENDO PHARMACEUTICALS, INC.; REEL/FRAME:032491/0620 EFFECTIVE DATE : 20140228
US2006193782 AA	20140324	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS INC., PENNSYLVANIA OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE NAME OF RECEIVING PARTY IN RELEASE OF PATENT SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS PREVIOUSLY RECORDED ON REEL 032380 FRAME 0157. ASSIGNOR(S) HEREBY CONFIRMS THE RELEASE OF SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS.; ASSIGNOR:MORGAN STANLEY SENIOR FUNDING, INC., AS ADMINISTRATIVE AGENT; REEL/FRAME:032513/0255 EFFECTIVE DATE : 20140228
US2006193782 AA	20170428	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ASTORA WOMEN'S HEALTH HOLDINGS, LLC, PENNSYLVANIA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK AG NEW YORK BRANCH; REEL/FRAME:042362/0001 EFFECTIVE DATE : 20170427
US2006193782 AA	20170428	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS SOLUTIONS, INC., PENNSYLVANIA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK AG NEW YORK BRANCH; REEL/FRAME:042362/0001 EFFECTIVE DATE : 20170427
US2006193782 AA	20170428	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER

					OWNER : ENDO PHARMACEUTICALS, INC., PENNSYLVANIA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK AG NEW YORK BRANCH; REEL/FRAME:042362/0001 EFFECTIVE DATE : 20170427
US2006193914 AA	20060831	LSPB	+	published / reissued	
US2006193914 AA	20060510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRUNENTHAL GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ASHWORTH, JUDY DR.; ARKENAU-MARIC, ELISABETH DR.; BARTHOLOMAUS, JOHANNES DR.; REEL/FRAME:017878/0195; SIGNING DATES FROM 20060215 TO 20060420
US2006193914 AA	20091124	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRUENENTHAL GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ASHWORTH, JUDY, DR.; ARKENAU-MARIC, ELISABETH, DR.; BARTHOLOMAEUS, JOHANNES, DR.; AND OTHERS; REEL/FRAME:023562/0270; SIGNING DATES FROM 20091103 TO 20091113
US2006193914 AA	20101209	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : JPMORGAN CHASE BANK, N.A., AS ADMINISTRATIVE AGENT OLDPARTY : CONFIRMATORY GRANT OF SECURITY INTEREST IN UNITED STATES PATENTS (EXCLUSIVELY LICENSED PATENTS); ASSIGNOR:ENDO PHARMACEUTICALS INC.; REEL/FRAME:025456/0172 EFFECTIVE DATE : 20101130
US2006193914 AA	20110708	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MORGAN STANLEY SENIOR FUNDING, INC., AS ADMINISTRA OLDPARTY : SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS; ASSIGNOR:ENDO PHARMACEUTICALS INC.; REEL/FRAME:026561/0978 EFFECTIVE DATE : 20110617
US2006193914 AA	20110712	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS INC., PENNSYLVANIA OLDPARTY : RELEASE OF SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS RECORDED AT REEL/FRAME 25456/172; ASSIGNOR:JPMORGAN CHASE BANK N.A., AS ADMINISTRATIVE AGENT; REEL/FRAME:026577/0357 EFFECTIVE DATE : 20110617
US2006193914 AA	20140103	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2006193914 AA	20140303	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS SOLUTIONS INC., PENNSYLVANIA OLDPARTY : RELEASE OF PATENT SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS; ASSIGNOR:MORGAN STANLEY SENIOR FUNDING, INC., AS ADMINISTRATIVE AGENT; REEL/FRAME:032380/0157 EFFECTIVE DATE : 20140228
US2006193914 AA	20140320	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : DEUTSCHE BANK AG

					NEW YORK BRANCH, AS COLLATERAL AG OLDPARTY : GRANT OF SECURITY INTEREST IN LICENSED PATENTS; ASSIGNOR:ENDO PHARMACEUTICALS, INC.; REEL/FRAME:032491/0620 EFFECTIVE DATE : 20140228
US2006193914 AA	20140324	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS INC., PENNSYLVANIA OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE NAME OF RECEIVING PARTY IN RELEASE OF PATENT SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS PREVIOUSLY RECORDED ON REEL 032380 FRAME 0157. ASSIGNOR(S) HEREBY CONFIRMS THE RELEASE OF SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS.; ASSIGNOR:MORGAN STANLEY SENIOR FUNDING, INC., AS ADMINISTRATIVE AGENT; REEL/FRAME:032513/0255 EFFECTIVE DATE : 20140228
US2006193914 AA	20170428	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS, INC., PENNSYLVANIA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK AG NEW YORK BRANCH; REEL/FRAME:042362/0001 EFFECTIVE DATE : 20170427
US2006193914 AA	20170428	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS SOLUTIONS, INC., PENNSYLVANIA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK AG NEW YORK BRANCH; REEL/FRAME:042362/0001 EFFECTIVE DATE : 20170427
US2006193914 AA	20170428	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ASTORA WOMEN'S HEALTH HOLDINGS, LLC, PENNSYLVANIA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK AG NEW YORK BRANCH; REEL/FRAME:042362/0001 EFFECTIVE DATE : 20170427
US2007003616 AA	20070104	LSPB	+	published / reissued	
US2007003616 AA	20060920	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRUNENTHAL GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ARKENAU-MARIC, ELISABETH, DR.; BARTHOLOMAUS, JOHANNES, DR.; REEL/FRAME:018276/0740; SIGNING DATES FROM 20060623 TO 20060626
US2007003616 AA	20101209	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : JPMORGAN CHASE BANK, N.A., AS ADMINISTRATIVE AGENT OLDPARTY : CONFIRMATORY GRANT OF SECURITY INTEREST IN UNITED STATES PATENTS (EXCLUSIVELY LICENSED PATENTS); ASSIGNOR:ENDO PHARMACEUTICALS INC.; REEL/FRAME:025456/0172 EFFECTIVE DATE : 20101130
US2007003616 AA	20110708	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MORGAN STANLEY SENIOR FUNDING, INC., AS ADMINISTRA OLDPARTY : SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS; ASSIGNOR:ENDO

					PHARMACEUTICALS INC.; REEL/FRAME:026561/0978 EFFECTIVE DATE : 20110617
US2007003616 AA	20110712	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS INC., PENNSYLVANIA OLDPARTY : RELEASE OF SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS RECORDED AT REEL/FRAME 25456/172; ASSIGNOR:JPMORGAN CHASE BANK N.A., AS ADMINISTRATIVE AGENT; REEL/FRAME:026577/0357 EFFECTIVE DATE : 20110617
US2007003616 AA	20140303	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS SOLUTIONS INC., PENNSYLVANIA OLDPARTY : RELEASE OF PATENT SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS; ASSIGNOR:MORGAN STANLEY SENIOR FUNDING, INC., AS ADMINISTRATIVE AGENT; REEL/FRAME:032380/0157 EFFECTIVE DATE : 20140228
US2007003616 AA	20140320	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : DEUTSCHE BANK AG NEW YORK BRANCH, AS COLLATERAL AG OLDPARTY : GRANT OF SECURITY INTEREST IN LICENSED PATENTS; ASSIGNOR:ENDO PHARMACEUTICALS, INC.; REEL/FRAME:032491/0620 EFFECTIVE DATE : 20140228
US2007003616 AA	20140324	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS INC., PENNSYLVANIA OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE NAME OF RECEIVING PARTY IN RELEASE OF PATENT SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS PREVIOUSLY RECORDED ON REEL 032380 FRAME 0157. ASSIGNOR(S) HEREBY CONFIRMS THE RELEASE OF SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS.; ASSIGNOR:MORGAN STANLEY SENIOR FUNDING, INC., AS ADMINISTRATIVE AGENT; REEL/FRAME:032513/0255 EFFECTIVE DATE : 20140228
US2007003616 AA	20150122	LSWD	-ABD2	Abandoned -- Failure to Pay Issue Fee	
US2007003616 AA	20170428	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS SOLUTIONS, INC., PENNSYLVANIA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK AG NEW YORK BRANCH; REEL/FRAME:042362/0001 EFFECTIVE DATE : 20170427
US2007003616 AA	20170428	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS, INC., PENNSYLVANIA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK AG NEW YORK BRANCH; REEL/FRAME:042362/0001 EFFECTIVE DATE : 20170427
US2007003616 AA	20170428	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ASTORA WOMEN'S HEALTH HOLDINGS, LLC, PENNSYLVANIA OLDPARTY : RELEASE BY

					SECURED PARTY; ASSIGNOR:DEUTSCHE BANK AG NEW YORK BRANCH; REEL/FRAME:042362/0001 EFFECTIVE DATE : 20170427
US2007048228 AA	20070301	LSPB	+	published / reissued	
US2007048228 AA	20061113	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRUNENTHAL GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ARKENAU-MARIC, ELISABETH; BARTHOLOMAUS, JOHANNES; KUGELMANN, HEINRICH; REEL/FRAME:018510/0930; SIGNING DATES FROM 20061011 TO 20061018
US2007048228 AA	20101209	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : JPMORGAN CHASE BANK, N.A., AS ADMINISTRATIVE AGENT OLDPARTY : CONFIRMATORY GRANT OF SECURITY INTEREST IN UNITED STATES PATENTS (EXCLUSIVELY LICENSED PATENTS); ASSIGNOR:ENDO PHARMACEUTICALS INC.; REEL/FRAME:025456/0172 EFFECTIVE DATE : 20101130
US2007048228 AA	20110708	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MORGAN STANLEY SENIOR FUNDING, INC., AS ADMINISTRA OLDPARTY : SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS; ASSIGNOR:ENDO PHARMACEUTICALS INC.; REEL/FRAME:026561/0978 EFFECTIVE DATE : 20110617
US2007048228 AA	20110712	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS INC., PENNSYLVANIA OLDPARTY : RELEASE OF SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS RECORDED AT REEL/FRAME 25456/172; ASSIGNOR:JPMORGAN CHASE BANK N.A., AS ADMINISTRATIVE AGENT; REEL/FRAME:026577/0357 EFFECTIVE DATE : 20110617
US2007048228 AA	20121223	LSWD	-EAB2	Expressly Abandoned -- During Publication Process	
US2007048228 AA	20140303	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS SOLUTIONS INC., PENNSYLVANIA OLDPARTY : RELEASE OF PATENT SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS; ASSIGNOR:MORGAN STANLEY SENIOR FUNDING, INC., AS ADMINISTRATIVE AGENT; REEL/FRAME:032380/0157 EFFECTIVE DATE : 20140228
US2007048228 AA	20140324	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS INC., PENNSYLVANIA OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE NAME OF RECEIVING PARTY IN RELEASE OF PATENT SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS PREVIOUSLY RECORDED ON REEL 032380 FRAME 0157. ASSIGNOR(S) HEREBY CONFIRMS THE RELEASE OF SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS.; ASSIGNOR:MORGAN STANLEY SENIOR FUNDING, INC., AS ADMINISTRATIVE AGENT; REEL/FRAME:032513/0255 EFFECTIVE DATE : 20140228

US2007183979 AA	20070809	LSPB	+	published / reissued	
US2007183979 AA	20101209	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : JPMORGAN CHASE BANK, N.A., AS ADMINISTRATIVE AGENT OLDPARTY : CONFIRMATORY GRANT OF SECURITY INTEREST IN UNITED STATES PATENTS (EXCLUSIVELY LICENSED PATENTS); ASSIGNOR:ENDO PHARMACEUTICALS INC.; REEL/FRAME:025456/0172 EFFECTIVE DATE : 20101130
US2007183979 AA	20110708	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MORGAN STANLEY SENIOR FUNDING, INC., AS ADMINISTRA OLDPARTY : SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS; ASSIGNOR:ENDO PHARMACEUTICALS INC.; REEL/FRAME:026561/0978 EFFECTIVE DATE : 20110617
US2007183979 AA	20110712	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS INC., PENNSYLVANIA OLDPARTY : RELEASE OF SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS RECORDED AT REEL/FRAME 25456/172; ASSIGNOR:JPMORGAN CHASE BANK N.A., AS ADMINISTRATIVE AGENT; REEL/FRAME:026577/0357 EFFECTIVE DATE : 20110617
US2007183979 AA	20111122	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2007183980 AA	20070809	LSPB	+	published / reissued	
US2007183980 AA	20061212	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRUNENTHAL GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ARKENAU-MARIC, ELISABETH; BARTHOLOMAUS, JOHANNES; KUGELMANN, HEINRICH; REEL/FRAME:018620/0962; SIGNING DATES FROM 20061031 TO 20061119
US2007183980 AA	20101209	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : JPMORGAN CHASE BANK, N.A., AS ADMINISTRATIVE AGENT OLDPARTY : CONFIRMATORY GRANT OF SECURITY INTEREST IN UNITED STATES PATENTS (EXCLUSIVELY LICENSED PATENTS); ASSIGNOR:ENDO PHARMACEUTICALS INC.; REEL/FRAME:025456/0172 EFFECTIVE DATE : 20101130
US2007183980 AA	20110708	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MORGAN STANLEY SENIOR FUNDING, INC., AS ADMINISTRA OLDPARTY : SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS; ASSIGNOR:ENDO PHARMACEUTICALS INC.; REEL/FRAME:026561/0978 EFFECTIVE DATE : 20110617
US2007183980 AA	20110712	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS INC., PENNSYLVANIA OLDPARTY : RELEASE OF SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS RECORDED AT REEL/FRAME 25456/172; ASSIGNOR:JPMORGAN CHASE BANK N.A., AS ADMINISTRATIVE AGENT;

					REEL/FRAME:026577/0357 EFFECTIVE DATE : 20110617
US2007183980 AA	20140108	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2007183980 AA	20140303	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS SOLUTIONS INC., PENNSYLVANIA OLDPARTY : RELEASE OF PATENT SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS; ASSIGNOR:MORGAN STANLEY SENIOR FUNDING, INC., AS ADMINISTRATIVE AGENT; REEL/FRAME:032380/0157 EFFECTIVE DATE : 20140228
US2007183980 AA	20140320	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : DEUTSCHE BANK AG NEW YORK BRANCH, AS COLLATERAL AG OLDPARTY : GRANT OF SECURITY INTEREST IN LICENSED PATENTS; ASSIGNOR:ENDO PHARMACEUTICALS, INC.; REEL/FRAME:032491/0620 EFFECTIVE DATE : 20140228
US2007183980 AA	20140324	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS INC., PENNSYLVANIA OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE NAME OF RECEIVING PARTY IN RELEASE OF PATENT SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS PREVIOUSLY RECORDED ON REEL 032380 FRAME 0157. ASSIGNOR(S) HEREBY CONFIRMS THE RELEASE OF SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS.; ASSIGNOR:MORGAN STANLEY SENIOR FUNDING, INC., AS ADMINISTRATIVE AGENT; REEL/FRAME:032513/0255 EFFECTIVE DATE : 20140228
US2007183980 AA	20170428	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ASTORA WOMEN'S HEALTH HOLDINGS, LLC, PENNSYLVANIA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK AG NEW YORK BRANCH; REEL/FRAME:042362/0001 EFFECTIVE DATE : 20170427
US2007183980 AA	20170428	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS, INC., PENNSYLVANIA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK AG NEW YORK BRANCH; REEL/FRAME:042362/0001 EFFECTIVE DATE : 20170427
US2007183980 AA	20170428	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS SOLUTIONS, INC., PENNSYLVANIA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK AG NEW YORK BRANCH; REEL/FRAME:042362/0001 EFFECTIVE DATE : 20170427
US2008247959 AA	20081009	LSPB	+	published / reissued	
US2008247959 AA	20101209	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : JPMORGAN CHASE BANK, N.A., AS ADMINISTRATIVE AGENT OLDPARTY : CONFIRMATORY GRANT OF SECURITY INTEREST IN UNITED STATES PATENTS (EXCLUSIVELY LICENSED PATENTS); ASSIGNOR:ENDO

					PHARMACEUTICALS INC.; REEL/FRAME:025456/0172 EFFECTIVE DATE : 20101130
US2008247959 AA	20110708	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MORGAN STANLEY SENIOR FUNDING, INC., AS ADMINISTRA OLDPARTY : SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS; ASSIGNOR:ENDO PHARMACEUTICALS INC.; REEL/FRAME:026561/0978 EFFECTIVE DATE : 20110617
US2008247959 AA	20110712	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS INC., PENNSYLVANIA OLDPARTY : RELEASE OF SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS RECORDED AT REEL/FRAME 25456/172; ASSIGNOR:JPMORGAN CHASE BANK N.A., AS ADMINISTRATIVE AGENT; REEL/FRAME:026577/0357 EFFECTIVE DATE : 20110617
US2008247959 AA	20140115	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2008247959 AA	20140303	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS SOLUTIONS INC., PENNSYLVANIA OLDPARTY : RELEASE OF PATENT SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS; ASSIGNOR:MORGAN STANLEY SENIOR FUNDING, INC., AS ADMINISTRATIVE AGENT; REEL/FRAME:032380/0157 EFFECTIVE DATE : 20140228
US2008247959 AA	20140320	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : DEUTSCHE BANK AG NEW YORK BRANCH, AS COLLATERAL AG OLDPARTY : GRANT OF SECURITY INTEREST IN LICENSED PATENTS; ASSIGNOR:ENDO PHARMACEUTICALS, INC.; REEL/FRAME:032491/0620 EFFECTIVE DATE : 20140228
US2008247959 AA	20140324	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS INC., PENNSYLVANIA OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE NAME OF RECEIVING PARTY IN RELEASE OF PATENT SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS PREVIOUSLY RECORDED ON REEL 032380 FRAME 0157. ASSIGNOR(S) HEREBY CONFIRMS THE RELEASE OF SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS.; ASSIGNOR:MORGAN STANLEY SENIOR FUNDING, INC., AS ADMINISTRATIVE AGENT; REEL/FRAME:032513/0255 EFFECTIVE DATE : 20140228
US2008247959 AA	20170428	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ASTORA WOMEN'S HEALTH HOLDINGS, LLC, PENNSYLVANIA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK AG NEW YORK BRANCH; REEL/FRAME:042362/0001 EFFECTIVE DATE : 20170427
US2008247959 AA	20170428	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS SOLUTIONS, INC., PENNSYLVANIA

					OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK AG NEW YORK BRANCH; REEL/FRAME:042362/0001 EFFECTIVE DATE : 20170427
US2008247959 AA	20170428	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS, INC., PENNSYLVANIA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK AG NEW YORK BRANCH; REEL/FRAME:042362/0001 EFFECTIVE DATE : 20170427
US2008311049 AA	20081218	LSPB	+	published / reissued	
US2008311049 AA	20101209	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : JPMORGAN CHASE BANK, N.A., AS ADMINISTRATIVE AGENT OLDPARTY : CONFIRMATORY GRANT OF SECURITY INTEREST IN UNITED STATES PATENTS (EXCLUSIVELY LICENSED PATENTS); ASSIGNOR:ENDO PHARMACEUTICALS INC.; REEL/FRAME:025456/0172 EFFECTIVE DATE : 20101130
US2008311049 AA	20110708	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MORGAN STANLEY SENIOR FUNDING, INC., AS ADMINISTRA OLDPARTY : SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS; ASSIGNOR:ENDO PHARMACEUTICALS INC.; REEL/FRAME:026561/0978 EFFECTIVE DATE : 20110617
US2008311049 AA	20110712	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS INC., PENNSYLVANIA OLDPARTY : RELEASE OF SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS RECORDED AT REEL/FRAME 25456/172; ASSIGNOR:JPMORGAN CHASE BANK N.A., AS ADMINISTRATIVE AGENT; REEL/FRAME:026577/0357 EFFECTIVE DATE : 20110617
US2008311049 AA	20120516	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2008311187 AA	20081218	LSPB	+	published / reissued	
US2008311187 AA	20100208	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRUNENTHAL GMBH,GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ASHWORTH, JUDY, DR.; ARKENAU-MARIC, ELISABETH, DR.; BARTHOLOMAUS, JOHANNES, DR.; AND OTHERS; SIGNING DATES FROM 20091120 TO 20091130; REEL/FRAME:023909/0009
US2008311187 AA	20140902	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2008312264 AA	20081218	LSPB	+	published / reissued	
US2008312264 AA	20101209	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : JPMORGAN CHASE BANK, N.A., AS ADMINISTRATIVE AGENT OLDPARTY : CONFIRMATORY GRANT OF SECURITY INTEREST IN UNITED STATES PATENTS (EXCLUSIVELY LICENSED PATENTS); ASSIGNOR:ENDO PHARMACEUTICALS INC.; REEL/FRAME:025456/0172 EFFECTIVE DATE : 20101130

US2008312264 AA	20110708	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MORGAN STANLEY SENIOR FUNDING, INC., AS ADMINISTRA OLDPARTY : SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS; ASSIGNOR:ENDO PHARMACEUTICALS INC.; REEL/FRAME:026561/0978 EFFECTIVE DATE : 20110617
US2008312264 AA	20110712	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS INC., PENNSYLVANIA OLDPARTY : RELEASE OF SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS RECORDED AT REEL/FRAME 25456/172; ASSIGNOR:JPMORGAN CHASE BANK N.A., AS ADMINISTRATIVE AGENT; REEL/FRAME:026577/0357 EFFECTIVE DATE : 20110617
US2008312264 AA	20121114	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2008317854 AA	20081225	LSPB	+	published / reissued	
US2008317854 AA	20140404	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2009005408 AA	20090101	LSPB	+	published / reissued	
US2009005408 AA	20101209	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : JPMORGAN CHASE BANK, N.A., AS ADMINISTRATIVE AGENT OLDPARTY : CONFIRMATORY GRANT OF SECURITY INTEREST IN UNITED STATES PATENTS (EXCLUSIVELY LICENSED PATENTS); ASSIGNOR:ENDO PHARMACEUTICALS INC.; REEL/FRAME:025456/0172 EFFECTIVE DATE : 20101130
US2009005408 AA	20110708	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MORGAN STANLEY SENIOR FUNDING, INC., AS ADMINISTRA OLDPARTY : SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS; ASSIGNOR:ENDO PHARMACEUTICALS INC.; REEL/FRAME:026561/0978 EFFECTIVE DATE : 20110617
US2009005408 AA	20110712	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS INC., PENNSYLVANIA OLDPARTY : RELEASE OF SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS RECORDED AT REEL/FRAME 25456/172; ASSIGNOR:JPMORGAN CHASE BANK N.A., AS ADMINISTRATIVE AGENT; REEL/FRAME:026577/0357 EFFECTIVE DATE : 20110617
US2009005408 AA	20130822	LSWD	-ABD2	Abandoned -- Failure to Pay Issue Fee	
US2009005408 AA	20140303	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS SOLUTIONS INC., PENNSYLVANIA OLDPARTY : RELEASE OF PATENT SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS; ASSIGNOR:MORGAN STANLEY SENIOR FUNDING, INC., AS ADMINISTRATIVE AGENT; REEL/FRAME:032380/0157 EFFECTIVE DATE : 20140228
US2009005408 AA	20140324	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS INC.,

					PENNSYLVANIA OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE NAME OF RECEIVING PARTY IN RELEASE OF PATENT SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS PREVIOUSLY RECORDED ON REEL 032380 FRAME 0157. ASSIGNOR(S) HEREBY CONFIRMS THE RELEASE OF SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS.; ASSIGNOR:MORGAN STANLEY SENIOR FUNDING, INC., AS ADMINISTRATIVE AGENT; REEL/FRAME:032513/0255 EFFECTIVE DATE : 20140228
US2010151028 AA	20100617	LSPB	+	published / reissued	
US2010151028 AA	20101217	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRUENENTHAL GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ARKENAU-MARIC, ELISABETH, DR.; BARTHOLOMAEUS, JOHANNES, DR.; KUGELMANN, HEINRICH; SIGNING DATES FROM 20101027 TO 20101128; REEL/FRAME:025515/0382
US2010151028 AA	20140116	LSWD	-ABD2	Abandoned -- Failure to Pay Issue Fee	
US2012034171 AA	20120209	LSPB	+	published / reissued	
US2012034171 AA	20130327	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2012107250 AA	20120503	LSPB	+	published / reissued	
US2012107250 AA	20121024	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2012251637 AA	20121004	LSPB	+	published / reissued	
US2012251637 AA	20140221	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2013171075 AA	20130704	LSPB	+	published / reissued	
US2013171075 AA	20130531	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRUENENTHAL GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ARKENAU-MARIC, ELISABETH; BARTHOLOMAEUS, JOHANNES; KUGELMANN, HEINRICH; SIGNING DATES FROM 20130412 TO 20130424; REEL/FRAME:030524/0008
US2013171075 AA	20140221	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2013320592 AA	20131205	LSPB	+	published / reissued	
US2013320592 AA	20160406	LSES	NFA1	Non Final Action Mailed	
US2013320592 AA	20161028	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2014079780 AA	20140320	LSPB	+	published / reissued	
US2014079780 AA	20150825	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRUENENTHAL GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BARTHOLOMAEUS, JOHANNES, DR.; KUGELMANN, HEINRICH, DR.; ARKENAU-MARIC, ELISABETH, DR.; SIGNING DATES FROM 20150530 TO 20150811; REEL/FRAME:036414/0500
US2014079780 AA	20151016	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	

US2014080858 AA	20140320	LSPB	+	published / reissued	
US2014080858 AA	20150824	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRUENENTHAL GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BARTHOLOMAEUS, JOHANNES, DR.; KUGELMANN, HEINRICH; ARKENAU-MARIC, ELISABETH, DR.; SIGNING DATES FROM 20150528 TO 20150811; REEL/FRAME:036396/0873
US2014080858 AA	20151120	LSES	NFA1	Non Final Action Mailed	
US2014080858 AA	20161123	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2014080915 AA	20140320	LSPB	+	published / reissued	
US2014080915 AA	20150821	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRUENENTHAL GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BARTHOLOMAEUS, JOHANNES, DR.; KUGELMANN, HEINRICH; ARKENAU-MARIC, ELISABETH, DR.; SIGNING DATES FROM 20150528 TO 20150811; REEL/FRAME:036391/0224
US2014080915 AA	20151120	LSES	NFA1	Non Final Action Mailed	
US2014080915 AA	20170110	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2014086847 AA	20140327	LSPB	+	published / reissued	
US2014086847 AA	20140922	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2014105830 AA	20140417	LSPB	+	published / reissued	
US2014105830 AA	20150519	LSES	NFA1	Non Final Action Mailed	
US2014105830 AA	20150825	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRUENENTHAL GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BARTHOLOMAEUS, JOHANNES, DR.; KUGELMANN, HEINRICH, DR.; ARKENAU-MARIC, ELISABETH, DR.; SIGNING DATES FROM 20150530 TO 20150815; REEL/FRAME:036407/0464
US2014105830 AA	20150825	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRUENENTHAL GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BARTHOLOMAEUS, JOHANNES, DR.; KUGELMANN, HEINRICH, DR.; ARKENAU-MARIC, ELISABETH, DR.; SIGNING DATES FROM 20150530 TO 20150815; REEL/FRAME:036415/0350
US2014105830 AA	20151215	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2014112984 AA	20140424	LSPB	+	published / reissued	
US2014112984 AA	20150810	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2014113926 AA	20140424	LSPB	+	published / reissued	
US2014113926 AA	20150629	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2014155489 AA	20140605	LSPB	+	published / reissued	
US2014155489 AA	20150629	LSWD	-ABD3	Abandoned -- Failure	

				to Respond to an Office Action	
US2014170079 AA	20140619	LSPB	+	published / reissued	
US2014170079 AA	20150506	LSES	NFA1	Non Final Action Mailed	
US2014170079 AA	20151203	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2014322311 AA	20141030	LSPB	+	published / reissued	
US2014322311 AA	20150810	LSES	NFA1	Non Final Action Mailed	
US2014322311 AA	20150910	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRUENENTHAL GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BARTHOLOMAEUS, JOHANNES, DR.; KUGELMANN, HEINRICH, DR.; ARKENAU-MARIC, ELISABETH, DR.; AND OTHERS; SIGNING DATES FROM 20150530 TO 20150901; REEL/FRAME:036533/0406
US2014322311 AA	20160303	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2014356294 AA	20141204	LSPB	+	published / reissued	
US2014356294 AA	20150320	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2015150978 AA	20150604	LSPB	+	published / reissued	
US2015150978 AA	20150928	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2015164811 AA	20150618	LSPB	+	published / reissued	
US2015164811 AA	20150824	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRUENENTHAL GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BARTHOLOMAEUS, JOHANNES; ARKENAU-MARIC, ELISABETH; SIGNING DATES FROM 20150530 TO 20150811; REEL/FRAME:036397/0126
US2015164811 AA	20160407	LSES	NFA1	Non Final Action Mailed	
US2015164811 AA	20161028	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2015182464 AA	20150702	LSPB	+	published / reissued	
US2015182464 AA	20150625	LSES	NFA1	Non Final Action Mailed	
US2015182464 AA	20150824	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRUENENTHAL GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BARTHOLOMAEUS, JOHANNES, DR.; KUGELMANN, HEINRICH; ARKENAU-MARIC, ELISABETH, DR.; SIGNING DATES FROM 20150530 TO 20150811; REEL/FRAME:036398/0177
US2015182464 AA	20160208	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2015182465 AA	20150702	LSPB	+	published / reissued	
US2015182465 AA	20150605	LSES	NFA1	Non Final Action Mailed	
US2015182465 AA	20150824	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRUENENTHAL GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BARTHOLOMAEUS, JOHANNES, DR.; KUGELMANN,

					HEINRICH; ARKENAU-MARIC, ELISABETH, DR.; SIGNING DATES FROM 20150530 TO 20150811; REEL/FRAME:036398/0331
US2015182465 AA	20160208	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2015290138 AA	20151015	LSPB	+	published / reissued	
US2015290138 AA	20151116	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRUENENTHAL GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BARTHOLOMAEUS, JOHANNES; KUGELMANN, HEINRICH; ARKENAU-MARIC, ELISABETH; SIGNING DATES FROM 20150902 TO 20151031; REEL/FRAME:037048/0562
US2015290138 AA	20160418	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2015359747 AA	20151217	LSPB	+	published / reissued	
US2015359747 AA	20150930	LSES	NFA1	Non Final Action Mailed	
US2015359747 AA	20151116	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRUENENTHAL GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BARTHOLOMAEUS, JOHANNES; KUGELMANN, HEINRICH; ARKENAU-MARIC, ELISABETH; SIGNING DATES FROM 20150902 TO 20151031; REEL/FRAME:037046/0529
US2015359747 AA	20160401	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2015374630 AA	20151231	LSPB	+	published / reissued	
US2015374630 AA	20151116	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRUENENTHAL GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ARKENAU-MARIC, ELISABETH; BARTHOLOMAEUS, JOHANNES; KUGELMANN, HEINRICH; AND OTHERS; SIGNING DATES FROM 20150530 TO 20150927; REEL/FRAME:037044/0794
US2015374630 AA	20170419	LSES	NFA1	Non Final Action Mailed	
US2015374630 AA	20180416	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2016022587 AA	20160128	LSPB	+	published / reissued	
US2016022587 AA	20151008	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRUENENTHAL GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BARTHOLOMAEUS, JOHANNES; KUGELMANN, HEINRICH; ARKENAU-MARIC, ELISABETH; SIGNING DATES FROM 20130412 TO 20130424; REEL/FRAME:036758/0780
US2016022587 AA	20160620	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2016058710 AA	20160303	LSPB	+	published / reissued	
US2016058710 AA	20151109	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRUENENTHAL GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BARTHOLOMAEUS, JOHANNES; KUGELMANN,

					HEINRICH; ARKENAU-MARIC, ELISABETH; SIGNING DATES FROM 20150530 TO 20150801; REEL/FRAME:036990/0590
US2016058710 AA	20161122	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2016074388 AA	20160317	LSPB	+	published / reissued	
US2016074388 AA	20151119	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRUENENTHAL GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BARTHOLOMAEUS, JOHANNES, DR.; KUGELMANN, HEINRICH, DR.; ARKENAU-MARIC, ELISABETH, DE.; SIGNING DATES FROM 20150530 TO 20150815; REEL/FRAME:037086/0035
US2016074388 AA	20161108	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2016101022 AA	20160414	LSPB	+	published / reissued	
US2016101022 AA	20151204	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRUENENTHAL GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BARTHOLOMAEUS, JOHANNES, DR.; KUGELMANN, HEINRICH; ARKENAU-MARIC, ELISABETH; SIGNING DATES FROM 20150530 TO 20150811; REEL/FRAME:037208/0487
US2016101022 AA	20161110	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2016120810 AA	20160505	LSPB	+	published / reissued	
US2016120810 AA	20160113	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRUENENTHAL GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BARTHOLOMAEUS, JOHANNES, DR.; KUGELMANN, HEINRICH; ARKENAU-MARIC, ELISABETH, DR.; AND OTHERS; SIGNING DATES FROM 20150530 TO 20150901; REEL/FRAME:037479/0894
US2016120810 AA	20170216	LSES	NFA1	Non Final Action Mailed	
US2016120810 AA	20170919	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2016166517 AA	20160616	LSPB	+	published / reissued	
US2016166517 AA	20160226	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRUENENTHAL GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:KUGELMANN, HEINRICH, DR.; ARKENAU-MARIC, ELISABETH, DR.; BARTHOLOMAEUS, JOHANNES, DR.; SIGNING DATES FROM 20150902 TO 20151003; REEL/FRAME:037835/0024
US2016166517 AA	20161017	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2016184297 AA	20160630	LSPB	+	published / reissued	
US2016184297 AA	20160304	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRUENENTHAL GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BARTHOLOMAEUS, JOHANNES; KUGELMANN, HEINRICH; ARKENAU-MARIC, ELISABETH; SIGNING DATES FROM

					20150902 TO 20151031; REEL/FRAME:037895/0469
US2016184297 AA	20180116	LSES	ADV1	Advisory Action Mailed	
US2016184297 AA	20180323	LSES	NFA1	Non Final Action Mailed	
US2016263037 AA	20160915	LSPB	+	published / reissued	
US2016263037 AA	20170405	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2016361308 AA	20161215	LSPB	+	published / reissued	
US2016361308 AA	20160826	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRUENENTHAL GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BARTHOLOMAEUS, JOHANNES; KUGELMANN, HEINRICH; ARKENAU-MARIC, ELISABETH; SIGNING DATES FROM 20150528 TO 20150811; REEL/FRAME:039554/0570
US2016361308 AA	20170420	LSES	NFA1	Non Final Action Mailed	
US2016361308 AA	20170707	LSES	NFA1	Non Final Action Mailed	
US2016361308 AA	20180302	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2016367484 AA	20161222	LSPB	+	published / reissued	
US2016367484 AA	20160831	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRUENENTHAL GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BARTHOLOMAEUS, JOHANNES; KUGELMANN, HEINRICH; ARKENAU-MARIC, ELISABETH; SIGNING DATES FROM 20150530 TO 20150811; REEL/FRAME:039602/0595
US2016367484 AA	20171109	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2016367487 AA	20161222	LSPB	+	published / reissued	
US2016367487 AA	20160906	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRUENENTHAL GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BARTHOLOMAEUS, JOHANNES; ARKENAU-MARIC, ELISABETH; SIGNING DATES FROM 20150530 TO 20150811; REEL/FRAME:039637/0747
US2016367487 AA	20161215	LSES	NFA1	Non Final Action Mailed	
US2016367487 AA	20180108	LSES	ADV1	Advisory Action Mailed	
US2016367487 AA	20180904	LSES	NFA1	Non Final Action Mailed	
US2016367501 AA	20161222	LSPB	+	published / reissued	
US2016367501 AA	20160829	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRUENENTHAL GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BARTHOLOMAEUS, JOHANNES; KUGELMANN, HEINRICH; ARKENAU-MARIC, ELISABETH; SIGNING DATES FROM 20150530 TO 20150811; REEL/FRAME:039562/0554
US2016367501 AA	20170824	LSAL	NAF1	Notice of Appeal Filed	
US2016367501 AA	20180316	LSWD	-ABD3	Abandoned -- Failure	

				to Respond to an Office Action	
US2016374963 AA	20161229	LSPB	+	published / reissued	
US2016374963 AA	20160906	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRUENENTHAL GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BARTHOLOMAEUS, JOHANNES; KUGELMANN, HEINRICH; ARKENAU-MARIC, ELISABETH; SIGNING DATES FROM 20150902 TO 20151031; REEL/FRAME:039639/0377
US2016374963 AA	20170606	LSES	NFA1	Non Final Action Mailed	
US2016374963 AA	20171130	LSES	NFA1	Non Final Action Mailed	
US2016374963 AA	20180608	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2017000739 AA	20170105	LSPB	+	published / reissued	
US2017000739 AA	20170525	LSES	NFA1	Non Final Action Mailed	
US2017000739 AA	20180713	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2017000739 AA	20180721	LSFE	-AWA4	Awaiting TC Resp., Issue Fee Not Paid	
US2017000739 AA	20180722	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2017000739 AA	20181031	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2017027886 AA	20170202	LSPB	+	published / reissued	
US2017027886 AA	20161013	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRUENENTHAL GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BARTHOLOMAEUS, JOHANNES; KUGELMANN, HEINRICH; ARKENAU-MARIC, ELISABETH; SIGNING DATES FROM 20150528 TO 20150811; REEL/FRAME:040006/0140
US2017027886 AA	20170427	LSES	NFA1	Non Final Action Mailed	
US2017027886 AA	20170707	LSES	NFA1	Non Final Action Mailed	
US2017027886 AA	20180306	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2017049706 AA	20170223	LSPB	+	published / reissued	
US2017049706 AA	20160902	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRUENENTHAL GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BARTHOLOMAEUS, JOHANNES; ARKENAU-MARIC, ELISABETH; SIGNING DATES FROM 20130906 TO 20130916; REEL/FRAME:039621/0434
US2017049706 AA	20161219	LSES	NFA1	Non Final Action Mailed	
US2017049706 AA	20170623	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2017209379 AA	20170727	LSPB	+	published / reissued	
US2017209379 AA	20170328	LSES	NFA1	Non Final Action Mailed	
US2017209379 AA	20180108	LSES	+NAM1	Notice of Allowance	

				Mailed -- Application Received in Office of Publications	
US2017209379 AA	20180413	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2017209379 AA	20180418	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2017209379 AA	20180711	LSFE	+PPR1	Publications -- Issue Fee Payment Received	
US2017209379 AA	20180712	LSFE	+PPV1	Publications -- Issue Fee Payment Verified	
US2017209379 AA	20180808	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2017312271 AA	20171102	LSPB	+	published / reissued	
US2017312271 AA	20170714	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRUENENTHAL GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BARTHOLOMAEUS, JOHANNES; KUGELMANN, HEINRICH; ARKENAU-MARIC, ELISABETH; AND OTHERS; SIGNING DATES FROM 20150530 TO 20150904; REEL/FRAME:043005/0947
US2017312271 AA	20170927	LSES	NFA1	Non Final Action Mailed	
US2017312271 AA	20180124	LSES	NFA1	Non Final Action Mailed	
US2017312271 AA	20180829	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2018243237 AA	20180830	LSPB	+	published / reissued	
US2018243237 AA	20180427	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRUENENTHAL GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BARTHOLOMAEUS, JOHANNES; KUGELMANN, HEINRICH; ARKENAU-MARIC, ELISABETH; SIGNING DATES FROM 20150902 TO 20151031; REEL/FRAME:045654/0855
US2018243237 AA	20180919	LSES	NFA1	Non Final Action Mailed	
US2018369235 AA	20181227	LSPB	+	published / reissued	
US2019008849 AA	20190110	LSPB	+	published / reissued	
US2019008849 AA	20181012	LSES	NFA1	Non Final Action Mailed	
US2019008849 AA	20190328	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2019008849 AA	20190530	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2019008849 AA	20190606	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2019029976 AA	20190131	LSPB	+	published / reissued	
US8075872 BB	20111213	LSGT	+	granted / extensions (spc, cpc, pte)	
US8075872 BB	20060703	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRUNENTHAL GMBH, GERMANY OLDPARTY : ASSIGNMENT OF

					ASSIGNORS INTEREST; ASSIGNORS:ARKENAU-MARIC, ELISABETH; BARTHOLOMAUS, JOHANNES; KUGELMANN, HEINRICH; REEL/FRAME:018055/0650; SIGNING DATES FROM 20060308 TO 20060626
US8075872 BB	20060703	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRUNENTHAL GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ARKENAU-MARIC, ELISABETH; BARTHOLOMAUS, JOHANNES; KUGELMANN, HEINRICH; SIGNING DATES FROM 20060308 TO 20060626; REEL/FRAME:018055/0650
US8075872 BB	20111122	LSGT	PAT1	Patented Case	
US8075872 BB	20140303	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS SOLUTIONS INC., PENNSYLVANIA OLDPARTY : RELEASE OF PATENT SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS; ASSIGNOR:MORGAN STANLEY SENIOR FUNDING, INC., AS ADMINISTRATIVE AGENT; REEL/FRAME:032380/0157 EFFECTIVE DATE : 20140228
US8075872 BB	20140320	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : DEUTSCHE BANK AG NEW YORK BRANCH, AS COLLATERAL AG OLDPARTY : GRANT OF SECURITY INTEREST IN LICENSED PATENTS; ASSIGNOR:ENDO PHARMACEUTICALS, INC.; REEL/FRAME:032491/0620 EFFECTIVE DATE : 20140228
US8075872 BB	20140324	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS INC., PENNSYLVANIA OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE NAME OF RECEIVING PARTY IN RELEASE OF PATENT SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS PREVIOUSLY RECORDED ON REEL 032380 FRAME 0157. ASSIGNOR(S) HEREBY CONFIRMS THE RELEASE OF SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS.; ASSIGNOR:MORGAN STANLEY SENIOR FUNDING, INC., AS ADMINISTRATIVE AGENT; REEL/FRAME:032513/0255 EFFECTIVE DATE : 20140228
US8075872 BB	20150527	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8075872 BB	20170428	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ASTORA WOMEN'S HEALTH HOLDINGS, LLC, PENNSYLVANIA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK AG NEW YORK BRANCH; REEL/FRAME:042362/0001 EFFECTIVE DATE : 20170427
US8075872 BB	20170428	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS SOLUTIONS, INC., PENNSYLVANIA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK AG NEW YORK BRANCH; REEL/FRAME:042362/0001 EFFECTIVE DATE : 20170427
US8075872 BB	20170428	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO

					PHARMACEUTICALS, INC., PENNSYLVANIA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK AG NEW YORK BRANCH; REEL/FRAME:042362/0001 EFFECTIVE DATE : 20170427
US8075872 BB	20260206	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
US8114383 BB	20120214	LSGT	+	granted / extensions (spc, cpc, pte)	
US8114383 BB	20031120	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRUNENTHAL GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BARTHOLOMAUS, JOHANNES; KUGELMANN, HEINRICH; REEL/FRAME:014728/0622; SIGNING DATES FROM 20031007 TO 20031008
US8114383 BB	20031120	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRUNENTHAL GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BARTHOLOMAUS, JOHANNES; KUGELMANN, HEINRICH; SIGNING DATES FROM 20031007 TO 20031008; REEL/FRAME:014728/0622
US8114383 BB	20120125	LSGT	PAT1	Patented Case	
US8114383 BB	20130115	LSRE	CC	CERTIFICATE OF CORRECTION	
US8114383 BB	20140303	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS SOLUTIONS INC., PENNSYLVANIA OLDPARTY : RELEASE OF PATENT SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS; ASSIGNOR:MORGAN STANLEY SENIOR FUNDING, INC., AS ADMINISTRATIVE AGENT; REEL/FRAME:032380/0157 EFFECTIVE DATE : 20140228
US8114383 BB	20140320	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : DEUTSCHE BANK AG NEW YORK BRANCH, AS COLLATERAL AG OLDPARTY : GRANT OF SECURITY INTEREST IN LICENSED PATENTS; ASSIGNOR:ENDO PHARMACEUTICALS, INC.; REEL/FRAME:032491/0620 EFFECTIVE DATE : 20140228
US8114383 BB	20140324	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS INC., PENNSYLVANIA OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE NAME OF RECEIVING PARTY IN RELEASE OF PATENT SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS PREVIOUSLY RECORDED ON REEL 032380 FRAME 0157. ASSIGNOR(S) HEREBY CONFIRMS THE RELEASE OF SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS.; ASSIGNOR:MORGAN STANLEY SENIOR FUNDING, INC., AS ADMINISTRATIVE AGENT; REEL/FRAME:032513/0255 EFFECTIVE DATE : 20140228
US8114383 BB	20150604	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8114383 BB	20170428	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ASTORA WOMEN'S HEALTH HOLDINGS, LLC,

					PENNSYLVANIA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK AG NEW YORK BRANCH; REEL/FRAME:042362/0001 EFFECTIVE DATE : 20170427
US8114383 BB	20170428	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS SOLUTIONS, INC., PENNSYLVANIA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK AG NEW YORK BRANCH; REEL/FRAME:042362/0001 EFFECTIVE DATE : 20170427
US8114383 BB	20170428	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS, INC., PENNSYLVANIA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK AG NEW YORK BRANCH; REEL/FRAME:042362/0001 EFFECTIVE DATE : 20170427
US8114383 BB	20241010	PEXP		Calculated Patent Term Expiry (PTA 325 days and a terminal disclaimer has been filed)	
US8114384 BB	20120214	LSGT	+	granted / extensions (spc, cpc, pte)	
US8114384 BB	20120125	LSGT	PAT1	Patented Case	
US8114384 BB	20140303	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS SOLUTIONS INC., PENNSYLVANIA OLDPARTY : RELEASE OF PATENT SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS; ASSIGNOR:MORGAN STANLEY SENIOR FUNDING, INC., AS ADMINISTRATIVE AGENT; REEL/FRAME:032380/0157 EFFECTIVE DATE : 20140228
US8114384 BB	20140320	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : DEUTSCHE BANK AG NEW YORK BRANCH, AS COLLATERAL AG OLDPARTY : GRANT OF SECURITY INTEREST IN LICENSED PATENTS; ASSIGNOR:ENDO PHARMACEUTICALS, INC.; REEL/FRAME:032491/0620 EFFECTIVE DATE : 20140228
US8114384 BB	20140324	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS INC., PENNSYLVANIA OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE NAME OF RECEIVING PARTY IN RELEASE OF PATENT SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS PREVIOUSLY RECORDED ON REEL 032380 FRAME 0157. ASSIGNOR(S) HEREBY CONFIRMS THE RELEASE OF SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS.; ASSIGNOR:MORGAN STANLEY SENIOR FUNDING, INC., AS ADMINISTRATIVE AGENT; REEL/FRAME:032513/0255 EFFECTIVE DATE : 20140228
US8114384 BB	20150729	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8114384 BB	20170428	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS, INC., PENNSYLVANIA OLDPARTY : RELEASE BY SECURED PARTY;

					ASSIGNOR:DEUTSCHE BANK AG NEW YORK BRANCH; REEL/FRAME:042362/0001 EFFECTIVE DATE : 20170427
US8114384 BB	20170428	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ASTORA WOMEN'S HEALTH HOLDINGS, LLC, PENNSYLVANIA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK AG NEW YORK BRANCH; REEL/FRAME:042362/0001 EFFECTIVE DATE : 20170427
US8114384 BB	20170428	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS SOLUTIONS, INC., PENNSYLVANIA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK AG NEW YORK BRANCH; REEL/FRAME:042362/0001 EFFECTIVE DATE : 20170427
US8114384 BB	20250726	PEXP		Calculated Patent Term Expiry (PTA 377 days and a terminal disclaimer has been filed)	
US8192722 BB	20120605	LSGT	+	granted / extensions (spc, cpc, pte)	
US8192722 BB	20120516	LSGT	PAT1	Patented Case	
US8192722 BB	20140303	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS SOLUTIONS INC., PENNSYLVANIA OLDPARTY : RELEASE OF PATENT SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS; ASSIGNOR:MORGAN STANLEY SENIOR FUNDING, INC., AS ADMINISTRATIVE AGENT; REEL/FRAME:032380/0157 EFFECTIVE DATE : 20140228
US8192722 BB	20140320	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : DEUTSCHE BANK AG NEW YORK BRANCH, AS COLLATERAL AG OLDPARTY : GRANT OF SECURITY INTEREST IN LICENSED PATENTS; ASSIGNOR:ENDO PHARMACEUTICALS, INC.; REEL/FRAME:032491/0620 EFFECTIVE DATE : 20140228
US8192722 BB	20140324	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS INC., PENNSYLVANIA OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE NAME OF RECEIVING PARTY IN RELEASE OF PATENT SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS PREVIOUSLY RECORDED ON REEL 032380 FRAME 0157. ASSIGNOR(S) HEREBY CONFIRMS THE RELEASE OF SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS.; ASSIGNOR:MORGAN STANLEY SENIOR FUNDING, INC., AS ADMINISTRATIVE AGENT; REEL/FRAME:032513/0255 EFFECTIVE DATE : 20140228
US8192722 BB	20150610	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8192722 BB	20170428	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ASTORA WOMEN'S HEALTH HOLDINGS, LLC, PENNSYLVANIA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK AG NEW YORK BRANCH; REEL/FRAME:042362/0001 EFFECTIVE DATE : 20170427

US8192722 BB	20170428	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS SOLUTIONS, INC., PENNSYLVANIA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK AG NEW YORK BRANCH; REEL/FRAME:042362/0001 EFFECTIVE DATE : 20170427
US8192722 BB	20170428	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS, INC., PENNSYLVANIA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK AG NEW YORK BRANCH; REEL/FRAME:042362/0001 EFFECTIVE DATE : 20170427
US8192722 BB	20300412	PEXP		Calculated Patent Term Expiry (PTA 664 days and a terminal disclaimer has been filed)	
US8309060 BB	20121113	LSGT	+	granted / extensions (spc, cpc, pte)	
US8309060 BB	20121024	LSGT	PAT1	Patented Case	
US8309060 BB	20121225	LSRE	CC	CERTIFICATE OF CORRECTION	
US8309060 BB	20151119	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8309060 BB	20320109	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
US8323889 BB	20121204	LSGT	+	granted / extensions (spc, cpc, pte)	
US8323889 BB	20121114	LSGT	PAT1	Patented Case	
US8323889 BB	20140303	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS SOLUTIONS INC., PENNSYLVANIA OLDPARTY : RELEASE OF PATENT SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS; ASSIGNOR:MORGAN STANLEY SENIOR FUNDING, INC., AS ADMINISTRATIVE AGENT; REEL/FRAME:032380/0157 EFFECTIVE DATE : 20140228
US8323889 BB	20140320	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : DEUTSCHE BANK AG NEW YORK BRANCH, AS COLLATERAL AG OLDPARTY : GRANT OF SECURITY INTEREST IN LICENSED PATENTS; ASSIGNOR:ENDO PHARMACEUTICALS, INC.; REEL/FRAME:032491/0620 EFFECTIVE DATE : 20140228
US8323889 BB	20140324	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS INC., PENNSYLVANIA OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE NAME OF RECEIVING PARTY IN RELEASE OF PATENT SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS PREVIOUSLY RECORDED ON REEL 032380 FRAME 0157. ASSIGNOR(S) HEREBY CONFIRMS THE RELEASE OF SECURITY INTEREST IN EXCLUSIVELY LICENSED PATENTS.; ASSIGNOR:MORGAN STANLEY SENIOR FUNDING, INC., AS ADMINISTRATIVE AGENT; REEL/FRAME:032513/0255 EFFECTIVE DATE : 20140228

US8323889 BB	20160519	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8323889 BB	20170428	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS SOLUTIONS, INC., PENNSYLVANIA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK AG NEW YORK BRANCH; REEL/FRAME:042362/0001 EFFECTIVE DATE : 20170427
US8323889 BB	20170428	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ASTORA WOMEN'S HEALTH HOLDINGS, LLC, PENNSYLVANIA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK AG NEW YORK BRANCH; REEL/FRAME:042362/0001 EFFECTIVE DATE : 20170427
US8323889 BB	20170428	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDO PHARMACEUTICALS, INC., PENNSYLVANIA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK AG NEW YORK BRANCH; REEL/FRAME:042362/0001 EFFECTIVE DATE : 20170427
US8323889 BB	20280617	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
US8420056 BB	20130416	LSGT	+	granted / extensions (spc, cpc, pte)	
US8420056 BB	20130327	LSGT	PAT1	Patented Case	
US8420056 BB	20160929	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8420056 BB	20311011	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
US9629807 BB	20170425	LSGT	+	granted / extensions (spc, cpc, pte)	
US9629807 BB	20160419	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRUENENTHAL GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:KUGELMANN, HEINRICH; ARKENAU-MARIC, ELISABETH; BARTHOLOMAEUS, JOHANNES; SIGNING DATES FROM 20130412 TO 20130424; REEL/FRAME:038315/0102
US9629807 BB	20170405	LSGT	PAT1	Patented Case	
US9629807 BB	20190625	LSRE	CC	CERTIFICATE OF CORRECTION	
US9629807 BB	20360419	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
WO05016313 A1	20050224	LSPB	+	published / reissued	
WO05016313 A1	20040805	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 200480028966.0 COUNTRY OF REF DOCUMENT : CN
WO05016313 A1	20060203	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : PA/A/2006/001452 COUNTRY OF REF DOCUMENT : MX
WO05016313 A1	20060203	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2004763833 COUNTRY OF REF DOCUMENT : EP

WO05016313 A1	20060206	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2534925 COUNTRY OF REF DOCUMENT : CA
WO05016313 A1	20060206	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2004264666 COUNTRY OF REF DOCUMENT : AU
WO05016313 A1	20060206	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2006522320 COUNTRY OF REF DOCUMENT : JP
WO05016313 A1	20060206	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1020067002521 COUNTRY OF REF DOCUMENT : KR
WO05016313 A1	20060206	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 173558 COUNTRY OF REF DOCUMENT : IL
WO05016313 A1	20060207	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 200601090 COUNTRY OF REF DOCUMENT : ZA
WO05016313 A1	20060207	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2006/01090 COUNTRY OF REF DOCUMENT : ZA
WO05016313 A1	20060209	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 545202 COUNTRY OF REF DOCUMENT : NZ
WO05016313 A1	20060223	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2004264666 COUNTRY OF REF DOCUMENT : AU DATE OF REF DOCUMENT : 20040805 KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO05016313 A1	20060223	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2004264666 COUNTRY OF REF DOCUMENT : AU
WO05016313 A1	20060306	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2006106725 COUNTRY OF REF DOCUMENT : RU
WO05016313 A1	20060328	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 06030701 COUNTRY OF REF DOCUMENT : CO
WO05016313 A1	20060524	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2004763833 COUNTRY OF REF DOCUMENT : EP
WO05016313 A1	20061010	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : PI0413361 COUNTRY OF REF DOCUMENT : BR
WO05016313 A1	20061212	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 10567594 COUNTRY OF REF DOCUMENT : US
WO05016313 A1	20061212	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2007183980 COUNTRY OF REF DOCUMENT : US
WO05016313 A1	20070212	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1020067002521 COUNTRY OF REF DOCUMENT : KR

WO05016313 A1	20070627	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2004763833 COUNTRY OF REF DOCUMENT : EP
WO05016313 A1	20070809	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 10567594 COUNTRY OF REF DOCUMENT : US
WO05016314 A1	20050224	LSPB	+	published / reissued	
WO05016314 A1	20040805	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 200480028967.5 COUNTRY OF REF DOCUMENT : CN
WO05016314 A1	20060130	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2004264667 COUNTRY OF REF DOCUMENT : AU
WO05016314 A1	20060201	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 173478 COUNTRY OF REF DOCUMENT : IL
WO05016314 A1	20060203	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1020067002402 COUNTRY OF REF DOCUMENT : KR
WO05016314 A1	20060203	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : PA/A/2006/001453 COUNTRY OF REF DOCUMENT : MX
WO05016314 A1	20060203	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2004763834 COUNTRY OF REF DOCUMENT : EP
WO05016314 A1	20060203	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 06010699 COUNTRY OF REF DOCUMENT : CO
WO05016314 A1	20060206	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2534932 COUNTRY OF REF DOCUMENT : CA
WO05016314 A1	20060206	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2006522321 COUNTRY OF REF DOCUMENT : JP
WO05016314 A1	20060206	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 11349537 COUNTRY OF REF DOCUMENT : US
WO05016314 A1	20060207	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 200601087 COUNTRY OF REF DOCUMENT : ZA
WO05016314 A1	20060207	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2006/01087 COUNTRY OF REF DOCUMENT : ZA
WO05016314 A1	20060209	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 545200 COUNTRY OF REF DOCUMENT : NZ
WO05016314 A1	20060216	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2004264667 COUNTRY OF REF DOCUMENT : AU DATE OF REF DOCUMENT : 20040805 KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO05016314 A1	20060216	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2004264667 COUNTRY OF REF DOCUMENT : AU

WO05016314 A1	20060306	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2006106726 COUNTRY OF REF DOCUMENT : RU
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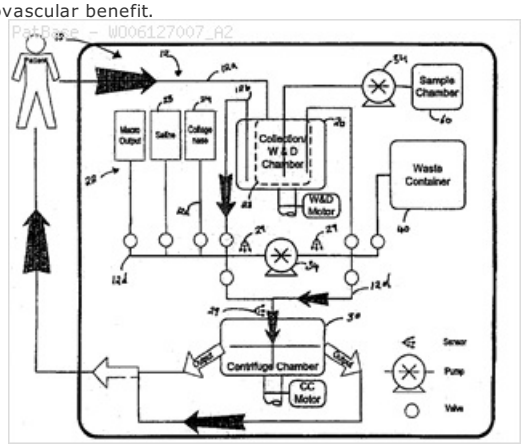
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ZA200601090 A	20070530	LSGT	+	granted / extensions (spc, cpc, pte)	
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ZA200705836 A	20080625	LSGT	+	granted / extensions (spc, cpc, pte)	
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5) Family number: 33902006 (WO06127007A2)

Title: METHODS OF USING ADIPOSE TISSUE-DERIVED CELLS IN THE TREATMENT OF CARDIOVASCULAR CONDITIONS

Abstract: Adipose derived regenerative cells are used to treat patients, including patients with cardiovascular conditions, diseases or disorders. Methods of treating patients include processing adipose tissue to deliver a concentrated amount of regenerative cells, e.g., stem and/or progenitor cells, obtained from the adipose tissue to a patient. The methods may be practiced in a closed system so that the stem cells are not exposed to an external environment prior to being administered to a patient. Accordingly, in a preferred method, adipose derived regenerative cells are placed directly into a recipient along with such additives necessary to promote, engender or support a therapeutic cardiovascular benefit.

Classifications:
International (IPC 8-9): A61K A61K35/12 A61K35/28 A61K35/34 A61K38/22 A61K45/00 A61K48/00 A61P43/00 A61P9/00 A61P9/02 A61P9/04 A61P9/10 C12N C12N5/00 C12N5/071 C12N5/0775 C12N5/08 (Advanced/Invention);
C12N5/077 C12N5/0775 (Advanced/Non-invention);
A61K35/12 A61K35/34 A61K38/22 A61K45/00 A61P9/00 C12N5/00 C12N5/0775 C12N5/08 (Core/Invention)
CPC: A61K35/12 C12N5/0667 A61K35/28 A61K9/0019 A61K38/1891 A61K9/127 A61K35/35 C12N5/0653
European: C12M47/04 C12N5/06B13P6 K61K35/12



Family:

Publication number	Publication date	Application number	Application date
AT500319 E	20110315	AT20050754073T	20050525
AU2005332046 AA	20061130	AU20050332046	20050525
AU2005332046 BB	20130516	AU20050332046	20050525
AU2013216683 AA	20131003	AU20130216683	20130816
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CA2609361 C	20171114	CA20052609361	20050525
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DE602005053823 D1	20180509	DE200560053823T	20050525
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EP1885382 A4	20090909	EP20050754073	20050525
EP1885382 B1	20110302	EP20050754073	20050525
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WO06127007 A2	20061130	WO2005US18605	20050525
WO06127007 A3	20090416	WO2005US18605	20050525

Priority:

AU20050332046 20050525 JP20080513441 20050525 EP20050754073 20050525
EP20110152868 20050525 WO2005US18605 20050525 JP20110229609 20111019
AU20130216683 20130816

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Assignee(s): CYTORI THERAPEUTICS INC SAN DIEGO

Inventor(s): (std): MIN ZHU ; FRASER JOHN ; STREM BRIAN ; HEDRICK MARC ; DANIELS ERIC ; ZHU MIN ; WULUR ISABELLA ; STREM BRIAN M ; FRASER JOHN K ; HEDRICK MARC H

Inventor(s): WULUR ISABELLA WESTFIELD ; DANIELS ERIC ENCINITAS ; STREM BRIAN M ENCINITAS ; ZHU MIN SAN DIEGO ; HEDRICK MARC H ENCINITAS ; FRASER JOHN K SAN DIEGO ; MARC H HEDRICK ; BRIAN M STREM ; ISABELLA WULUR ; ERIC DANIELS ; JOHN K FRASER

Agent(s): BALDWINS INTELLECTUAL PROPERTY; OGILVY RENAULT LLP SENCRL SRL; NORTON ROSE FULBRIGHT CANADA LLP SENCRL SRL; PLOUGMANN AND VINGTOFT A/S; PLOUGMANN AND VINGTOFT A S; SHARPLES

ANDREW JOHN; CHINA PATENT AGENT HK LTD

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
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AU2005332046 BB	20130912	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
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EP1885382 B1	20110831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20110302
EP1885382 B1	20110912	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2364689 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) : EFFECTIVE DATE : 20110912
EP1885382 B1	20111031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20110704
EP1885382 B1	20111031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20110302
EP1885382 B1	20111130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20110302
EP1885382 B1	20111130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT	COUNTRY OF REF DOCUMENT : IS NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE

				INFORMATION FROM NATIONAL OFFICE TO EPO]	DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20110702
EP1885382 B1	20120111	LSOP	-26	OPPOSITION FILED	PARTYTYPE : OPPONENT OPPONENT : CSA21 EFFECTIVE DATE : 20111202
EP1885382 B1	20120216	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R083 REF DOCUMENT NUMBER : 602005026724 COUNTRY OF REF DOCUMENT : DE
EP1885382 B1	20120301	LSOP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R026 REF DOCUMENT NUMBER : 602005026724 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20111202
EP1885382 B1	20130930	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20110302
EP1885382 B1	20131031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20110302
EP1885382 B1	20140723	LSRE	+27C	OPPOSITION PROCEEDINGS TERMINATED	EFFECTIVE DATE : 20140317
EP1885382 B1	20150508	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 11
EP1885382 B1	20160412	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 12
EP1885382 B1	20170413	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 13
EP1885382 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20170329 YEAR OF FEE PAYMENT : 13
EP1885382 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20170316 YEAR OF FEE PAYMENT : 13
EP1885382 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20170324 YEAR OF FEE PAYMENT : 13
EP1885382 B1	20170630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20170512 YEAR OF FEE PAYMENT : 13
EP1885382 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK PAYMENT DATE : 20170412 YEAR OF FEE PAYMENT : 13
EP1885382 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID	COUNTRY OF REF DOCUMENT : IE

				TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	PAYMENT DATE : 20170510 YEAR OF FEE PAYMENT : 13
EP1885382 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20170512 YEAR OF FEE PAYMENT : 13
EP1885382 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20170524 YEAR OF FEE PAYMENT : 13
EP1885382 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20170427 YEAR OF FEE PAYMENT : 13
EP1885382 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20170510 YEAR OF FEE PAYMENT : 13
EP1885382 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170413 YEAR OF FEE PAYMENT : 13
EP1885382 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170516 YEAR OF FEE PAYMENT : 13
EP1885382 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20170522 YEAR OF FEE PAYMENT : 13
EP1885382 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20170511 YEAR OF FEE PAYMENT : 13
EP1885382 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20170602 YEAR OF FEE PAYMENT : 13
EP1885382 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20170508 YEAR OF FEE PAYMENT : 13
EP1885382 B1	20180411	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 14
EP1885382 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20180329 YEAR OF FEE PAYMENT : 14
EP1885382 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20180316 YEAR OF FEE PAYMENT : 14
EP1885382 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20180314 YEAR OF FEE PAYMENT : 14

EP1885382 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK PAYMENT DATE : 20180416 YEAR OF FEE PAYMENT : 14
EP1885382 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20180427 YEAR OF FEE PAYMENT : 14
EP1885382 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20180426 YEAR OF FEE PAYMENT : 14
EP1885382 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20180509 YEAR OF FEE PAYMENT : 14
EP1885382 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180515 YEAR OF FEE PAYMENT : 14
EP1885382 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20180508 YEAR OF FEE PAYMENT : 14
EP1885382 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20180514 YEAR OF FEE PAYMENT : 14
EP1885382 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20180516 YEAR OF FEE PAYMENT : 14
EP1885382 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20180601 YEAR OF FEE PAYMENT : 14
EP1885382 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20180522 YEAR OF FEE PAYMENT : 14
EP1885382 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20180411 YEAR OF FEE PAYMENT : 14
EP1885382 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20180514 YEAR OF FEE PAYMENT : 14
EP1885382 B1	20180928	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20180511 YEAR OF FEE PAYMENT : 14
EP1885382 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20190320 YEAR OF FEE PAYMENT : 15
EP1885382 B1	20190531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20190315

				OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	YEAR OF FEE PAYMENT : 15
EP1885382 B1	20190628	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20190510 YEAR OF FEE PAYMENT : 15
EP1885382 B1	20190628	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20190515 YEAR OF FEE PAYMENT : 15
EP1885382 B1	20250525	PEXP		Calculated Patent Term Expiry	
EP2465923 A2	20120620	LSPB	+	published / reissued	
EP2465923 A3	20130213	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20121220
EP2465923 A3	20130717	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20130614
EP2465923 A3	20171129	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20171031
EP2465923 B1	20180411	LSGT	+	granted / extensions (spc, cpc, pte)	
EP2465923 B1	20180411	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP2465923 B1	20180413	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP2465923 B1	20180415	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 988041 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20180415
EP2465923 B1	20180502	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP2465923 B1	20180509	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602005053823 COUNTRY OF REF DOCUMENT : DE
EP2465923 B1	20180827	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : LT REF LEGAL EVENT CODE : MG4D
EP2465923 B1	20180928	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20180411
EP2465923 B1	20181031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20180411
EP2465923 B1	20181031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20180411

EP2465923 B1	20181031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20180411
EP2465923 B1	20181031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20180411
EP2465923 B1	20181031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20180711
EP2465923 B1	20181031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20180411
EP2465923 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20180825 YEAR OF FEE PAYMENT : 14
EP2465923 B1	20181130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20180712
EP2465923 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20180825 YEAR OF FEE PAYMENT : 14
EP2465923 B1	20181201	LSDW	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R119 REF DOCUMENT NUMBER : 602005053823 COUNTRY OF REF DOCUMENT : DE
EP2465923 B1	20181214	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP2465923 B1	20181215	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MK05 REF DOCUMENT NUMBER : 988041 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20180411
EP2465923 B1	20181231	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20180813
EP2465923 B1	20190131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-

				OFFICE TO EPO]	LIMIT LAPSED DATE : 20180411
EP2465923 B1	20190131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20180411
EP2465923 B1	20190131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20180411
EP2465923 B1	20190131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20180411
EP2465923 B1	20190131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20180411
EP2465923 B1	20190131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20180411
EP2465923 B1	20190131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20180411
EP2465923 B1	20190228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20180411
EP2465923 B1	20190228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180531
EP2465923 B1	20190228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180531
EP2465923 B1	20190320	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20190114
EP2465923 B1	20190329	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180525
EP2465923 B1	20190430	LSLE	-PG25	LAPSED IN A	COUNTRY OF REF DOCUMENT : DE

				CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20181201
EP2465923 B1	20190430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180531
EP2465923 B1	20250525	PEXP		Calculated Patent Term Expiry	
ES2364689 T3	20110912	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2364689 T3	20250525	PEXP		Calculated Patent Term Expiry	
HK1132918 A1	20100312	LSPB	+	published / reissued	
JP2008545687 T2	20081218	LSPB	+	published / reissued	
JP2008545687 T2	20110419	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20110419
JP2008545687 T2	20111019	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20111018
JP2008545687 T2	20111020	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20111019
JP2008545687 T2	20111105	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A821 EFFECTIVE DATE : 20111018
JP2008545687 T2	20111220	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20111220
JP2008545687 T2	20120609	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20120608
JP2008545687 T2	20120627	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A821 EFFECTIVE DATE : 20120608
JP2008545687 T2	20120724	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20120724
JP2008545687 T2	20121122	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20121121
JP2008545687 T2	20121211	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A821 EFFECTIVE DATE : 20121121
JP2008545687 T2	20121215	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20121214
JP2008545687 T2	20121226	LSAL	A911	TRANSFER OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A911 EFFECTIVE DATE : 20121225
JP2008545687 T2	20130117	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
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JP5210155 B2	20130226	LSFE	R100	特許料納付書 (Patent fee payment form)	
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6) Family number: 1620010 (US4114619A)

Title: Automatic injecting apparatus

Abstract: An automatic injecting apparatus has a housing formed with a recess having an annular rim and provided with a hypodermic-holding case in which a hypodermic syringe can be held, with the needle tip of the syringe projecting into the recess and lying just inward of the rim thereof. The housing is formed with a suction chamber having a piston and connected via a passage to the recess. A spring urges this piston away from the passage so as normally to aspirate air from the recess and, when the rim is snugly engaged against the skin of a person to be injected, to pull the skin of a person to be injected into piercing contact with the needle tip. Similarly a spring-loaded mechanism is provided for pushing the plunger down. Neither the spring-operated mechanism for the syringe plunger nor the piston can be displaced, however, until detecting means provided around the rim ascertains that the rim is firmly seated against the skin of the person to be injected. Only then can the device automatically function to perform a hypodermic injection.

Classifications:

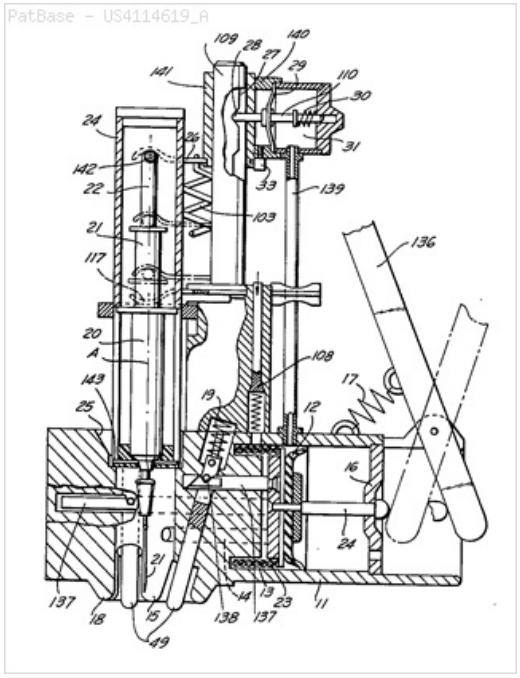
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A61M5/00 A61M5/20 A61M5/42 (Advanced/Non-invention);
A61J1/00 A61J1/05 A61J3/00 A61M1/00 A61M31/00 A61M5/00 A61M5/145 A61M5/178 A61M5/20 A61M5/315 A61M5/32 A61M5/42 (Core/Invention);
A61M5/00 A61M5/20 A61M5/42 (Core/Non-invention)

International (IPC 1-7): A61B17/34 A61J1/00 A61J3/00 A61J7/00 A61M1/00 A61M37/00 A61M5/00 A61M5/14 A61M5/18

CPC: A61M5/20 A61M5/14236 A61M5/14526 A61M5/1454 A61M5/14593 A61M5/16827 A61M5/3287 A61M5/24 A61M5/31553 A61J1/05 A61M5/1486 A61M5/425 A61M5/002 A61M5/2033 A61M5/204 A61M5/31525 A61M5/31548 A61M5/31555 A61M5/3156 A61M5/3158 A61M5/31591 A61M2005/31506

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Priority:

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US19810241378 19810226

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Inventor(s): (std): WAGNER WOLFGANG DR ; WAGNER W ; WOLFGANG WAGNER ; WAGNER WOLFGANG DR MED ; WAGNER WOLFGANG

Inventor(s): WOLGANG WAGNER ; WAGNER DR MED WOLFGANG ; DR WOLFGANG WAGNER ; DR MED WOLFGANG WAGNER ; UORUFUGANGU UAAGUNAA ; W WAGNER ; DR MED WAGNER WOLGANG ; BORUFUGANGU UAAGUNAA ; WAGNER WOLFGANG DRMED

Agent(s): CL; FISHER ADAMS KELLY CALLINANS; SPRUSON AND FERGUSON

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
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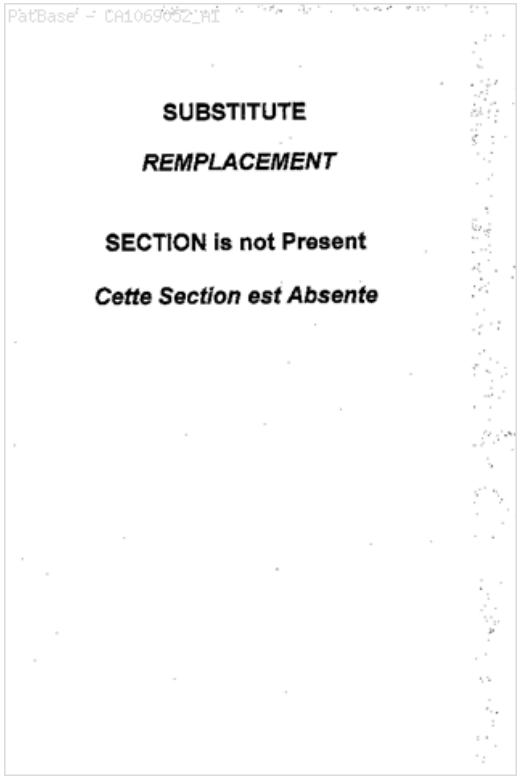
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US4573970 A	19900304	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US4573970 A	19900515	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 19900304
US4600403 A	19860715	LSGT	+	granted / extensions (spc, cpc, pte)	
US4600403 A	19860514	LSGT	PAT1	Patented Case	
US4600403 A	19890829	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US4600403 A	19940717	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US4600403 A	19940927	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 19940720
US4600403 A	20180122	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US4600403 A	20180122	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
ZA7507265 A	19761124	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA7507265 A	19911118	PEXP		Calculated Patent Term Expiry	

7) Family number: 30999012 (US4146634A)

Title: COMPOSITION

Abstract: A pharmaceutical composition in the form of a lozenge, chewable tablet, chewing gum, pastille, gel, paint or paste comprises from 0.01 to 20 percent by weight of 1,3-bis(carboxychromon-5-yloxy)-2-hydroxypropane or a pharmaceutically acceptable salt thereof in association with a suitable pharmaceutically acceptable adjuvant, diluent or carrier. The composition is useful for the treatment of mouth ulcers in man.

Classifications:
International (IPC 8-9): A61K31/35 A61K31/37 A61K47/02 A61K47/38 A61K8/49 A61K9/00 A61K9/06 A61P17/00 A61P27/02 A61P27/14 A61P37/08 A61Q11/00 C07D311/24 (Advanced/Invention);
A61Q11/00 (Advanced/Non-invention);
A61K31/35 A61K31/366 A61K47/02 A61K47/38 A61K8/30 A61K9/00 A61K9/06 A61P17/00 A61P27/00 A61P37/00 A61Q11/00 C07D311/00 (Core/Invention)
International (IPC 1-7): A61K31/01 A61K31/31 A61K31/35 A61K31/37 A61K9/00 A61K9/06 A61K9/20 A61K9/68 C07D311/24
CPC: A61K8/498 A61K9/0056 A61K31/35 A61K47/02 A61K47/38 A61Q11/00 A61K9/0048 A61K9/06 Y10S514/925
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US: 424/283 514/456 514/925



Family:

Publication number	Publication date	Application number	Application date
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AU499501 B2	19790426	AU19750086419	19751107
BE835236 A	19760504	BE19750161572	19751104
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BE845709 R	19770228	BE19760170239	19760831
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CA1069052 A1	19791231	CA19760257889	19760727
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DE2634908 C2	19881229	DE19762634908	19760803
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IL48360 A1	19781217	IL19750048360	19751024
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IT1076941 A	19850427	IT19760026522	19760825
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JP52044242 A2	19770407	JP19760100751	19760825
LU73754 A	19760906	LU19750073754	19751107
NL7513064 A	19760511	NL19750013064	19751107
NL7610057 A	19770405	NL19760010057	19760910
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NO753674 L	19760511	NO19750003674	19751103
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US4146634 A	19790327	US19770810361	19770627
ZA7506989 A	19761124	ZA19750006989	19751107

Priority:

GB19740048591 19741109 GB19740048595 19741109 GB19750040507 19751003
IL19750048360 19751024 IL19760050112 19760723

Probable Assignee: FISONS LTD

Assignee(s): (std): FISONS LTD

Assignee(s): FISONS LTD LONDON GB ; SULLIVAN THOMAS J ; TAYLOR JAMES E ; BELL JOHN H ; CLARKE CLIFFORD WF ; FISONS LIMITED ; FISONS LIMITED TE LONDEN

Inventor(s): (std): CLARKE CLIFFORD WF ; JAMES HOWARD BELL CLIFFORD WALTER FRED CLARKE JAME ; DJ ROBINSON ; KURIFUOODO UORUTAA FURETSUDO KURAAKU ; TAYLOR JAMES EDWARD ; DAVID JOHN ROBINSON ; CLARKE C W F ; TAYLOR JAMES E ; BROWN KENNETH ; YAYLOR J E ; JAMES EDWARD TAYLOR ; ROBINSON DAVID JOHN ; KENNETH BROWN ; JE TAYLOR ; TAYLOR J E ; ROBINSON DAVID J ; BROWN K ; ROBINSON D J ; BELL J H ; JIEEMUSU EDOWAADO TEIRAA ; SULLIVAN T J ; JIYON HAWAADO BERU ; K BROWN ; TOOMASU JIEEMUSU SARIBAN ; BELL JOHN H ; CLARKE CLIFFORD W F ; SULLIVAN THOMAS J ; BELL JOHN HOWARD ; CLARKE CLIFFORD WALTER FRED ; SULLIVAN THOMAS JAMES ; BELL JAMES HOWARD ; KURIFUOODO UORUTAA FURETSUDO K ; JEEMUSU EDOWAADO TEIRAA ; DEEBITSUDO JON ROBINSON ; KENNESU BURAUN

Inventor(s): JAMES HOWARD BELL CLIFFORD WALTER FRED CLARKE... ; SULLIVAN THOMAS JAMES THRUSSINGTON... ; TAYLOR J E BROWN K ROBINSON D J ; EDWARD TAYLOR JAMES ; SULLIVAN THOMAS JAMES THRUSSINGTON LEICESTERSHIRE ; FRED CLARKE CLIFFORD WALTER ; JOHN ROBINSON DAVID ; TAYLOR JAMES EDWARD LOUGHBOROUGH LEICESTERSHIRE GB ; JAMES SULLIVAN THOMAS ; HOWARD BELL JOHN ; J E TAYLOR ; D J ROBINSON

Agent(s): DM; DAVIES COLLISON CAVE PTY LTD; REINHOLD COHN AND PARTNERS

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
AU197586419 A1	19770512	LSPB	+	published / reissued	
AU499501 B2	19790426	LSGT	+	granted / extensions (spc, cpc, pte)	
BE835236 A	19760504	LSPB	+	published / reissued	
BE835236 A	19920531	LSLE	-RE	PATENT LAPSED	PARTYTYPE : OWNER OWNER : FISONS LTD EFFECTIVE DATE : 19911130
BE845709 A4	19770228	LSPB	+	published / reissued	
BE845709 R	19770228	LSPB	+	published / reissued	
BE845709 R	19920531	LSLE	-RE	PATENT LAPSED	PARTYTYPE : OWNER OWNER : FISONS LTD EFFECTIVE DATE : 19911130
DE2548367 A1	19760513	LSPB	+	published / reissued	
DE2548367 A1	19820812	LSES	+8110	REQUEST FOR EXAMINATION PARAGRAPH 44	
DE2548367 A1	19850627	LSAS	8127	NEW PERSON/NAME/ADDRESS OF THE APPLICANT	PARTYTYPE : OWNER OWNER : FISONS PLC, IPSWICH, SUFFOLK, GB
DE2548367 A1	19860430	LSRV	-8131	REJECTION	
DE2634908 A1	19770414	LSPB	+	published / reissued	
DE2634908 A1	19830825	LSES	+8110	REQUEST FOR EXAMINATION PARAGRAPH 44	
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DE2634908 C2	19910207	LSRV	-8331	COMPLETE REVOCATION	
DK355076 A	19770404	LSPB	+	published / reissued	
DK355076 A	19890516	LSRV	-ARF	APPLICATION REFUSED	

FI753002 A	19760510	LSPB	+	published / reissued	
FI753002 A	20040831	LSLE	-FD	APPLICATION LAPSED	PARTYTYPE : OWNER OWNER : FISONS LIMITED
FI762625 A	19770404	LSPB	+	published / reissued	
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FR2290196 B1	19780728	LSGT	+	granted / extensions (spc, cpc, pte)	
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GB1486841 A	19780208	LSGT	+PS	PATENT SEALED	
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GB1486841 A	19940622	LSLE	-PCNP	PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	EFFECTIVE DATE : 19931028
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GB1537047 A	19790411	LSGT	+PS	PATENT SEALED	
GB1537047 A	19890705	LSLI	704A	DECLARATION THAT LICENCE IS NOT AVAILABLE AS OF RIGHT FOR AN EXCEPTED USE (PAR. 4A/1977)	
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IE41922 B	19951024	PEXP		Calculated Patent Term Expiry	
IL48360 A1	19781217	LSPB	+	published / reissued	
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IT1076941 A	19850427	LSGT	+	granted / extensions (spc, cpc, pte)	
IT1076941 A	19960825	PEXP		Calculated Patent Term Expiry	
JP51070828 A2	19760618	LSPB	+	published / reissued	
JP52044242 A2	19770407	LSPB	+	published / reissued	
LU73754 A	19760906	LSGT	+	granted / extensions (spc, cpc, pte)	
LU73754 A	19951108	PEXP		Calculated Patent Term Expiry	
NL7513064 A	19760511	LSPB	+	published / reissued	
NL7513064 A	19830103	LSES	+BA	A REQUEST FOR SEARCH OR AN INTERNATIONAL-TYPE SEARCH HAS BEEN FILED	
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NL7513064 A	19830201	LSES	+BC	A REQUEST FOR EXAMINATION HAS BEEN FILED	
NL7513064 A	19890703	LSLE	-BV	THE PATENT APPLICATION HAS LAPSED	
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NL7610057 A	19831003	LSES	+BA	A REQUEST FOR SEARCH OR AN INTERNATIONAL-TYPE SEARCH HAS BEEN FILED	
NL7610057 A	19840102	LSES	BB	A SEARCH REPORT HAS BEEN DRAWN UP	
NL7610057 A	19840301	LSES	+BC	A REQUEST FOR EXAMINATION HAS BEEN FILED	
NL7610057 A	19900903	LSWD	-BN	A DECISION NOT TO PUBLISH THE APPLICATION HAS BECOME IRREVOCABLE	
NO753674 A	19760511	LSPB	+	published / reissued	

NO762516 A	19770405	LSPB	+	published / reissued
SE7512531 A	19760510	LSPB	+	published / reissued
SE7608462 A	19770404	LSPB	+	published / reissued
US4146634 A	19790327	LSGT	+	granted / extensions (spc, cpc, pte)
ZA7506989 A	19761124	LSGT	+	granted / extensions (spc, cpc, pte)
ZA7506989 A	19911106	PEXP		Calculated Patent Term Expiry

8) Family number: 2475012 (US4445972A)

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Title: Process for the continuous manufacture in an aqueous medium of sheets made of fibrous material and containing latex or similar and/or phenoplasts or aminoplasts, sheets obtained by said process and their possible re-use

Abstract: A new process for manufacturing sheets made of fibrous material containing latex is characterized in that the pulp containing the fibrous material is prepared in the following way:-adjustment of the pH between 4 and 5.5 and preferably between 4 and 4.5,-addition of an electrolyte, the polarity of which is of the opposite sign to that of the latex used,-addition of a foam inhibitor,-re-adjustment of the pH between 4 and 5.5, if necessary,-addition, preferably by injection, of latex,-second addition of an electrolyte having the same characteristics as indicated above,-possibly addition of resins (phenoplasts or aminoplasts),-re-adjustment of the pH to the previously indicated value, if necessary. The new sheets obtained by this process find use in the field of paper manufacture.

Classifications:

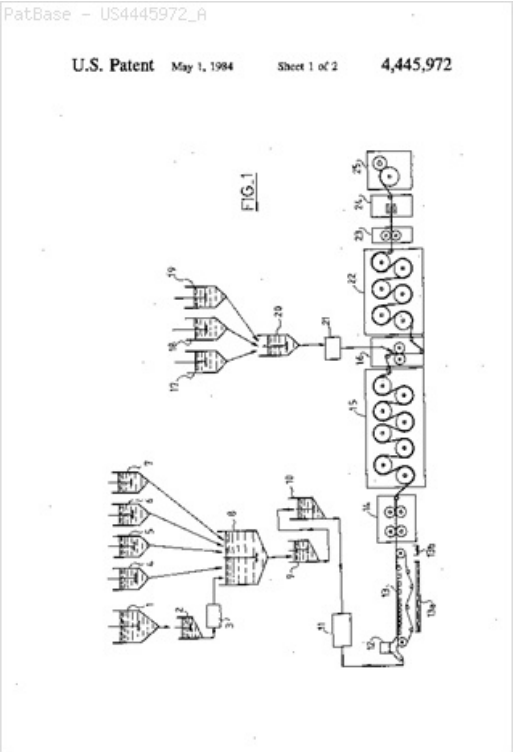
International (IPC 8-9): B09B3/00 C08K11/00 C08K3/00 C08K5/00 C08L99/00 D21C5/02 D21H13/00 D21H17/01 D21H17/03 D21H17/33 D21H17/35 D21H17/37 D21H17/46 D21H17/48 D21H17/50 D21H17/51 D21H21/40 D21H23/00 D21H23/08 D21H23/10 D21J1/00 D21J1/16 D21J1/20 E04C2/16 (Advanced/Invention);
C08K3/00 C08K5/00 C08L99/00 D21H13/00 D21H21/40 D21J1/00 (Advanced/Non-invention);
B09B3/00 C08K11/00 C08K3/00 C08K5/00 C08L99/00 D21C5/02 D21H13/00 D21H17/00 D21H21/40 D21H23/00 D21J1/00 E04C2/10 (Core/Invention);
D21H (Subclass/Invention)

International (IPC 1-7): B09B3/00 B65D65/02 C08J5/00 C08J5/02 C08J5/12 C08J5/18 C08K3/00 C08K5/00 C08L99/00 C09J7/04 D21C5/02 D21D3/00 D21F9/00 D21H3/0 D21H3/00 D21H3/02 D21H3/32 D21H3/48 D21H3/64 D21H3/66 D21H5/00 D21H5/12 D21J1/00 D21J1/04 D21J1/16 D21J1/20 E04C2/16

CPC: B09B3/0033 C08K11/005 D21H17/01 D21J1/16 D21J1/20 E04C2/16 D21H17/35 D21H17/37 D21H17/48 D21H17/51 D21H23/00 D21H23/10 Y02W30/648 D21C5/02 D21H17/50 D21H23/08

European: B09B3/00D2 C08K11/00B D21C5/02 D21H17/01 D21H17/35 D21H17/37 D21H17/48 D21H17/50 D21H17/51 D21H23/00 D21H23/08 D21H23/10 D21J1/16 D21J1/20 E04C2/16

US: 162/141 162/142 162/144 162/145 162/164.1 162/164.3 162/164.6 162/166 162/168.1 162/169 162/170 162/181.1 162/183 162/189 162/191



Family:

Publication number	Publication date	Application number	Application date
AT18685 E	19860415	AT19820400654T	19820409
AT22136 E	19860915	AT19820401373T	19820723
AT28222 E	19870715	AT19830402205T	19831116
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Priority:

FR19810009400 19810512
EP19820400654 19820409
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US19820441172 19821112
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US19820349366 19820216
CA19820402414 19820506
EP19820401373 19820723
CA19830441213 19831115

Probable Assignee: JEAND HEURS PAPETERIES

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Inventor(s): (std): BARTELLONI RENE ; RUNE BARUTOUROONI ; BERTELLONI RENE

Inventor(s): RENE BERTELLONI ; RENE BARTELLONI ; BARTELLONI RENE F 55000 BAR LE DUC FR

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; BORDEN LADNER GERVAIS LLP; FETHERSTONHAUGH AND CO

Designated states: AT BE CH DE FR GB IT LI LU NL SE

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
AT18685 E	19860415	LSGT	+	granted / extensions (spc, cpc, pte)	
AT18685 E	20020409	PEXP		Calculated Patent Term Expiry	
AT22136 E	19860915	LSGT	+	granted / extensions (spc, cpc, pte)	
AT22136 E	19870115	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	
AT22136 E	19970415	LSLE	-REN	CEASED DUE TO NON-PAYMENT OF THE ANNUAL FEE	
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AT28222 E	19870715	LSGT	+	granted / extensions (spc, cpc, pte)	
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AT28222 E	20031116	PEXP		Calculated Patent Term Expiry	
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EP0067076 B1	19900430	LSFE	ITTA	IT: LAST PAID ANNUAL FEE	REF COUNTRY CODE : EP
EP0067076 B1	19930921	LSFE	+EPTA	LU: LAST PAID ANNUAL FEE	REF COUNTRY CODE : EP
EP0067076 B1	19950131	LSGT	+EAL	SE: EUROPEAN PATENT IN FORCE IN SWEDEN	REF COUNTRY CODE : EP TEXT : 82400654.8
EP0067076 B1	19990329	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 19990329 YEAR OF FEE PAYMENT : 18
EP0067076 B1	19990412	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 19990412 YEAR OF FEE PAYMENT : 18
EP0067076 B1	19990420	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 19990420 YEAR OF FEE PAYMENT : 18
EP0067076 B1	19990423	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 19990423 YEAR OF FEE PAYMENT : 18
EP0067076 B1	19990429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 19990429 YEAR OF FEE PAYMENT : 18
EP0067076 B1	19990429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 19990429 YEAR OF FEE PAYMENT : 18
EP0067076 B1	19990429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 19990429 YEAR OF FEE PAYMENT : 18
EP0067076 B1	19990601	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 19990601 YEAR OF FEE PAYMENT : 18
EP0067076 B1	19990629	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 19990629 YEAR OF FEE PAYMENT : 18

EP0067076 B1	20000409	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20000409
EP0067076 B1	20000409	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20000409
EP0067076 B1	20000409	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20000409
EP0067076 B1	20000410	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20000410
EP0067076 B1	20000430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20000430
EP0067076 B1	20000430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20000430
EP0067076 B1	20000430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20000430
EP0067076 B1	20001031	LSLE	-BERE	BE: LAPSED	PARTYTYPE : OWNER REF COUNTRY CODE : EP OWNER : PAPETERIES DE JEAND'HEURS EFFECTIVE DATE : 20000430
EP0067076 B1	20001101	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20001101
EP0067076 B1	20001129	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20000409
EP0067076 B1	20001211	LSLE	-EUG	SE: EUROPEAN PATENT HAS LAPSED	REF COUNTRY CODE : EP TEXT : 82400654.8
EP0067076 B1	20001215	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP0067076 B1	20001229	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20001229
EP0067076 B1	20010102	LSLE	-NLV4	NL: LAPSED OR ANULLED DUE TO NON-PAYMENT OF THE ANNUAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20001101
EP0067076 B1	20010201	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO	COUNTRY OF REF DOCUMENT : DE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-

				EPO]	PAYMENT OF DUE FEES LAPSED DATE : 20010201
EP0067076 B1	20010202	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST
EP0091529 A1	19831019	LSPB	+	published / reissued	
EP0091529 A1	19831019	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19830525
EP0091529 B1	19860910	LSGT	+	granted / extensions (spc, cpc, pte)	
EP0091529 B1	19870902	LSGT	+26N	NO OPPOSITION FILED	
EP0091529 B1	19910731	LSFE	ITTA	IT: LAST PAID ANNUAL FEE	REF COUNTRY CODE : EP
EP0091529 B1	19941003	LSFE	+EPTA	LU: LAST PAID ANNUAL FEE	REF COUNTRY CODE : EP
EP0091529 B1	19950131	LSGT	+EAL	SE: EUROPEAN PATENT IN FORCE IN SWEDEN	REF COUNTRY CODE : EP TEXT : 82401373.4
EP0091529 B1	19950701	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 19950701 YEAR OF FEE PAYMENT : 14
EP0091529 B1	19950712	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 19950712 YEAR OF FEE PAYMENT : 14
EP0091529 B1	19950713	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 19950713 YEAR OF FEE PAYMENT : 14
EP0091529 B1	19950717	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 19950717 YEAR OF FEE PAYMENT : 14
EP0091529 B1	19950725	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 19950725 YEAR OF FEE PAYMENT : 14
EP0091529 B1	19950726	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 19950726 YEAR OF FEE PAYMENT : 14
EP0091529 B1	19950726	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 19950726 YEAR OF FEE PAYMENT : 14
EP0091529 B1	19950727	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 19950727 YEAR OF FEE PAYMENT : 14
EP0091529 B1	19950905	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 19950905 YEAR OF FEE PAYMENT : 14
EP0091529 B1	19960723	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT LAPSED DATE : 19960723
EP0091529 B1	19960723	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB LAPSED DATE : 19960723
EP0091529 B1	19960723	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 19960723

EP0091529 B1	19960724	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE LAPSED DATE : 19960724
EP0091529 B1	19960731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE LAPSED DATE : 19960731
EP0091529 B1	19960731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH LAPSED DATE : 19960731
EP0091529 B1	19960731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LI LAPSED DATE : 19960731
EP0091529 B1	19970131	LSLE	-BERE	BE: LAPSED	PARTYTYPE : OWNER REF COUNTRY CODE : EP OWNER : PAPETERIES DE JEAND'HEURS EFFECTIVE DATE : 19960731
EP0091529 B1	19970201	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL LAPSED DATE : 19970201
EP0091529 B1	19970312	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 19960723
EP0091529 B1	19970314	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP0091529 B1	19970328	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR LAPSED DATE : 19970328
EP0091529 B1	19970401	LSLE	-NLV4	NL: LAPSED OR ANULLED DUE TO NON-PAYMENT OF THE ANNUAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 19970201
EP0091529 B1	19970402	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE LAPSED DATE : 19970402
EP0091529 B1	19970407	LSLE	-EUG	SE: EUROPEAN PATENT HAS LAPSED	REF COUNTRY CODE : EP TEXT : 82401373.4
EP0091529 B1	19970530	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST
EP0109900 A1	19840530	LSPB	+	published / reissued	
EP0109900 A1	19840530	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19831119
EP0109900 B1	19870708	LSGT	+	granted / extensions (spc, cpc, pte)	
EP0109900 B1	19880622	LSGT	+26N	NO OPPOSITION FILED	
EP0109900 B1	19891130	LSFE	ITTA	IT: LAST PAID ANNUAL FEE	REF COUNTRY CODE : EP
EP0109900 B1	19940307	LSFE	+EPTA	LU: LAST PAID ANNUAL FEE	REF COUNTRY CODE : EP
EP0109900 B1	19950131	LSGT	+EAL	SE: EUROPEAN PATENT IN FORCE IN SWEDEN	REF COUNTRY CODE : EP TEXT : 83402205.5
EP0109900 B1	19981028	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 19981028 YEAR OF FEE PAYMENT : 16
EP0109900 B1	19981030	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 19981030 YEAR OF FEE PAYMENT : 16

EP0109900 B1	19981102	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 19981102 YEAR OF FEE PAYMENT : 16
EP0109900 B1	19981110	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 19981110 YEAR OF FEE PAYMENT : 16
EP0109900 B1	19981125	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 19981125 YEAR OF FEE PAYMENT : 16
EP0109900 B1	19981125	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 19981125 YEAR OF FEE PAYMENT : 16
EP0109900 B1	19981125	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 19981125 YEAR OF FEE PAYMENT : 16
EP0109900 B1	19981130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 19981130 YEAR OF FEE PAYMENT : 16
EP0109900 B1	19990111	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 19990111 YEAR OF FEE PAYMENT : 16
EP0109900 B1	19991116	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 19991116
EP0109900 B1	19991116	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 19991116
EP0109900 B1	19991116	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 19991116
EP0109900 B1	19991117	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 19991117
EP0109900 B1	19991130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 19991130
EP0109900 B1	19991130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 19991130
EP0109900 B1	19991130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 19991130
EP0109900 B1	20000531	LSLE	-BERE	BE: LAPSED	PARTYTYPE : OWNER REF COUNTRY CODE : EP OWNER : PAPETERIES DE

					JEAND'HEURS EFFECTIVE DATE : 19991130
EP0109900 B1	20000601	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20000601
EP0109900 B1	20000705	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 19991116
EP0109900 B1	20000714	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP0109900 B1	20000717	LSLE	-EUG	SE: EUROPEAN PATENT HAS LAPSED	REF COUNTRY CODE : EP TEXT : 83402205.5
EP0109900 B1	20000731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20000731
EP0109900 B1	20000801	LSLE	-NLV4	NL: LAPSED OR ANULLED DUE TO NON-PAYMENT OF THE ANNUAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20000601
EP0109900 B1	20000901	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20000901
EP0109900 B1	20000901	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST
ES8307955 A1	19830701	LSGT	+	granted / extensions (spc, cpc, pte)	
ES8307955 A1	20020616	LSLE	-FD1A	PATENT LAPSED	EFFECTIVE DATE : 20020506
ES8307955 A1	20030701	PEXP		Calculated Patent Term Expiry	
FI72553 B	19870227	LSPB	+	published / reissued	
FI72553 C	19870608	LSGT	+	granted / extensions (spc, cpc, pte)	
FI72553 C	20040831	LSLE	-MM	PATENT LAPSED	PARTYTYPE : OWNER OWNER : PAPETERIES DE JEAND'HEURS
FI72553 C	20020610	PEXP		Calculated Patent Term Expiry	
FI76759 B	19880831	LSPB	+	published / reissued	
FI76759 C	19881212	LSGT	+	granted / extensions (spc, cpc, pte)	
FI76759 C	19970228	LSLE	-MM	PATENT LAPSED	
FI76759 C	20040831	LSLE	-MM	PATENT LAPSED	PARTYTYPE : OWNER OWNER : PAPETERIES DE JEAND'HEURS
FI76759 C	20020713	PEXP		Calculated Patent Term Expiry	
FI822082 A	19830709	LSPB	+	published / reissued	
FI822500 A	19831010	LSPB	+	published / reissued	
FR2505896 A1	19821119	LSPB	+	published / reissued	
FR2505896 B1	19850524	LSGT	+	granted / extensions (spc, cpc, pte)	
FR2505896 B1	20010512	PEXP		Calculated Patent Term Expiry	
FR2524828 A1	19831014	LSPB	+	published / reissued	
FR2524828 B1	19860110	LSGT	+	granted / extensions (spc, cpc, pte)	

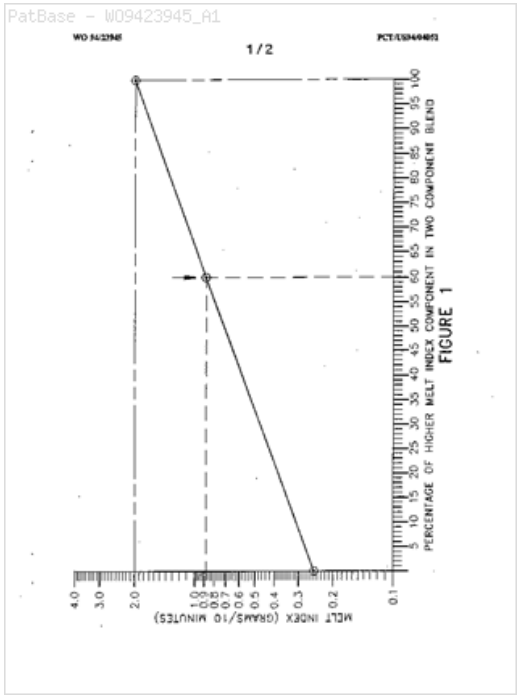
FR2524828 B1	19970124	LSLE	-ST	NOTIFICATION OF LAPSE	
FR2524828 B1	20020409	PEXP		Calculated Patent Term Expiry	
JP57199896 A2	19821207	LSPB	+	published / reissued	
JP58183753 A2	19831027	LSPB	+	published / reissued	
MX160400 A	19900216	LSGT	+	granted / extensions (spc, cpc, pte)	
MX160400 A	20000216	PEXP		Calculated Patent Term Expiry	
US4445972 A	19840501	LSGT	+	granted / extensions (spc, cpc, pte)	
US4445972 A	19820216	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PAPETERIES DE JEAND'HEURS; LISLE EN RIGAULT, 55000 OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNOR:BARTELLONI, RENE; REEL/FRAME:003975/0040 EFFECTIVE DATE : 19820211
US4445972 A	19840302	LSGT	PAT1	Patented Case	
US4445972 A	19840302	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US4445972 A	19870929	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US4445972 A	19911016	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US4445972 A	19951027	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US4510019 A	19850409	LSGT	+	granted / extensions (spc, cpc, pte)	
US4510019 A	19821117	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PAPETERIES DE JEAND'HEURS LISLE EN RIGAULT, 55000 OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNOR:BARTELLONI, RENE; REEL/FRAME:004070/0101 EFFECTIVE DATE : 19821112
US4510019 A	19850208	LSGT	PAT1	Patented Case	
US4510019 A	19850208	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US4510019 A	19880926	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US4510019 A	19920924	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US4510019 A	19961009	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
ZA8205838 A	19830727	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA8205838 A	20020811	PEXP		Calculated Patent Term Expiry	

9) Family number: 29169013 (US2002034622A)

Title: CHEESE PACKAGE, FILM, BAG AND PROCESS FOR PACKAGING A CO2 RESPIRING FOODSTUFF

Abstract: A packaged article, especially a respiring foodstuff such as cheese which generates or releases gas during storage, and a permeable multilayer biaxially oriented film suitable for allowing escape of such gas while minimizing transfer of oxygen across the film which has a thin layer of a blend of EVOH and nylon. In a preferred embodiment the low cost film having a high permeability to CO2 and low O2 permeability is used to package cheese.

Classifications:
International (IPC 8-9): A23C19/16 B29C47/06 B29C55/12 B29C61/06 B32B27/08 B32B27/28 B32B27/34 B32B7/04 B32B7/12 B65D65/40 B65D75/00 B65D75/14 B65D85/76 C08J5/18 (Advanced/Invention); B29C47/06 B32B27/28 B32B27/34 B32B7/12 C08J5/18 (Advanced/Non-invention); A23C19/00 B29C47/06 B32B27/08 B32B27/28 B32B27/34 B32B7/12 B65D65/40 B65D85/72 C08J5/18 (Core/Invention); B65D (Subclass/Invention)
International (IPC 1-7): A01J27/02 A23C19/16 B23B27/08 B29C47/06 B29C61/06 B32B27/08 B32B27/28 B32B27/30 B32B27/32 B32B27/34 B32B31/00 B32B31/02 B32B31/30 B32B7/04 B32B7/12 B65B25/06 B65D65/40 B65D75/14 B65D81/20 B65D85/76 B65F75/14 C08J5/18
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European: B32B27/08
US: 264/173.15 426/127 426/127S 426/130 426/36 428/213 428/220 428/220P 428/334 428/34.9 428/349 428/35.4 428/35.400S 428/36.7 428/475.8 428/475.800S 428/476.1 428/476.100S 428/476.3 428/516 428/518 428/52 428/520 428/520S 428/526 428/91 428/910 428/910S



Family:

Publication number	Publication date	Application number	Application date
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Priority:

US19930044669 19930409 US19940191886 19940203 CA19942120836 19940408
CA19942120895 19940408 WO1994US04051 19940408 WO1994US04052 19940408
IL19940109271 19940410 US20010950471 20010910

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Agent(s): WATERMARK PATENT AND TRADE MARKS ATTORNEYS; WATERMARK INTELLECTUAL PROPERTY PTY LTD; SIM AND MCBURNEY; VILLASECA; REINHOLD COHN AND PARTNERS; WOLFF BREGMAN AND GOLLER

Designated states: AT AU BE BR CH CZ DE DK ES FI FR GB GR HU IE IT JP LI LU MC NL NZ PT RU SE

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT181281 E	19990715	LSGT	+	granted / extensions (spc, cpc, pte)	
AT181281 E	20140408	PEXP		Calculated Patent Term Expiry	
AT187389 E	19991215	LSGT	+	granted / extensions (spc, cpc, pte)	
AT187389 E	20140408	PEXP		Calculated Patent Term Expiry	
AU199465584 A1	19941108	LSPB	+	published / reissued	
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AU671747 B2	19960905	LSGT	+	granted / extensions (spc, cpc, pte)	

AU671747 B2	20010301	LSAS	PC	ASSIGNMENT REGISTERED	PARTYTYPE : OWNER OWNER : CURWOOD, INC. OLDPARTY : FORMER OWNER WAS: VISKASE CORPORATION
AU671747 B2	20140408	PEXP		Calculated Patent Term Expiry	
AU672108 B2	19960919	LSGT	+	granted / extensions (spc, cpc, pte)	
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AU672108 B2	20021024	LSRE	DA3	AMENDMENTS MADE SECTION 104	TEXT : THE NATURE OF THE AMENDMENT IS AS WAS NOTIFIED IN THE OFFICIAL JOURNAL DATED 20020509
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BRPI9405336 A	20040824	LSAS	B25G	REQUESTED CHANGE OF HEADQUARTER APPROVED	
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BRPI9405337 A	19990831	LSPB	+	published / reissued	
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DE69419097 T2	19991111	LSGT	+	granted / extensions (spc, cpc, pte)	
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EP0644828 B1	20140228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20131101
EP0644828 B1	20140228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20130430
EP0644828 B1	20140228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20130408
EP0644828 B1	20140430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20130430
EP0644828 B1	20140430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20130408
EP0644828 B1	20140610	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20140610
EP0644828 B1	20140829	LSLE	-PG25	LAPSED IN A CONTRACTING STATE	COUNTRY OF REF DOCUMENT : ES NOTIFICATIONOFLAPSE : LAPSE

				[ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20130409
EP0644828 B1	20140408	PEXP		Calculated Patent Term Expiry	
EP0646064 A1	19950405	LSPB	+	published / reissued	
EP0646064 A1	19950510	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19950314
EP0646064 A1	19970806	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 19970620
EP0646064 B1	19990616	LSGT	+	granted / extensions (spc, cpc, pte)	
EP0646064 B1	19990616	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES NOTIFICATIONOFLAPSE : THE PATENT HAS BEEN ANNULLED BY A DECISION OF A NATIONAL AUTHORITY LAPSED DATE : 19990616
EP0646064 B1	19990616	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 19990616
EP0646064 B1	19990616	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE NOTIFICATIONOFLAPSE : THE PATENT HAS BEEN ANNULLED BY A DECISION OF A NATIONAL AUTHORITY LAPSED DATE : 19990616
EP0646064 B1	19990616	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 19990616
EP0646064 B1	19990630	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP0646064 B1	19990908	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP0646064 B1	19990916	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 19990916
EP0646064 B1	20000408	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20000408
EP0646064 B1	20000408	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20000408
EP0646064 B1	20000531	LSGT	+26N	NO OPPOSITION FILED	
EP0646064 B1	20001031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20001031
EP0646064 B1	20010131	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : CH OWNER : VISKASE CORPORATION

					TRANSFER- CURWOOD, INC. A DELA REF LEGAL EVENT CODE : PUE
EP0646064 B1	20010207	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP0646064 B1	20010402	LSAS	NLS	NL: ASSIGNMENTS OF EP-PATENTS	PARTYTYPE : OWNER REF COUNTRY CODE : EP OWNER : CURWOOD, INC.
EP0646064 B1	20010928	LSAS	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : TP
EP0646064 B1	20120731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20120425 YEAR OF FEE PAYMENT : 19
EP0646064 B1	20120731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20120426 YEAR OF FEE PAYMENT : 19
EP0646064 B1	20120731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20120425 YEAR OF FEE PAYMENT : 19
EP0646064 B1	20120731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20120427 YEAR OF FEE PAYMENT : 19
EP0646064 B1	20120831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20120425 YEAR OF FEE PAYMENT : 19
EP0646064 B1	20120831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20120503 YEAR OF FEE PAYMENT : 19
EP0646064 B1	20120928	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20120424 YEAR OF FEE PAYMENT : 19
EP0646064 B1	20130329	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20120321 YEAR OF FEE PAYMENT : 19
EP0646064 B1	20131113	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : V1 EFFECTIVE DATE : 20131101
EP0646064 B1	20131129	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP0646064 B1	20131209	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DK REF LEGAL EVENT CODE : EBP EFFECTIVE DATE : 20130430
EP0646064 B1	20131215	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MM01 REF DOCUMENT NUMBER : 181281 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20130430
EP0646064 B1	20131225	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20130408
EP0646064 B1	20140131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM	COUNTRY OF REF DOCUMENT : CH NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES

				NATIONAL OFFICE TO EPO]	LAPSED DATE : 20130430
EP0646064 B1	20140131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20130430
EP0646064 B1	20140131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20130408
EP0646064 B1	20140131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20130430
EP0646064 B1	20140131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20131101
EP0646064 B1	20140131	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20131231
EP0646064 B1	20140228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20131101
EP0646064 B1	20140228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20130430
EP0646064 B1	20140228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20130408
EP0646064 B1	20140313	LSDW	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R119 REF DOCUMENT NUMBER : 69419097 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20131101
EP0646064 B1	20140430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20130430
EP0646064 B1	20140408	PEXP		Calculated Patent Term Expiry	
ES2139072 T3	20000201	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2139072 T3	20000201	LSGT	+FG2A	DEFINITIVE PROTECTION	REF DOCUMENT NUMBER : 644828 COUNTRY OF REF DOCUMENT : ES
ES2139072 T3	20140408	PEXP		Calculated Patent Term Expiry	
FI107898 B	20011031	LSPB	+	published / reissued	
FI107898 B	20131129	LSLE	-MM	PATENT LAPSED	
FI107898 B	20141208	PEXP		Calculated Patent Term Expiry	

FI113159 B	20040315	LSPB	+	published / reissued	
FI113159 B	20131129	LSLE	-MM	PATENT LAPSED	
FI113159 B	20141208	PEXP		Calculated Patent Term Expiry	
FI945769 A	19950207	LSPB	+	published / reissued	
FI945770 A	19941208	LSPB	+	published / reissued	
HU213628 B	19970828	LSGT	+	granted / extensions (spc, cpc, pte)	
HU213628 B	20070129	LSLE	-MM4A	LAPSE OF DEFINITIVE PATENT PROTECTION DUE TO NON-PAYMENT OF FEES	
HU213628 B	20140408	PEXP		Calculated Patent Term Expiry	
HU221127 B1	20020828	LSGT	+	granted / extensions (spc, cpc, pte)	
HU221127 B1	20140128	LSLE	-MM4A	LAPSE OF DEFINITIVE PATENT PROTECTION DUE TO NON-PAYMENT OF FEES	
HU221127 B1	20140408	PEXP		Calculated Patent Term Expiry	
HU71204 A2	19951128	LSPB	+	published / reissued	
HU71506 A2	19951228	LSPB	+	published / reissued	
IL109270 A1	19960804	LSPB	+	published / reissued	
IL109270 A1	19970110	LSGT	+FF	PATENT GRANTED	
IL109270 A1	19970415	LSFE	+KB	PATENT RENEWED	
IL109270 A1	20000831	LSFE	+KB	PATENT RENEWED	
IL109270 A1	20030212	LSRE	NP	PERMISSION FOR AMENDING THE PATENT SPECIFICATION GRANTED (SECTION 66, PATENTS LAW 1967)	
IL109270 A1	20040601	LSFE	+KB	PATENT RENEWED	
IL109270 A1	20080605	LSFE	+KB	PATENT RENEWED	
IL109270 A1	20120430	LSFE	+KB	PATENT RENEWED	
IL109270 A1	20141130	LSLE	-EXP	PATENT EXPIRED	
IL109271 A1	19970713	LSPB	+	published / reissued	
IL109271 A1	19980208	LSGT	+FF	PATENT GRANTED	
IL109271 A1	19980615	LSFE	+KB	PATENT RENEWED	
IL109271 A1	20000831	LSFE	+KB	PATENT RENEWED	
IL109271 A1	20040601	LSFE	+KB	PATENT RENEWED	
IL109271 A1	20080605	LSFE	+KB	PATENT RENEWED	
IL109271 A1	20120430	LSFE	+KB	PATENT RENEWED	
IL109271 A1	20141130	LSLE	-EXP	PATENT EXPIRED	
IL119474 A1	19990620	LSPB	+	published / reissued	
IL119474 A1	19991028	LSGT	+FF	PATENT GRANTED	
IL119474 A1	20000716	LSGT	+FF	PATENT GRANTED	
IL119474 A1	20010614	LSWD	-RH	PATENT VOID	
IL119474 A1	20040601	LSFE	+KB	PATENT RENEWED	
IL119474 A1	20080605	LSFE	+KB	PATENT RENEWED	
IL119474 A1	20120430	LSFE	+KB	PATENT RENEWED	
IL119474 A1	20141130	LSLE	-EXP	PATENT EXPIRED	
JP3001637 B2	20000124	LSGT	+	granted / extensions (spc, cpc, pte)	
JP3001637 B2	20041102	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP3001637 B2	20051101	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250

JP3001637 B2	20061107	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP3001637 B2	20071120	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 9
JP3001637 B2	20081125	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 10
JP3001637 B2	20091029	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 10
JP3001637 B2	20091104	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 11
JP3001637 B2	20101102	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 12
JP3001637 B2	20111020	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 12
JP3001637 B2	20111025	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 13
JP3001637 B2	20121101	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 13
JP3001637 B2	20121106	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 14
JP3001637 B2	20131112	LSLE	-LAPS	CANCELLATION BECAUSE OF NO PAYMENT OF ANNUAL FEES	
JP3001637 B2	20140408	PEXP		Calculated Patent Term Expiry	
JP3032296 B2	20000410	LSGT	+	granted / extensions (spc, cpc, pte)	
JP3032296 B2	20050201	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP3032296 B2	20060131	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP3032296 B2	20070130	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP3032296 B2	20080226	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 9
JP3032296 B2	20090205	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 9
JP3032296 B2	20090210	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 10
JP3032296 B2	20100128	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 10
JP3032296 B2	20100202	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 11
JP3032296 B2	20110201	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 12

JP3032296 B2	20120131	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 13
JP3032296 B2	20130129	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 14
JP3032296 B2	20140210	LSLE	-LAPS	CANCELLATION BECAUSE OF NO PAYMENT OF ANNUAL FEES	
JP3032296 B2	20140408	PEXP		Calculated Patent Term Expiry	
JP8500551 T2	19960123	LSPB	+	published / reissued	
JP8507011 T2	19960730	LSPB	+	published / reissued	
NZ265206 A	19960925	LSPB	+	published / reissued	
NZ265206 A	20020426	LSRE	S38A	APPLICATION FOR PROCEEDINGS UNDER SECTION 38 (AMENDMENT OF SPECIFICATION WITH LEAVE OF COMMISSIONER)	TEXT : BY WAY OF CORRECTION
NZ265206 A	20021122	LSRE	S38C	PROCEEDINGS UNDER SECTION 38 (AMENDMENT OF SPECIFICATION WITH LEAVE OF COMMISSIONER): SPECIFICATION AMENDED	
NZ265206 A	20040430	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	
NZ265206 A	20070427	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	
NZ265206 A	20140430	LSLE	-EXPY	PATENT EXPIRED	
NZ265527 A	19960827	LSPB	+	published / reissued	
NZ265527 A	20040430	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	
NZ265527 A	20070427	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	
NZ265527 A	20140430	LSLE	-EXPY	PATENT EXPIRED	
RU2133702 C1	19990727	LSGT	+	granted / extensions (spc, cpc, pte)	
RU2133702 C1	20140210	LSLE	-MM4A	THE PATENT IS INVALID DUE TO NON-PAYMENT OF FEES	EFFECTIVE DATE : 20130409
RU2133702 C1	20140408	PEXP		Calculated Patent Term Expiry	
RU2134276 C1	19990810	LSGT	+	granted / extensions (spc, cpc, pte)	
RU2134276 C1	20071220	LSLE	-MM4A	THE PATENT IS INVALID DUE TO NON-PAYMENT OF FEES	EFFECTIVE DATE : 20060409
RU2134276 C1	20140408	PEXP		Calculated Patent Term Expiry	
RU95105791 A	19961027	LSPB	+	published / reissued	
RU95105795 A	19970320	LSPB	+	published / reissued	
US2002034622 AA	20020321	LSPB	+	published / reissued	
US5382470 A	19950117	LSGT	+	granted / extensions (spc, cpc, pte)	
US5382470 A	19930729	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : VISKASE CORPORATION OLDPARTY : RE-RECORD TO CORRECT SERIAL NUMBER PREVIOUSLY RECORDED ON REEL 6545 FRAME 368.; ASSIGNOR:VICIK, STEPHEN JAMES; REEL/FRAME:006587/0885 EFFECTIVE DATE : 19930407
US5382470 A	19950109	LSGT	PAT1	Patented Case	

US5382470 A	19950628	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BT COMMERCIAL CORPORATION, AS COLLATERAL AGENT, IL OLDPARTY : SECURITY INTEREST; ASSIGNOR:VISKASE CORPORATION; REEL/FRAME:007526/0584 EFFECTIVE DATE : 19950620
US5382470 A	19980716	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5382470 A	19990623	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CIT GROUP/BUSINESS CREDIT, INC., THE, ILLINOIS OLDPARTY : SECURITY INTEREST IN INTELLECTUAL PROPERTY; ASSIGNOR:VISKASE CORPORATION; REEL/FRAME:010226/0287 EFFECTIVE DATE : 19990614
US5382470 A	19990623	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GENERAL MOTORS EMPLOYEE GLOBAL GROUP PENSION TRUST OLDPARTY : SECURITY INTEREST IN INTELLECTUAL PROPERTY; ASSIGNOR:VISKASE CORPORATION; REEL/FRAME:010226/0287 EFFECTIVE DATE : 19990614
US5382470 A	19990623	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : D.P. KELLY & ASSOCIATES, ILLINOIS OLDPARTY : SECURITY INTEREST IN INTELLECTUAL PROPERTY; ASSIGNOR:VISKASE CORPORATION; REEL/FRAME:010226/0287 EFFECTIVE DATE : 19990614
US5382470 A	19990702	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : VISKASE CORPORATION, ILLINOIS OLDPARTY : RELEASE OF SECURITY INTEREST; ASSIGNOR:BT COMMERICIAL CORPORATION; REEL/FRAME:010238/0701 EFFECTIVE DATE : 19990614
US5382470 A	19990702	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : VISKASE CORPORATION,ILLINOIS OLDPARTY : RELEASE OF SECURITY INTEREST; ASSIGNOR:BT COMMERICIAL CORPORATION; REEL/FRAME:010238/0701 EFFECTIVE DATE : 19990614
US5382470 A	20000922	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : VISKASE CORPORATION, ILLINOIS OLDPARTY : RELEASE OF SECURITY INTEREST; ASSIGNORS:CIT GROUP/BUSINESS CREDIT, INC., THE; GENERAL MOTORS EMPLOYEE GLOBAL GROUP PENSION TRUST; DEPARTMENT OF PENSIONS-CITY OF LOS ANGELES; AND OTHERS; REEL/FRAME:011089/0725 EFFECTIVE DATE : 20000830
US5382470 A	20000925	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CURWOOD, INC., WISCONSIN OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:VISKASE CORPORATION; REEL/FRAME:011137/0055 EFFECTIVE DATE : 20000831
US5382470 A	20011120	LSRE	CC	CERTIFICATE OF CORRECTION	
US5382470 A	20020701	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8

US5382470 A	20060622	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5382470 A	20130409	PEXP		Calculated Patent Term Expiry	
US6316067 BA	20011113	LSGT	+	granted / extensions (spc, cpc, pte)	
US6316067 BA	19940407	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : VISKASE CORPORATION, ILLINOIS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:EDWARDS, DAVID NICHOLAS; VICIK, STEPHEN JAMES; REEL/FRAME:006898/0215; SIGNING DATES FROM 19940330 TO 19940404
US6316067 BA	19950628	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BT COMMERCIAL CORPORATION, AS COLLATERAL AGENT, IL OLDPARTY : SECURITY INTEREST; ASSIGNOR:VISKASE CORPORATION; REEL/FRAME:007526/0584 EFFECTIVE DATE : 19950620
US6316067 BA	19990623	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CIT GROUP/BUSINESS CREDIT, INC., THE, ILLINOIS OLDPARTY : SECURITY INTEREST IN INTELLECTUAL PROPERTY; ASSIGNOR:VISKASE CORPORATION; REEL/FRAME:010226/0287 EFFECTIVE DATE : 19990614
US6316067 BA	19990623	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GENERAL MOTORS EMPLOYEE GLOBAL GROUP PENSION TRUST OLDPARTY : SECURITY INTEREST IN INTELLECTUAL PROPERTY; ASSIGNOR:VISKASE CORPORATION; REEL/FRAME:010226/0287 EFFECTIVE DATE : 19990614
US6316067 BA	19990623	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : D.P. KELLY & ASSOCIATES, ILLINOIS OLDPARTY : SECURITY INTEREST IN INTELLECTUAL PROPERTY; ASSIGNOR:VISKASE CORPORATION; REEL/FRAME:010226/0287 EFFECTIVE DATE : 19990614
US6316067 BA	19990702	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : VISKASE CORPORATION, ILLINOIS OLDPARTY : RELEASE OF SECURITY INTEREST; ASSIGNOR:BT COMMERICIAL CORPORATION; REEL/FRAME:010238/0701 EFFECTIVE DATE : 19990614
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					AND OTHERS; REEL/FRAME:011089/0725 EFFECTIVE DATE : 20000830
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US6316067 BA	20090513	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
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US6316067 BA	20131209	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
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US6316067 BA	20181113	PEXP		Calculated Patent Term Expiry	
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WO9423945 A1	19941103	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 265206 COUNTRY OF REF DOCUMENT : NZ
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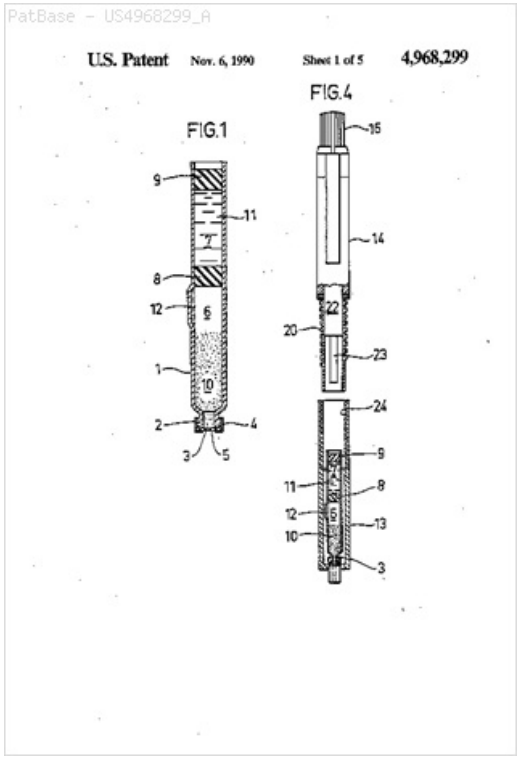
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WO9423946 A1	19941103	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 265527 COUNTRY OF REF DOCUMENT : NZ
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WO9423946 A1	19950712	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : PV1994-3097 COUNTRY OF REF DOCUMENT : CZ
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WO9423946 A1	19961113	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : PV1996-1989 COUNTRY OF REF DOCUMENT : CZ
WO9423946 A1	19990616	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1994914148 COUNTRY OF REF DOCUMENT : EP
WO9423946 A1	20020417	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : PV1994-3097 COUNTRY OF REF DOCUMENT : CZ
WO9423946 A1	20020515	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : PV1996-1989 COUNTRY OF REF DOCUMENT : CZ
WO9423946 A1	20040315	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 945770 COUNTRY OF REF DOCUMENT : FI

10) Family number: 2708014 (US4968299A)

Title: Method and device for injection

Abstract: A dual-chamber cylinder ampoule is used for the mixture of a sensitive, solid medicament, with **liquid** which is caused to flow calmly through the medicament in order to avoid any shaking and mechanical influence. The mixing is preferably carried out at a pressure above atmospheric. An injection device for the preparation of an injection solution and a following injection of such solution includes first and second tubular members for enclosing and holding a dual-chamber cylinder ampoule, in which the dry medicament is kept separated from the **liquid**. When the two tubular members are being screwed together the **liquid** is calmly and gently mixed with the dry medicament and dissolves it, and the resulted solution can thereafter be injected by means of the dosage and administration mechanism, provided in one tubular member, through a needle arranged at the front end of the other tubular member.

Classifications:
International (IPC 8-9): A61J1/06 A61M5/178 A61M5/19 A61M5/24 A61M5/315 (Advanced/Invention);
A61J1/06 A61M5/19 A61M5/24 A61M5/315 (Core/Invention);
A61M (Subclass/Invention)
International (IPC 1-7): A61J1/06 A61M37/00 A61M5/00 A61M5/178 A61M5/18 A61M5/19 A61M5/20 A61M5/24 A61M5/28 A61M5/315 B65D81/32
CPC: A61M5/3155 A61M5/31578 A61M5/31525 A61M5/2448
European: A61M5/24M A61M5/315D K61M5/315E2B1 K61M5/315F2A
US: 604/191 604/224 604/232 604/518 604/90 D24/114



Family:

Publication number	Publication date	Application number	Application date
AT68707 E	19911115	AT19880850235T	19880628
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AU613379 B2	19910801	AU19880018607	19880701
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NO173001 C	19931013	NO19880002743	19880621
NO882743 A	19890103	NO19880002743	19880621
NO882743 A0	19880621	NO19880002743	19880621

NO882743 L	19890103	NO19880002743	19880621
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PT87794 B	19930930	PT19880087794	19880622
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SE8801405 A0	19880415	SE19880001405	19880415
SE8801405 L	19891016	SE19880001405	19880415
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YU46917 B	19940624	YU19880001284	19880701
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Priority:

SE19870002735 19870702 SE19870002735 19870702 SE19880001405 19880415
EP19880850235 19880628 EP19880850235 19880628 CA19880570965 19880630
YU19880001284 19880701

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Inventor(s): (std): SROM A ; ROBERTSON E F ; STROEM A ; HJERTMAN B ; FLORIN ROBERTSSON E ; AHLSTRAND B ; SIROM ANDERS ; RINDA FURIIKURUNDO ; BUU AARUSUTORANDO ; ETSUBA FUROORINNROBERUTOSON ; ANDERUSU SUTORIYOOMU ; BIRUGERU IERUTOMAN ; FLORIN ROBERTSSON EBBA ; STROM ANDERS ; FRYKLUND LINDA ; AHLSTRAND BO ; FLORIN ROBERTSON EBBA ; STROEM ANDERS ; HJERTMAN BIRGER ; FLORIN ROBERTSON E ; AHLASTRAND B ; FRYKLUND L ; BIRGER HJERTMAN ; ANDERS STROEM ; EBBA FLORIN ROBERTSON ; BO AHLSTRAND ; LINDA FRYKLUND ; STROM A

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Agent(s): WATERMARK PATENT AND TRADE MARKS ATTORNEYS; WATERMARK INTELLECTUAL PROPERTY PTY LTD; FETHERSTONHAUGH AND CO; REINHOLD COHN AND PARTNERS

Designated states: AT BE CH DE ES FR GB GR IT LI LU NL SE

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
AT68707 E	19911115	LSGT	+	granted / extensions (spc, cpc, pte)	
AT68707 E	19920715	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	
AT68707 E	19960615	LSAS	EEIH	CHANGE IN THE PERSON OF PATENT OWNER	
AT68707 E	20080915	LSLE	-EELA	CANCELLED DUE TO LAPSE OF TIME	
AT68707 E	20080628	PEXP		Calculated Patent Term Expiry	
AU198818607 A1	19890105	LSPB	+	published / reissued	
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BRPI8803170 A	19890110	LSPB	+	published / reissued	
BRPI8803170 A	19950418	LSFE	KD	FEES DUE (LETTER PATENT)	
BRPI8803170 A	19950725	LSGT	+FG	LETTER PATENT GRANTED	
BRPI8803170 A	19951024	LSAS	TC	CHANGE OF PROPRIETOR'S NAME	

BRPI8803170 A	19951031	LSAS	HC	CHANGE OF NAME	
BRPI8803170 A	19960416	LSAS	HIH	TRANSFER OR CHANGE CANCELLED	
BRPI8803170 A	19960416	LSAS	PC	TRANSFER	TEXT : PHARMACIA AKTIEBOLAG (SE)
BRPI8803170 A	20080902	LSLE	-B21A	EXPIRY ACC. ART. 78, ITEM I OF IPL- EXPIRY OF THE TERM OF PROTECTION	TEXT : PATENTE EXTINTA EM 28/06/2003
CA1310871 A1	19921201	LSGT	+	granted / extensions (spc, cpc, pte)	
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CA1310871 A1	20091201	PEXP		Calculated Patent Term Expiry	
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DK167800 B1	19931220	LSGT	+	granted / extensions (spc, cpc, pte)	
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DK367988 A	19890103	LSPB	+	published / reissued	
EP0298067 A1	19890104	LSPB	+	published / reissued	
EP0298067 A1	19890419	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19890221
EP0298067 A1	19900912	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 19900801
EP0298067 A1	19910605	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : KABI PHARMACIA AB
EP0298067 A1	19920501	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2026695 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP0298067 A1	19921014	LSGT	+26N	NO OPPOSITION FILED	
EP0298067 A1	19940729	LSFE	+EPTA	LU: LAST PAID ANNUAL FEE	REF COUNTRY CODE : EP
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				(spc, cpc, pte)	
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ES2026695 T3	20080628	PEXP		Calculated Patent Term Expiry	
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FI882981 A	19940310	LSAS	HC	NAME/ COMPANY CHANGED IN APPLICATION	PARTYTYPE : OWNER OWNER : PHARMACIA AB
FI882981 A	19940718	LSPB	BB	PUBLICATION OF EXAMINED APPLICATION	
FI92467 B	19940815	LSPB	+	published / reissued	
FI92467 C	19941125	LSGT	+	granted / extensions (spc, cpc, pte)	
FI92467 C	19960214	LSAS	PC	TRANSFER OF ASSIGNMENT OF PATENT	PARTYTYPE : OWNER OWNER : PHARMACIA AB
FI92467 C	20040831	LSGT	+FG	PATENT GRANTED	PARTYTYPE : OWNER OWNER : PHARMACIA AB
FI92467 C	20080622	PEXP		Calculated Patent Term Expiry	
GR3003027 T3	19930217	LSGT	+	granted / extensions (spc, cpc, pte)	
GR3003027 T3	20111029	PEXP		Calculated Patent Term Expiry	
HR920949 A2	19941031	LSPB	+	published / reissued	
HR920949 B1	19971231	LSGT	+	granted / extensions (spc, cpc, pte)	
IL86799 A1	19930315	LSPB	+	published / reissued	
IL86799 A1	19981126	LSFE	+KB	PATENT RENEWED	
IL86799 A1	20020725	LSFE	+KB	PATENT RENEWED	
IL86799 A1	20081229	LSLE	-EXP	PATENT EXPIRED	
JP1080371 A2	19890327	LSPB	+	published / reissued	
JP2108611 C3	19961121	LSGT	+	granted / extensions (spc, cpc, pte)	
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JP6061361 B4	20050802	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
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JP64080371 A2	19890327	LSPB	+	published / reissued	
MX172551 B	19930103	LSGT	+	granted / extensions (spc, cpc, pte)	
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NO173001 B	19930705	LSPB	+	published / reissued	

NO173001 C	19931013	LSGT	+	granted / extensions (spc, cpc, pte)	
NO173001 C	20080811	LSLE	-MK1K	PATENT EXPIRED	
NO173001 C	20080621	PEXP		Calculated Patent Term Expiry	
NO882743 A	19890103	LSPB	+	published / reissued	
NZ225181 A	19910925	LSPB	+	published / reissued	
NZ225181 A	20010727	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	
PT87794 A	19890630	LSPB	+	published / reissued	
PT87794 B	19930930	LSGT	+	granted / extensions (spc, cpc, pte)	
PT87794 B	19930930	LSGT	+FG3A	PATENT GRANTED, DATE OF GRANTING	EFFECTIVE DATE : 19930324
PT87794 B	19940531	LSAS	PD3A	CHANGE OF PROPRIETORSHIP	
PT87794 B	20080704	LSLE	-MM4A	ANNULMENT/LAPSE DUE TO NON-PAYMENT OF FEES, SEARCHED AND EXAMINED PATENT	TEXT : MAXIMUM VALIDITY LIMIT REACHED EFFECTIVE DATE : 20080622
PT87794 B	20080930	PEXP		Calculated Patent Term Expiry	
SE464797 B	19910617	LSPB	+	published / reissued	
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SE464797 C	19911010	LSGT	+	granted / extensions (spc, cpc, pte)	
SE464797 C	20080415	PEXP		Calculated Patent Term Expiry	
SE465065 B	19910722	LSPB	+	published / reissued	
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SE465065 C	19911114	LSGT	+	granted / extensions (spc, cpc, pte)	
SE465065 C	20070702	PEXP		Calculated Patent Term Expiry	
SE8702735 A	19890103	LSPB	+	published / reissued	
SE8801405 A	19891016	LSPB	+	published / reissued	
SI8811284 A	19970630	LSGT	+	granted / extensions (spc, cpc, pte)	
SI8811284 A	20080701	PEXP		Calculated Patent Term Expiry	
TR25071 A	19920923	LSGT	+	granted / extensions (spc, cpc, pte)	
US4968299 A	19901106	LSGT	+	granted / extensions (spc, cpc, pte)	
US4968299 A	19890516	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KABIVITRUM AB, SWEDEN OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNORS:AHLSTRAND, BO; FLORIN-ROBERTSSON, EBBA; FRYKLUND, LINDA; AND OTHERS; REEL/FRAME:005070/0836 EFFECTIVE DATE : 19880824
US4968299 A	19900905	LSGT	PAT1	Patented Case	
US4968299 A	19900905	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US4968299 A	19940418	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US4968299 A	19940505	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KABI PHARMACIA AKTIEBOLAG, SWEDEN OLDPARTY : CHANGE OF NAME; ASSIGNOR:KABIVITRUM AB; REEL/FRAME:006968/0824

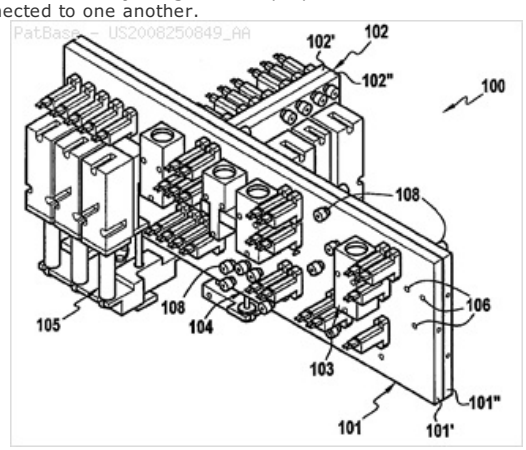
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US4968299 A	19980427	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US4968299 A	20020429	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US4968299 A	20080628	PEXP		Calculated Patent Term Expiry	
YU128488 A	19900831	LSPB	+	published / reissued	
YU46917 B	19940624	LSPB	+	published / reissued	
ZA8804616 A	19890329	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA8804616 A	20080627	PEXP		Calculated Patent Term Expiry	

11) Family number: 34396014 (US2008250849A)

Title: MODULAR DEVICE FOR ANALYSING A BIOLOGICAL FLUID, SUCH AS BLOOD

Abstract: The invention relates to a modular device for implementation in a biological fluid analysis system. It comprises functional modules, each comprising a support for supporting hydraulic components, the support including at least two plates having etched therein circuits that enable channels to be defined when the two plates are assembled side by side. According to the invention, said functional modules comprise at least a preparation first functional module for preparing a fluid for analysis and supporting at least one dilution vessel, and an injection second functional module for injecting the fluid prepared in said dilution vessel towards an analysis unit, said first and second modules being connected to one another.

Classifications:
International (IPC 8-9): G01N1/00 G01N1/38 G01N15/10 G01N35/10 G01N37/00 (Advanced/Invention);
G01N1/00 G01N1/38 G01N15/10 G01N35/10 G01N37/00 (Core/Invention)
International (IPC 1-7): G01N1/38
CPC: G01N1/38 G01N15/1404 G01N2035/00326
European: G01N1/38 G01N15/14C S01N35/00D9
US: 73/64.56 73/64.560P



Family:

Publication number	Publication date	Application number	Application date
AT472723 E	20100715	AT20060831193T	20060919
BRPI0616991 A2	20110705	BR2006PI16991	20060919
CA2625220 AA	20080407	CA20062625220	20060919
CN101283261 A	20081008	CN200680037341	20060919
CN101283261 B	20120307	CN200680037341	20060919
DE602006015214 D1	20100812	DE200660015214T	20060919
DK1941255 T3	20101025	DK20060831193T	20060919
EP1941255 A1	20080709	EP20060831193	20060919
EP1941255 B1	20100630	EP20060831193	20060919
ES2348178 T3	20101201	ES20060831193T	20060919
FR2891911 A1	20070413	FR20050010286	20051007
FR2891911 B1	20080425	FR20050010286	20051007
IN01297KN2008 A	20090102	IN2008KN01297	20080331
JP2009511869 T2	20090319	JP20080534050T	20060919
JP5020249 B2	20120905	JP20080534050T	20060919
US2008250849 AA	20081016	US20060088904	20060919
US7963152 BB	20110621	US20060088904	20060919
WO07042691 A1	20070419	WO2006FR50904	20060919

Priority:
FR20050010286 20051007 WO2006FR50904 20060919

Probable Assignee: HORIBA ABX SAS

Assignee(s): (std): COUDERC GUILHEM ; CREMIEN DIDIER ; HORIBA ABX SAS ; HORIBA ABX SAS SOC PAR ACTIONS ; LE COMTE ROGER ; MORENO PAUL

Assignee(s): HORIBA ABX SAS SOC PAR ACTIONS SIMPLIFIEE ; HORIBA ABX SAS SOCIETE PAR ACTIONS SIMPLIFIEE

Inventor(s): (std): COUDERC GUILHEM ; CREMIEN DIDIER ; DIDIER CREMIEN ; GUILHEM COUDERC ; LE COMTE ROGER ; MORENO PAUL ; PAUL MORENO ; ROGER LE COMTE

Agent(s): MCCARTHY TETRAULT LLP; DOMANGE MAXIME ET AL; DOMANGE MAXIME; CABINET BEAU DE LOMENIE; FITCH EVEN TABIN AND FLANNERY

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
AT472723 E	20100715	LSGT	+	granted / extensions (spc, cpc, pte)	
AT472723 E	20101215	LSLE	-RER	CEASED AS TO PARAGRAPH 5 LIT.	

				3 LAW INTRODUCING PATENT TREATIES	
AT472723 E	20260919	PEXP		Calculated Patent Term Expiry	
BRPI0616991 A2	20151201	LSFE	-B08F	APPLICATION FEES: DISMISSAL - ARTICLE 86 OF INDUSTRIAL PROPERTY LAW	TEXT : REFERENTE A 9A ANUIDADE.
BRPI0616991 A2	20160329	LSLE	-B08K	LAPSE AS NO EVIDENCE OF PAYMENT OF THE ANNUAL FEE HAS BEEN FURNISHED TO INPI (ACC. ART. 87)	TEXT : EM VIRTUDE DO ARQUIVAMENTO PUBLICADO NA RPI 2343 DE 01-12-2015 E CONSIDERANDO AUSENCIA DE MANIFESTACAO DENTRO DOS PRAZOS LEGAIS, INFORMO QUE CABE SER MANTIDO O ARQUIVAMENTO DO PEDIDO DE PATENTE, CONFORME O DISPOSTO NO ARTIGO 12, DA RESOLUCAO 113/2013.
CA2625220 AA	20080407	LSPB	+	published / reissued	
CA2625220 AA	20120919	LSLE	-FZDE	DEAD	
CN101283261 A	20081008	LSPB	+	published / reissued	
CN101283261 A	20081008	LSPB	+C06	PUBLICATION	
CN101283261 B	20120307	LSGT	+	granted / extensions (spc, cpc, pte)	
CN101283261 B	20120307	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN101283261 B	20151111	LSWD	-EXPY	TERMINATION OF PATENT RIGHT OR UTILITY MODEL	
CN101283261 B	20260919	PEXP		Calculated Patent Term Expiry	
DK1941255 T3	20101025	LSGT	+	granted / extensions (spc, cpc, pte)	
DK1941255 T3	20260919	PEXP		Calculated Patent Term Expiry	
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EP1941255 A1	20080709	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20080403
EP1941255 A1	20090121	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20080819
EP1941255 B1	20100630	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1941255 B1	20100630	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
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EP1941255 B1	20101027	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : VDEP EFFECTIVE DATE : 20100630
EP1941255 B1	20101029	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20100630

EP1941255 B1	20101125	LSRV	-LTIE	LT: INVALIDATION OF EUROPEAN PATENT OR PATENT EXTENSION	REF COUNTRY CODE : EP EFFECTIVE DATE : 20100630
EP1941255 B1	20101130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20100630
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EP1941255 B1	20110131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20100630
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EP1941255 B1	20110131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20100630
EP1941255 B1	20110202	LSWD	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FD4D
EP1941255 B1	20110228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20100630
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EP1941255 B1	20110228	LSLE	-PG25	LAPSED IN A CONTRACTING	COUNTRY OF REF DOCUMENT : IS NOTIFICATIONOFLAPSE : LAPSE

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EP1941255 B1	20110228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20101102
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EP1941255 B1	20110429	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20100630
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EP1941255 B1	20120928	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20100919

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EP1941255 B1	20121031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20100630
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EP1941255 B1	20131031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20130924 YEAR OF FEE PAYMENT : 8
EP1941255 B1	20131031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20130924 YEAR OF FEE PAYMENT : 8
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EP1941255 B1	20131031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20130920 YEAR OF FEE PAYMENT : 8
EP1941255 B1	20131031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20130923 YEAR OF FEE PAYMENT : 8
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EP1941255 B1	20131129	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20130920 YEAR OF FEE PAYMENT : 8
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EP1941255 B1	20150401	LSDW	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R119 REF DOCUMENT NUMBER : 602006015214 COUNTRY OF REF DOCUMENT : DE
EP1941255 B1	20150420	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DK REF LEGAL EVENT CODE : EBP EFFECTIVE DATE : 20140930

EP1941255 B1	20150430	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP1941255 B1	20150505	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SE REF LEGAL EVENT CODE : EUG
EP1941255 B1	20150527	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20140919
EP1941255 B1	20150529	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20140920
EP1941255 B1	20150626	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20150529
EP1941255 B1	20150731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20140930
EP1941255 B1	20150731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20150401
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EP1941255 B1	20160229	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION	COUNTRY OF REF DOCUMENT : ES NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20140920

				FROM NATIONAL OFFICE TO EPO]	
EP1941255 B1	20260919	PEXP		Calculated Patent Term Expiry	
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ES2348178 T3	20260919	PEXP		Calculated Patent Term Expiry	
FR2891911 A1	20070413	LSPB	+	published / reissued	
FR2891911 B1	20080425	LSGT	+	granted / extensions (spc, cpc, pte)	
FR2891911 B1	20150731	LSLE	-ST	NOTIFICATION OF LAPSE	EFFECTIVE DATE : 20150630
FR2891911 B1	20251007	PEXP		Calculated Patent Term Expiry	
IN01297KN2008 A	20090102	LSPB	+	published / reissued	
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JP2009511869 T2	20090731	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20090730
JP2009511869 T2	20110622	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20110621
JP2009511869 T2	20110929	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20110928
JP2009511869 T2	20120229	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20120228
JP2009511869 T2	20120426	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20120425
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JP2009511869 T2	20120523	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20120522
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JP2009511869 T2	20120621	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20120612
JP2009511869 T2	20120622	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
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JP5020249 B2	20120619	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP5020249 B2	20150622	LSLE	-LAPS	CANCELLATION BECAUSE OF NO PAYMENT OF ANNUAL FEES	

JP5020249 B2	20260919	PEXP		Calculated Patent Term Expiry	
US2008250849 AA	20081016	LSPB	+	published / reissued	
US7963152 BB	20110621	LSGT	+	granted / extensions (spc, cpc, pte)	
US7963152 BB	20080401	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : HORIBA ABX SAS, FRANCE OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:LE COMTE, ROGER; COUDERC, GUILHEM; CREMIEN, DIDIER; AND OTHERS; REEL/FRAME:020737/0711; SIGNING DATES FROM 20080215 TO 20080313
US7963152 BB	20080401	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : HORIBA ABX SAS, FRANCE OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:LE COMTE, ROGER; COUDERC, GUILHEM; CREMIEN, DIDIER; AND OTHERS; SIGNING DATES FROM 20080215 TO 20080313; REEL/FRAME:020737/0711
US7963152 BB	20110601	LSGT	PAT1	Patented Case	
US7963152 BB	20150621	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US7963152 BB	20150720	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	TEXT : PATENT EXPIRED FOR FAILURE TO PAY MAINTENANCE FEES (ORIGINAL EVENT CODE: EXP.)
US7963152 BB	20150811	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20150621
US7963152 BB	20171106	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US7963152 BB	20171106	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US7963152 BB	20280228	PEXP		Calculated Patent Term Expiry (PTA 527 days)	
WO07042691 A1	20070419	LSPB	+	published / reissued	
WO07042691 A1	20060919	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 200680037341.X COUNTRY OF REF DOCUMENT : CN
WO07042691 A1	20080328	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2008534050 COUNTRY OF REF DOCUMENT : JP
WO07042691 A1	20080331	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1297/KOLNP/2008 COUNTRY OF REF DOCUMENT : IN
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WO07042691 A1	20080403	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2006831193 COUNTRY OF REF DOCUMENT : EP
WO07042691 A1	20080407	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2625220 COUNTRY OF REF DOCUMENT : CA
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WO07042691 A1	20080412	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO	REF DOCUMENT NUMBER : 12088904 COUNTRY OF REF DOCUMENT : US

				NATIONAL PHASE	
WO07042691 A1	20080709	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2006831193 COUNTRY OF REF DOCUMENT : EP
WO07042691 A1	20110705	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : PI0616991 COUNTRY OF REF DOCUMENT : BR KIND CODE OF REF DOCUMENT : A2 DESIGNATED STATE(S) : EFFECTIVE DATE : 20080407

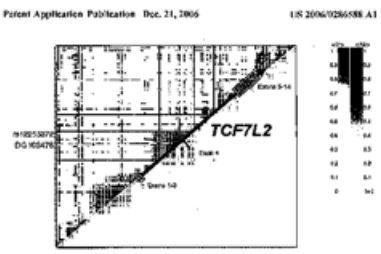
12) Family number: 34026016 (US2006286588A)

Title: GENETIC VARIANTS IN THE TCF7L2 GENE AS DIAGNOSTIC MARKERS FOR RISK OF TYPE 2 DIABETES MELLITUS

Abstract: Polymorphisms in the gene TCF7L2 are shown by association analysis to be a susceptibility gene for type II diabetes. Methods of diagnosis of susceptibility to diabetes, of decreased susceptibility to diabetes and protection against diabetes, are described, as are methods of treatment for type II diabetes.

Classifications:
International (IPC 8-9): A61K45/00 A61P A61P3/10 C12N15/09 C12N15/10 C12Q C12Q1/68 (Advanced/Invention);
A61P3/10 C07H21/02 C12N15/10 C12Q1/68 G01N33/53 (Advanced/Non-invention);
A61K45/00 A61P3/00 C12N15/09 C12N15/10 C12Q1/68 (Core/Invention);
C07H21/00 G01N33/53 (Core/Non-invention);
A61P C12Q (Subclass/Invention)
International (IPC 1-7): C12Q1/68
CPC: C12Q2600/106 C12Q2600/136 C12Q2600/158 C12Q2600/172 C12Q1/6883 C12Q1/6886 C12Q2600/156 C12N15/1006
European: C12Q1/68M6 M12Q1/68M6B M12Q600/156
US: 435/6 435/6.11 435/6.110P 435/6P 536/23.1 536/24.3

PatBase – US2006286588_AA



Family:

Publication number	Publication date	Application number	Application date
AU2006260477 AA	20061228	AU20060260477	20060616
AU2006260477 AH	20080207	AU20060260477	20060616
AU2006260477 BB	20120223	AU20060260477	20060616
BRPI0612301 A2	20090127	BR2006PI12301	20060616
CA2612475 AA	20061228	CA20062612475	20060616
CA2612475 C	20150728	CA20062612475	20060616
CN101238222 A	20080806	CN200680022129	20060616
CN101238222 B	20130410	CN200680022129	20060616
DE602006035576 D1	20130606	DE200660035576T	20060616
EA016397 B1	20120430	EA20080000087	20060616
EA200800087 A1	20080630	EA20080000087	20060616
EP1907569 A1	20080409	EP20060745230	20060616
EP1907569 B1	20130410	EP20060745230	20060616
HK1117569 A1	20131011	HK20080107630	20080710
HK1117569 A1	20090116	HK20080107630	20080710
HK1117569 A3	20090116	HK20080107630	20080710
HK1117569 B	20131011	HK20080107630	20080710
IL188147 A0	20080320	IL20070188147	20071213
IL188147 A1	20130228	IL20060188147	20060616
IN09981DN2007 A	20080620	IN2007DN09981	20071224
JP2008546403 T2	20081225	JP20080517701T	20060616
JP5301987 B2	20130925	JP20080517701T	20060616
KR101374304 B1	20140314	KR20087001376	20060616
KR20080051128 A	20080610	KR20087001376	20060616
MX2007015848 A1	20080422	MX20070015848	20060616
NO20080389 A	20080121	NO20080000389	20080121
NO20080389 L	20080121	NO20080000389	20080121
NO341910 B1	20180219	NO20080000389	20080121
NZ564285 A	20100326	NZ20060564285	20060616
US2006286588 AA	20061221	US20060454296	20060616
US2009275043 AA	20091105	US20090456381	20090615
US2012149016 AA	20120614	US20110294802	20111111
US7585630 BB	20090908	US20060454296	20060616
WO06137085 A1	20061228	WO2006IS00014	20060616

Priority:

US20050692174 20050620 US20050692174P 20050620 US20060757155P 20060106
EP20060745230 20060616 US20060454296 20060616 WO2006IS00014 20060616
US20090456381 20090615 US20110294802 20111111

Probable Assignee: DECODE GENETICS EHF

Assignee(s): (std): DECODE GENETICS EHF ; GRANT STRUAN F ; GRANT STRUAN F A

Assignee(s): GRANT STRUAN FA ; SAGA INVESTMENTS LLC

Inventor(s): (std): GRANT STRUAN F ; GRANT STRUAN F A

Inventor(s): STRUAN F A GRANT ; STRUAN F GRANT ; STRUAN GRANT FA ; GRANT STRUAN ; GRANT STRUAN F A PHILADELPHIA ; GRANT STRUAN FA

Agent(s): FREEHILLS PATENT AND TRADE MARK ATTORNEYS; FPA PATENT ATTORNEYS PTY LTD; FREEHILLS PATENT ATTORNEYS; HERBERT SMITH FREEHILLS; RIDOUT AND MAYBEE LLP; ARNASON FAKTOR; CHINA PATENT AGENT HK LTD; PEARL COHEN ZEDEK LATZER BARATZ; ONO SHINJIRO; KOBAYASHI YASUSHI; TOMITA HIROYUKI; CHIBA AKIO; HAMILTON BROOK SMITH AND REYNOLDS PC

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AU2006260477 AA	20061228	LSPB	+	published / reissued	
AU2006260477 BB	20120223	LSGT	+	granted / extensions (spc, cpc, pte)	
AU2006260477 BB	20120621	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU2006260477 BB	20260616	PEXP		Calculated Patent Term Expiry	
BRPI0612301 A2	20180306	LSES	B07D	TECHNICAL EXAMINATION (OPINION) RELATED TO ARTICLE 229 OF INDUSTRIAL PROPERTY LAW	
CA2612475 AA	20061228	LSPB	+	published / reissued	
CA2612475 AA	20110607	LSES	+EEER	EXAMINATION REQUEST	
CA2612475 C	20150728	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2612475 C	20260616	PEXP		Calculated Patent Term Expiry	
CN101238222 A	20080806	LSPB	+	published / reissued	
CN101238222 A	20080806	LSPB	+C06	PUBLICATION	
CN101238222 B	20130410	LSGT	+	granted / extensions (spc, cpc, pte)	
CN101238222 B	20130410	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN101238222 B	20260616	PEXP		Calculated Patent Term Expiry	
EA016397 B1	20120430	LSGT	+	granted / extensions (spc, cpc, pte)	
EA016397 B1	20130329	LSLE	-MM4A	LAPSE OF A EURASIAN PATENT DUE TO NON-PAYMENT OF RENEWAL FEES WITHIN THE TIME LIMIT IN THE FOLLOWING DESIGNATED STATE(S)	COUNTRY OF REF DOCUMENT : AM COUNTRY OF REF DOCUMENT : AZ COUNTRY OF REF DOCUMENT : KG COUNTRY OF REF DOCUMENT : KZ COUNTRY OF REF DOCUMENT : MD COUNTRY OF REF DOCUMENT : TJ COUNTRY OF REF DOCUMENT : TM
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EA200800087 A1	20080630	LSPB	+	published / reissued	
EP1907569 A1	20080409	LSPB	+	published / reissued	
EP1907569 A1	20080409	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20080118
EP1907569 A1	20090708	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20090609

EP1907569 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20160621 YEAR OF FEE PAYMENT : 11
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EP1907569 B1	20130415	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1907569 B1	20130415	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 606057 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20130415
EP1907569 B1	20130508	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP1907569 B1	20130606	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602006035576 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20130606
EP1907569 B1	20130830	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20130410
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EP1907569 B1	20130925	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : VDEP

					EFFECTIVE DATE : 20130410
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EP1907569 B1	20131031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20130410
EP1907569 B1	20131031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20130711
EP1907569 B1	20131031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20130721
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				POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20130810
EP1907569 B1	20131031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20130410
EP1907569 B1	20131129	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20130410
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EP1907569 B1	20131129	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20130410
EP1907569 B1	20140131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20130410
EP1907569 B1	20140131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20130410
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				NATIONAL OFFICE TO EPO]	DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20130410
EP1907569 B1	20140131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20130410
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EP1907569 B1	20140228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20130410
EP1907569 B1	20140319	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20140113
EP1907569 B1	20140424	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 602006035576 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20140113
EP1907569 B1	20150630	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20130410
EP1907569 B1	20150731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT; INVALID AB INITIO LAPSED DATE : 20060616
EP1907569 B1	20160630	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 11
EP1907569 B1	20170616	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 12
EP1907569 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20170615 YEAR OF FEE PAYMENT : 12
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EP1907569 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO	COUNTRY OF REF DOCUMENT :

				NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	DE PAYMENT DATE : 20170620 YEAR OF FEE PAYMENT : 12
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EP1907569 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20170621 YEAR OF FEE PAYMENT : 12
EP1907569 B1	20180615	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 13
EP1907569 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20180620 YEAR OF FEE PAYMENT : 13
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EP1907569 B1	20260616	PEXP		Calculated Patent Term Expiry	
HK1117569 A1	20090116	LSPB	+	published / reissued	
HK1117569 A1	20131011	LSPB	+	published / reissued	
HK1117569 A1	20280710	PEXP		Calculated Patent Term Expiry	
HK1117569 A1	20280710	PEXP		Calculated Patent Term Expiry	
HK1117569 A3	20090116	LSPB	+	published / reissued	
HK1117569 B	20131011	LSGT	+	granted / extensions (spc, cpc, pte)	
HK1117569 B	20280710	PEXP		Calculated Patent Term Expiry	
IL188147 A1	20130228	LSPB	+	published / reissued	
IL188147 A1	20130627	LSGT	+FF	PATENT GRANTED	
IL188147 A1	20130731	LSFE	+KB	PATENT RENEWED	
IL188147 A1	20160531	LSFE	+KB	PATENT RENEWED	
IN09981DN2007 A	20080620	LSPB	+	published / reissued	
JP2008546403 T2	20081225	LSPB	+	published / reissued	
JP2008546403 T2	20090611	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20090610
JP2008546403 T2	20090611	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20090610
JP2008546403 T2	20111118	LSES	-A131	NOTIFICATION OF	TEXT : JAPANESE INTERMEDIATE

				REASONS FOR REFUSAL	CODE: A131 EFFECTIVE DATE : 20111117
JP2008546403 T2	20120418	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20120417
JP2008546403 T2	20121107	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20121106
JP2008546403 T2	20130501	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20130430
JP2008546403 T2	20130520	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2008546403 T2	20130523	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20130522
JP2008546403 T2	20130627	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20130620
JP2008546403 T2	20130628	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP5301987 B2	20130925	LSGT	+	granted / extensions (spc, cpc, pte)	
JP5301987 B2	20130530	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP5301987 B2	20130625	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP5301987 B2	20160616	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5301987 B2	20160621	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5301987 B2	20170608	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5301987 B2	20170613	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5301987 B2	20180614	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5301987 B2	20180619	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5301987 B2	20190613	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5301987 B2	20190618	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
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KR101374304 B1	20140314	LSGT	+	granted / extensions (spc, cpc, pte)	
KR101374304 B1	20170217	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20170220 YEAR OF FEE PAYMENT : 4
KR101374304 B1	20180222	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20180223 YEAR OF FEE PAYMENT : 5
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KR101374304 B1	20260616	PEXP		Calculated Patent Term Expiry	
KR20080051128 A	20080610	LSPB	+	published / reissued	
KR20080051128 A	20110614	LSES	A201	REQUEST FOR EXAMINATION	
KR20080051128 A	20130313	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	

KR20080051128 A	20131217	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
KR20080051128 A	20140307	LSGT	+GRNT	WRITTEN DECISION TO GRANT	
MX2007015848 A1	20080422	LSPB	+	published / reissued	
MX2007015848 A1	20111202	LSGT	+FG	GRANT OR REGISTRATION	
NO20080389 A	20080121	LSPB	+	published / reissued	
NO341910 B1	20180219	LSGT	+	granted / extensions (spc, cpc, pte)	
NO341910 B1	20280121	PEXP		Calculated Patent Term Expiry	
NZ564285 A	20100326	LSPB	+	published / reissued	
NZ564285 A	20100730	LSGT	+PSEA	PATENT SEALED	
NZ564285 A	20100930	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	
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NZ564285 A	20160624	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	TEXT : PATENT RENEWED FOR 1 YEAR UNTIL 16 JUN 2017 BY LEA SKYLLERSTEDT EFFECTIVE DATE : 20160604
NZ564285 A	20170630	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	TEXT : PATENT RENEWED FOR 1 YEAR UNTIL 16 JUN 2018 BY CPA GLOBAL (PATRAFEE) EFFECTIVE DATE : 20170605
NZ564285 A	20180629	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	TEXT : PATENT RENEWED FOR 1 YEAR UNTIL 16 JUN 2019 BY CPA GLOBAL(PATRAFEE) AB EFFECTIVE DATE : 20180611
NZ564285 A	20190628	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	TEXT : PATENT RENEWED FOR 1 YEAR UNTIL 16 JUN 2020 BY CPA GLOBAL(PATRAFEE) AB EFFECTIVE DATE : 20190603
US2006286588 AA	20061221	LSPB	+	published / reissued	
US2006286588 AA	20090819	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2009275043 AA	20091105	LSPB	+	published / reissued	
US2009275043 AA	20120409	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2012149016 AA	20120614	LSPB	+	published / reissued	
US2012149016 AA	20130811	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US7585630 BB	20090908	LSGT	+	granted / extensions (spc, cpc, pte)	
US7585630 BB	20060823	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : DECODE GENETICS EHF., ICELAND OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:GRANT, STRUAN F.A.; REEL/FRAME:018168/0920 EFFECTIVE DATE : 20060721
US7585630 BB	20090819	LSGT	PAT1	Patented Case	
US7585630 BB	20091112	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SAGA INVESTMENTS LLC, CALIFORNIA OLDPARTY : GRANT OF PATENT SECURITY INTEREST; ASSIGNOR:DECODE GENETICS EHF (IN ICELANDIC: ISLENSK ERFDAGREINING EHF); REEL/FRAME:023510/0243 EFFECTIVE DATE : 20091112

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US7585630 BB	20101214	LSRE	CC	CERTIFICATE OF CORRECTION	
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US7585630 BB	20170223	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US7585630 BB	20270418	PEXP		Calculated Patent Term Expiry (PTA 306 days)	
WO06137085 A1	20061228	LSPB	+	published / reissued	
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WO06137085 A1	20071213	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 188147 COUNTRY OF REF DOCUMENT : IL
WO06137085 A1	20071213	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 564285 COUNTRY OF REF DOCUMENT : NZ
WO06137085 A1	20071213	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : MX/A/2007/015848 COUNTRY OF REF DOCUMENT : MX
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WO06137085 A1	20071220	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 200680022129.6 COUNTRY OF REF DOCUMENT : CN
WO06137085 A1	20071220	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2008517701 COUNTRY OF REF DOCUMENT : JP
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WO06137085 A1	20071221	LSWD	-WWW	WIPO INFORMATION: WITHDRAWN IN NATIONAL OFFICE	TEXT : DE
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WO06137085 A1	20080110	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2006260477 COUNTRY OF REF DOCUMENT : AU DATE OF REF DOCUMENT : 20060616 KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO06137085 A1	20080110	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2006260477 COUNTRY OF REF DOCUMENT : AU
WO06137085 A1	20080117	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1020087001376 COUNTRY OF REF DOCUMENT :

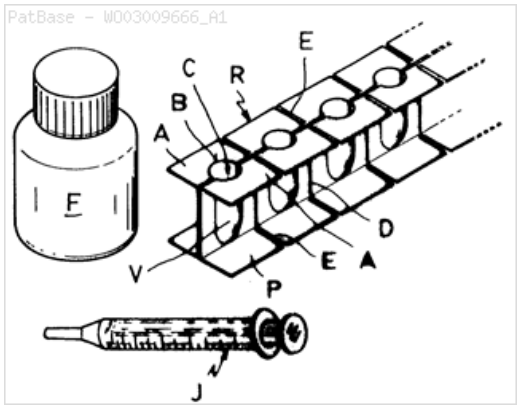
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WO06137085 A1	20080118	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2006745230 COUNTRY OF REF DOCUMENT : EP
WO06137085 A1	20080409	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2006745230 COUNTRY OF REF DOCUMENT : EP
WO06137085 A1	20090127	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : PI0612301 COUNTRY OF REF DOCUMENT : BR

13) Family number: 34667017 (WO03009666A1) © PatBase

Title: METHOD OF ADMINISTERING DRUGS AND DEVICES FOR SAME

Abstract: The invention relates to a method of administering drugs consisting in dosing the drugs according to a **medical** prescription appropriate for the specific circumstances of each patient. Said drugs can be in **liquid** form or in the form of a solid that can be dissolved or diluted in a **liquid** vehicle. According to the invention, the drug contained in the **liquid** vehicle is dosed using a graduated instrument and the prescribed dose is deposited in a shape-forming container comprising a cavity that is designed in the shape of a suppository. Subsequently, said container is subjected to cold storage at the level produced by a compartment of a domestic refrigerator so that the **liquid** drug solidifies in the form of a suppository. Said suppository is kept in the refrigerator compartment until the use thereof.

Classifications:
International (IPC 8-9): A61J3/08 (Advanced/Invention); A61J3/00 (Core/Invention)
International (IPC 1-7): A61J1/00 A61J3/08 A61M31/00 A61M5/178 A61M5/31
CPC: A61J3/08
European: A61J3/08



Family:

Publication number	Publication date	Application number	Application date
AU2002355186 AA	20030217	AU20020355186	20020724
ES1049731 UA	20020101	ES20010001914U	20010726
ES1049731 Y1	20020516	ES20010001914U	20010726
ES1049731 YA	20020516	ES20010001914U	20010726
WO03009666 A1	20030206	WO2002ES00368	20020724
WO03009666 C1	20050303	WO2002ES00368	20020724

Priority:

ES20010001914U 20010726 WO2002ES00368 20020724

Probable Assignee: BARROSO PEREZ CONCEPCION

Assignee(s): (std): BARROSO PEREZ CONCEPCION ; CABANAS POY MARIA JOSE ; HIDALGO ALBERT EDUARD ; JUAREZ GIMENEZ JUAN CARLOS ; OLIVERAS ARENAS MARIA

Inventor(s): (std): ALBERT EDUARD HIDALGO ; ARENAS MARIA OLIVERAS ; BARROSO PEREZ CONCEPCION ; CABANAS POY MARIA JOSE ; CONCEPCION BARROSO PEREZ ; EDUARD HIDALGO ALBERT ; GIMENEZ JUAN CARLOS JUAREZ ; HIDALGO ALBERT EDUARD ; JUAN CARLOS JUAREZ GIMENEZ ; JUAREZ GIMENEZ JUAN CARLOS ; MARIA JOSE CABANAS POY ; MARIA OLIVERAS ARENAS ; OLIVERAS ARENAS MARIA ; PEREZ CONCEPCION BARROSO ; POY MARIA JOSE CABANAS

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
AU2002355186 AA	20030217	LSPB	+	published / reissued	
AU2002355186 AA	20040408	LSLE	-MK6	APPLICATION LAPSED SECTION 142(2)(F)/REG. 8.3(3) - PCT APPLIC. NOT ENTERING NATIONAL PHASE	
ES1049731 UA	20020101	LSPB	+	published / reissued	
ES1049731 Y1	20020516	LSGT	+	granted / extensions (spc, cpc, pte)	
ES1049731 Y1	20020716	LSAS	+PC1K	TRANSFER OF UTILITY MODEL	PARTYTYPE : OWNER OWNER : CONCEPCION BARROSO PEREZ
ES1049731 Y1	20091221	LSLE	-FD1K	UTILITY MODEL	EFFECTIVE DATE : 20080728

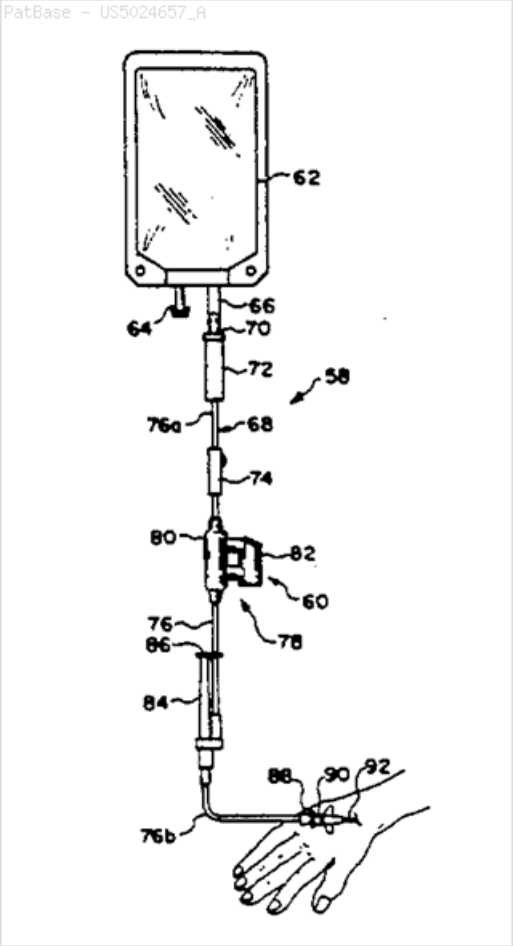
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ES1049731 Y1	20110726	PEXP		Calculated Patent Term Expiry	
ES1049731 YA	20020516	LSGT	+	granted / extensions (spc, cpc, pte)	
ES1049731 YA	20110726	PEXP		Calculated Patent Term Expiry	
WO03009666 A1	20030206	LSPB	+	published / reissued	
WO03009666 A1	20040603	LSWD	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : 8642
WO03009666 A1	20040908	LSNE	-122	EP: PCT APPLICATION NON-ENTRY IN EUROPEAN PHASE	REF COUNTRY CODE : WO
WO03009666 C1	20050303	LSRE	CR1	CORRECTION OF ENTRY IN SECTION I	TEXT : IN PCT GAZETTE 06/2003 ADD "DECLARATION UNDER RULE 4.17: - AS TO THE APPLICANT'S ENTITLEMENT TO CLAIM THE PRIORITY OF THE EARLIER APPLICATION (RULE 4.17(III)) FOR ALL DESIGNATIONS."
WO03009666 C1	20060508	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : JP
WO03009666 C1	20060508	LSWD	-WWW	WIPO INFORMATION: WITHDRAWN IN NATIONAL OFFICE	TEXT : JP

14) Family number: 6709021 (US5024657A)

Title: Drug delivery apparatus and method preventing local and systemic toxicity

Abstract: An apparatus is provided for the safe, passive reconstruction of a drug or other beneficial agent, without requiring manual reconstitution steps. The apparatus includes a housing, preferably having a receptacle "in-line" in an administration set and forming part of an intravenous delivery system, and a cartridge adapted for receiving a beneficial agent or beneficial agent and carrier. The cartridge is plugged into the receptacle to initiate reconstitution of the agent. The apparatus creates first and second delivery modes, in which the delivery rate of the agent to a patient is independent from and dependent upon, respectively, the fluid flow rate through the intravenous delivery system.

Classifications:
International (IPC 8-9): A61M39/00 A61M5/14 A61M5/168 (Advanced/Invention); A61M39/00 A61M5/168 (Advanced/Non-invention); A61M39/00 A61M5/14 A61M5/168 (Core/Invention)
International (IPC 1-7): A61M39/00 A61M5/14 A61M5/16
CPC: A61M5/1409
European: A61M5/14B2
US: 604/251 604/518 604/519 604/56 604/85



Family:

Publication number	Publication date	Application number	Application date
AU198652331 A1	19860701	AU19860052331	19851129
AU592546 B2	19900118	AU19860052331	19851129
CA1261701 A1	19890926	CA19850496681	19851202
DE3585530 D1	19920409	DE19853585530	19851129
EP0203186 A1	19861203	EP19860900399	19851129
EP0203186 A4	19871208	EP19860900399	19851129
EP0203186 B1	19920304	EP19860900399	19851129
EP0246715 A2	19871125	EP19870201289	19851129
EP0246715 A3	19880203	EP19870201289	19851129
JP5040589 B4	19930618	JP19860500130	19851129
JP62501270 T2	19870521	JP19850500130	19851129
NO863115 A	19861002	NO19860003115	19860801
NO863115 A0	19860801	NO19860003115	19860801
NO863115 L	19861002	NO19860003115	19860801
US5024657 A	19910618	US19900518272	19900504
WO8603416 A1	19860619	WO1985US02356	19851129
ZA8509248 A	19860730	ZA19850009248	19851203

Priority:

US19840721999 19841203 WO1985US02356 19851129 WO1985US02356 19851129
CA19850496681 19851202 US19900518272 19900504

Probable Assignee: BAXTER INT

Assignee(s): (std): BAXTER TRAVENOL LAB ; BAXTER INT

Assignee(s): BAXTER INT INC ; BAXTER INT INC A DELAWARE CORP ; BAXTER TRAVENOL LABORATORIES INC ; KOPP CLINTON V ; PEARSON STEVE ; NEEDHAM THOMAS E ; CHILAMKURTI RAO ; WRIGHT JEREMY C

Inventor(s): (std): CHILAMKURTI RAO ; NEEDHAM E ; WRIGHT C ; CHILAMKURTI N ; KOPP V ; KOPP CLINTON V ; CHILAMKURTI RAO N ; WRIGHT JEREMY C ; PEARSON STEVE ; NEEDHAM THOMAS E ; CLINTON V KOPP ; RAO N CHILAMKURTI ; JEREMY C WRIGHT ; THOMAS E NEEDHAM ; STEVE PEARSON

Agent(s): PETER MAXWELL AND ASSOCIATES; MAXWELLS PATENT AND TRADE MARK ATTORNEYS PTY LTD; SIM AND MCBURNEY

Designated states: AT AU BE CH DE FR GB IT JP LI LU NL NO SE

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
AU198652331 A1	19860701	LSPB	+	published / reissued	
AU592546 B2	19900118	LSGT	+	granted / extensions (spc, cpc, pte)	
AU592546 B2	20051129	PEXP		Calculated Patent Term Expiry	
DE3585530 D1	19930401	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE3585530 D1	20050908	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
EP0203186 A1	19861203	LSPB	+	published / reissued	
EP0203186 A1	19861203	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19860808
EP0203186 A4	19880127	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	EFFECTIVE DATE : 19871208
EP0203186 A4	19881228	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : BAXTER INTERNATIONAL INC.
EP0203186 A4	19900124	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 19891207
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EP0203186 B1	19930224	LSGT	+26N	NO OPPOSITION FILED	
EP0203186 B1	19950131	LSGT	+EAL	SE: EUROPEAN PATENT IN FORCE IN SWEDEN	REF COUNTRY CODE : EP TEXT : 86900399.6
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EP0203186 B1	20031121	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20031121 YEAR OF FEE PAYMENT : 19
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EP0203186 B1	20031126	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20031126 YEAR OF FEE PAYMENT : 19
EP0203186 B1	20031231	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM	COUNTRY OF REF DOCUMENT : DE

				NATIONAL OFFICE TO EPO]	PAYMENT DATE : 20031231 YEAR OF FEE PAYMENT : 19
EP0203186 B1	20040115	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20040115 YEAR OF FEE PAYMENT : 19
EP0203186 B1	20041129	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20041129
EP0203186 B1	20041130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20041130
EP0203186 B1	20041130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20041130
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EP0203186 B1	20050601	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20050601
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EP0203186 B1	20050705	LSLE	-EUG	SE: EUROPEAN PATENT HAS LAPSED	REF COUNTRY CODE : EP
EP0203186 B1	20050715	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL

EP0203186 B1	20050720	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20041129
EP0203186 B1	20050729	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20050729
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EP0203186 B1	20071231	LSLE	-BERE	BE: LAPSED	PARTYTYPE : OWNER REF COUNTRY CODE : EP OWNER : *BAXTER INTERNATIONAL INC. (A DELAWARE CORP.) EFFECTIVE DATE : 20041130
EP0203186 B1	20051129	PEXP		Calculated Patent Term Expiry	
EP0246715 A2	19871125	LSPB	+	published / reissued	
EP0246715 A2	19871125	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19870721
EP0246715 A3	19881228	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : BAXTER INTERNATIONAL INC.
EP0246715 A3	19900124	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 19891207
EP0246715 A3	19910918	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 19910319
JP5040589 B4	19930618	LSPB	+	published / reissued	
JP62501270 T2	19870521	LSPB	+	published / reissued	
NO863115 A	19861002	LSPB	+	published / reissued	
US5024657 A	19910618	LSGT	+	granted / extensions (spc, cpc, pte)	
US5024657 A	19910417	LSGT	PAT1	Patented Case	
US5024657 A	19910417	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5024657 A	19940928	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5024657 A	19981217	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5024657 A	20020923	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5024657 A	20100504	PEXP		Calculated Patent Term Expiry	
WO8603416 A1	19860619	LSPB	+	published / reissued	
WO8603416 A1	19860806	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1986900399 COUNTRY OF REF DOCUMENT : EP
WO8603416 A1	19861203	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1986900399 COUNTRY OF REF DOCUMENT : EP

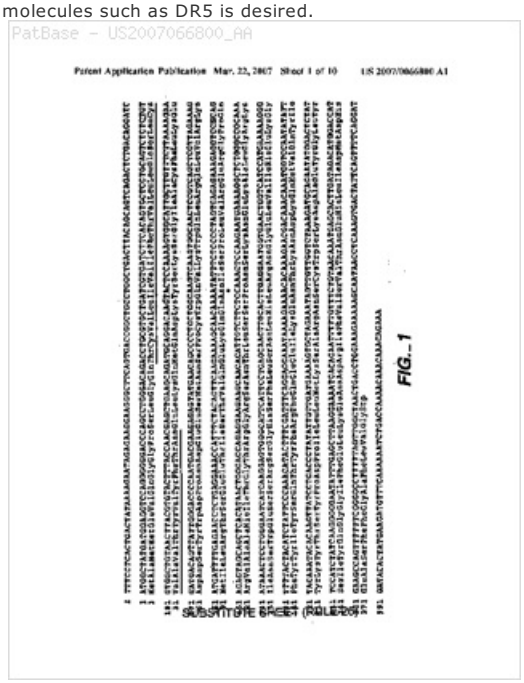
WO8603416 A1	19920304	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1986900399 COUNTRY OF REF DOCUMENT : EP
ZA8509248 A	19860730	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA8509248 A	20051202	PEXP		Calculated Patent Term Expiry	

15) Family number: 31348023 (US2007066800A)

Title: APO2L(TRAIL) RECEPTOR BINDING PEPTIDES AND USES THEREOF

Abstract: Peptides are provided that bind Apo-2L receptor molecules. These peptides can be used for example in methods where a modulation of the biological activities of Apo-2L and/or Apo-2L receptor molecules such as DR5 is desired.

Classifications:
International (IPC 8-9): A61K38/00 A61K38/04 A61P19/02 A61P25/00 A61P35/00 A61P37/02 A61P43/00 C07H21/04 C07K14/47 C07K14/525 C07K14/705 C07K14/74 C07K16/28 C07K7/04 C12N1/19 C12N1/21 C12N15/09 C12N15/10 C12N5/10 C12P21/02 C12P21/06 (Advanced/Invention);
A61K38/00 (Advanced/Non-invention)
International (IPC 1-7): A61K38/04 C07K14/705 C07K7/04 C12N15/10
CPC: C07K7/06 A61K38/00 C07K7/08 C07K14/47 C07K14/4747 C07K14/525 C07K14/70575
European: C07K14/47 C07K14/47A33 C07K14/525 C07K14/705Q C07K7/06 C07K7/08 K61K38/00 M07K207/00
US: 435/252.33 435/252.330S 435/254.2 435/254.200S 435/358 435/358S 435/69.1 435/69.100S 530/350 530/388.22 530/388.220S 536/23.5 536/23.500S



Family:

Publication number	Publication date	Application number	Application date
AT342274 E	20061115	AT20040760861T	20040429
AT423786 E	20090315	AT20040013626T	20040429
AU2004238794 AA	20041125	AU20040238794	20040429
CA2524456 AA	20051102	CA20042524456	20040429
DE602004002773 D1	20061123	DE2004600002773T	20040429
DE602004002773 T2	20070816	DE2004600002773T	20040429
DE602004019701 D1	20090409	DE2004600019701T	20040429
DK1622929 T3	20070219	DK20040760861T	20040429
DK1754713 T3	20090608	DK20040013626T	20040429
EP1622929 A2	20060208	EP20040760861	20040429
EP1622929 B1	20061011	EP20040760861	20040429
EP1754713 A1	20070221	EP20060013626	20040429
EP1754713 B1	20090225	EP20060013626	20040429
ES2274480 T3	20070516	ES20040760861T	20040429
ES2322182 T3	20090617	ES20060013626T	20040429
IL171733 A1	20101130	IL20040171733	20040429
JP2007530008 T2	20071101	JP20060532534T	20040429
US2007066800 AA	20070322	US20040556106	20040429
WO04101608 A2	20041125	WO2004US13576	20040429
WO04101608 A3	20041229	WO2004US13576	20040429

Priority:

US20030469436P 20030509 EP20040760861 20040429 US20040556106 20040429 WO2004US13576 20040429

Probable Assignee: GENENTECH INC

Assignee(s): (std): GENENTECH INC ; LI BING ; SIDHU SACHDEV S

Inventor(s): (std): BING LI ; LI BING ; SACHDEV S SIDHU ; SIDHU S ; SIDHU SACHDEV S

Inventor(s): SIDHU SACHDEV

Agent(s): GRIFFITH HACK; SMART AND BIGGAR; KIDDLE SIMON JOHN ET AL; REINHOLD COHN AND PARTNERS; GENENTECH INC

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
AT342274 E	20061115	LSGT	+	granted / extensions (spc, cpc, pte)	
AT342274 E	20070315	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	REF DOCUMENT NUMBER : 1622929 COUNTRY OF REF DOCUMENT : EP
AT342274 E	20240429	PEXP		Calculated Patent Term Expiry	
AT423786 E	20090315	LSGT	+	granted / extensions (spc, cpc, pte)	
AT423786 E	20091115	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	REF DOCUMENT NUMBER : 1754713 COUNTRY OF REF DOCUMENT : EP
AT423786 E	20240429	PEXP		Calculated Patent Term Expiry	
AU2004238794 AA	20041125	LSPB	+	published / reissued	
AU2004238794 AA	20111124	LSLE	-MK4	APPLICATION LAPSED SECTION 142(2)(D) - NO CONTINUATION FEE PAID FOR THE APPLICATION	
CA2524456 AA	20051102	LSPB	+	published / reissued	
CA2524456 AA	20090409	LSES	+EEER	EXAMINATION REQUEST	
CA2524456 AA	20130211	LSLE	-FZDE	DEAD	EFFECTIVE DATE : 20121119
DE602004002773 T2	20070816	LSGT	+	granted / extensions (spc, cpc, pte)	
DE602004002773 T2	20071129	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE602004002773 T2	20240429	PEXP		Calculated Patent Term Expiry	
DE602004019701 D1	20100325	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DK1622929 T3	20070219	LSGT	+	granted / extensions (spc, cpc, pte)	
DK1622929 T3	20240429	PEXP		Calculated Patent Term Expiry	
DK1754713 T3	20090608	LSGT	+	granted / extensions (spc, cpc, pte)	
DK1754713 T3	20240429	PEXP		Calculated Patent Term Expiry	
EP1622929 A2	20060208	LSPB	+	published / reissued	
EP1622929 A2	20060208	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20051123
EP1622929 B1	20061011	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1622929 B1	20061011	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20061011
EP1622929 B1	20061011	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20061011
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EP1622929 B1	20061031	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1622929 B1	20061115	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
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EP1622929 B1	20070328	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HU REF LEGAL EVENT CODE : AG4A REF DOCUMENT NUMBER : E001123 COUNTRY OF REF DOCUMENT : HU
EP1622929 B1	20070516	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2274480 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP1622929 B1	20071017	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20070712
EP1622929 B1	20081031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED

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EP1622929 B1	20090831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20070429
EP1622929 B1	20090831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20061011
EP1622929 B1	20110630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20110310 YEAR OF FEE PAYMENT : 8
EP1622929 B1	20110729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20110426 YEAR OF FEE PAYMENT : 8
EP1622929 B1	20110729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20110427 YEAR OF FEE PAYMENT : 8
EP1622929 B1	20110729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20110331 YEAR OF FEE PAYMENT : 8
EP1622929 B1	20110729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20110412 YEAR OF FEE PAYMENT : 8
EP1622929 B1	20110729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20110408 YEAR OF FEE PAYMENT : 8
EP1622929 B1	20110729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20110412 YEAR OF FEE PAYMENT : 8
EP1622929 B1	20110729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20110412 YEAR OF FEE PAYMENT : 8
EP1622929 B1	20110831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20110414 YEAR OF FEE PAYMENT : 8
EP1622929 B1	20110831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20110419 YEAR OF FEE PAYMENT : 8
EP1622929 B1	20110831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20110420 YEAR OF FEE PAYMENT : 8
EP1622929 B1	20110831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20110427 YEAR OF FEE PAYMENT : 8

EP1622929 B1	20110831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20110412 YEAR OF FEE PAYMENT : 8
EP1622929 B1	20110831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20110411 YEAR OF FEE PAYMENT : 8
EP1622929 B1	20110831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20110328 YEAR OF FEE PAYMENT : 8
EP1622929 B1	20110930	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20110422 YEAR OF FEE PAYMENT : 8
EP1622929 B1	20121031	LSLE	-BERE	BE: LAPSED	PARTYTYPE : OWNER REF COUNTRY CODE : EP OWNER : GENENTECH, INC. EFFECTIVE DATE : 20120430
EP1622929 B1	20121114	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : V1 EFFECTIVE DATE : 20121101
EP1622929 B1	20121119	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DK REF LEGAL EVENT CODE : EBP
EP1622929 B1	20121130	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP1622929 B1	20121204	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SE REF LEGAL EVENT CODE : EUG
EP1622929 B1	20121215	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MM01 REF DOCUMENT NUMBER : 342274 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20120429
EP1622929 B1	20121226	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20120429
EP1622929 B1	20130118	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20121228
EP1622929 B1	20130123	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : ML REF DOCUMENT NUMBER : 20060404492 COUNTRY OF REF DOCUMENT : GR EFFECTIVE DATE : 20121102
EP1622929 B1	20130131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120430
EP1622929 B1	20130131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120430
EP1622929 B1	20130131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO	COUNTRY OF REF DOCUMENT : AT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120429

				EPO]	
EP1622929 B1	20130131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120430
EP1622929 B1	20130131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120430
EP1622929 B1	20130131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120429
EP1622929 B1	20130228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120429
EP1622929 B1	20130228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120430
EP1622929 B1	20130228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20121102
EP1622929 B1	20130228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120430
EP1622929 B1	20130307	LSDW	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R119 REF DOCUMENT NUMBER : 602004002773 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20121101
EP1622929 B1	20130329	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20121101
EP1622929 B1	20130430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120429
EP1622929 B1	20130716	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20130716
EP1622929 B1	20130731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120430
EP1622929 B1	20130731	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : PL REF LEGAL EVENT CODE : LAPE
EP1622929 B1	20130830	LSLE	-PG25	LAPSED IN A CONTRACTING STATE	COUNTRY OF REF DOCUMENT : PL

				[ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120429
EP1622929 B1	20131031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120430
EP1622929 B1	20140228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120429
EP1622929 B1	20141031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20121101
EP1622929 B1	20240429	PEXP		Calculated Patent Term Expiry	
EP1754713 A1	20070221	LSPB	+	published / reissued	
EP1754713 A1	20070221	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20060717
EP1754713 A1	20071010	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20070907
EP1754713 A1	20071024	LSFE	+AKX	DESIGNATION FEES PAID	COUNTRY OF REF DOCUMENT : AT COUNTRY OF REF DOCUMENT : BE COUNTRY OF REF DOCUMENT : BG COUNTRY OF REF DOCUMENT : CH COUNTRY OF REF DOCUMENT : CY COUNTRY OF REF DOCUMENT : CZ COUNTRY OF REF DOCUMENT : DE COUNTRY OF REF DOCUMENT : DK COUNTRY OF REF DOCUMENT : EE COUNTRY OF REF DOCUMENT : ES COUNTRY OF REF DOCUMENT : FI COUNTRY OF REF DOCUMENT : FR COUNTRY OF REF DOCUMENT : GB COUNTRY OF REF DOCUMENT : GR COUNTRY OF REF DOCUMENT : HU COUNTRY OF REF DOCUMENT : IE COUNTRY OF REF DOCUMENT : IT COUNTRY OF REF DOCUMENT : LI COUNTRY OF REF DOCUMENT : LU COUNTRY OF REF DOCUMENT : MC COUNTRY OF REF DOCUMENT : NL COUNTRY OF REF DOCUMENT : PL COUNTRY OF REF DOCUMENT : PT COUNTRY OF REF DOCUMENT : RO COUNTRY OF REF DOCUMENT : SE COUNTRY OF REF DOCUMENT : SI COUNTRY OF REF DOCUMENT : SK COUNTRY OF REF DOCUMENT : TR
EP1754713 A1	20080910	LSRE	RTI1	TITLE (CORRECTION)	TEXT : APO2L (TRAIL) RECEPTOR BINDING PEPTIDES AND USES THEREOF

EP1754713 B1	20090225	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1754713 B1	20090225	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP1754713 B1	20090227	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1754713 B1	20090401	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP1754713 B1	20090612	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : EP REF DOCUMENT NUMBER : 20090401283 COUNTRY OF REF DOCUMENT : GR
EP1754713 B1	20090617	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2322182 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP1754713 B1	20090731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20090225
EP1754713 B1	20090731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20090225
EP1754713 B1	20090928	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HU REF LEGAL EVENT CODE : AG4A REF DOCUMENT NUMBER : E005696 COUNTRY OF REF DOCUMENT : HU
EP1754713 B1	20091030	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20090225
EP1754713 B1	20091030	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20090225
EP1754713 B1	20091030	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20090812
EP1754713 B1	20091130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA	COUNTRY OF REF DOCUMENT : RO NOTIFICATIONOFLAPSE : LAPSE

				POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20090225
EP1754713 B1	20091130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20090225
EP1754713 B1	20100129	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20090525
EP1754713 B1	20100203	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20091126
EP1754713 B1	20100430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20090430
EP1754713 B1	20110429	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20090429
EP1754713 B1	20110630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20110310 YEAR OF FEE PAYMENT : 8
EP1754713 B1	20110729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20110426 YEAR OF FEE PAYMENT : 8
EP1754713 B1	20110729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20110331 YEAR OF FEE PAYMENT : 8
EP1754713 B1	20110729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20110427 YEAR OF FEE PAYMENT : 8
EP1754713 B1	20110729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20110408 YEAR OF FEE PAYMENT : 8
EP1754713 B1	20110729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20110412 YEAR OF FEE PAYMENT : 8
EP1754713 B1	20110729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20110412 YEAR OF FEE PAYMENT : 8
EP1754713 B1	20110729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20110412 YEAR OF FEE PAYMENT : 8
EP1754713 B1	20110831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20110419 YEAR OF FEE PAYMENT : 8

EP1754713 B1	20110831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20110420 YEAR OF FEE PAYMENT : 8
EP1754713 B1	20110831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20110414 YEAR OF FEE PAYMENT : 8
EP1754713 B1	20110831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20110427 YEAR OF FEE PAYMENT : 8
EP1754713 B1	20110831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20110328 YEAR OF FEE PAYMENT : 8
EP1754713 B1	20110831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20110411 YEAR OF FEE PAYMENT : 8
EP1754713 B1	20110831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20110412 YEAR OF FEE PAYMENT : 8
EP1754713 B1	20110930	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20090225
EP1754713 B1	20110930	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20110422 YEAR OF FEE PAYMENT : 8
EP1754713 B1	20121031	LSLE	-BERE	BE: LAPSED	PARTYTYPE : OWNER REF COUNTRY CODE : EP OWNER : GENENTECH, INC. EFFECTIVE DATE : 20120430
EP1754713 B1	20121114	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : V1 EFFECTIVE DATE : 20121101
EP1754713 B1	20121119	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DK REF LEGAL EVENT CODE : EBP
EP1754713 B1	20121130	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP1754713 B1	20121204	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SE REF LEGAL EVENT CODE : EUG
EP1754713 B1	20121215	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MM01 REF DOCUMENT NUMBER : 423786 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20120429
EP1754713 B1	20121226	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20120429
EP1754713 B1	20130118	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20121228
EP1754713 B1	20130123	LSLE	REG	REFERENCE TO A	REF COUNTRY CODE : GR

				NATIONAL CODE	REF LEGAL EVENT CODE : ML REF DOCUMENT NUMBER : 20090401283 COUNTRY OF REF DOCUMENT : GR EFFECTIVE DATE : 20121102
EP1754713 B1	20130131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120429
EP1754713 B1	20130131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120430
EP1754713 B1	20130131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120430
EP1754713 B1	20130131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120429
EP1754713 B1	20130131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120430
EP1754713 B1	20130131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120430
EP1754713 B1	20130221	LSDW	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R119 REF DOCUMENT NUMBER : 602004019701 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20121101
EP1754713 B1	20130228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120429
EP1754713 B1	20130228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120430
EP1754713 B1	20130228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120430
EP1754713 B1	20130228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20121102
EP1754713 B1	20130329	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM	COUNTRY OF REF DOCUMENT : NL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES

				NATIONAL OFFICE TO EPO]	LAPSED DATE : 20121101
EP1754713 B1	20130430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120429
EP1754713 B1	20130716	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20130716
EP1754713 B1	20130731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120430
EP1754713 B1	20130731	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : PL REF LEGAL EVENT CODE : LAPE
EP1754713 B1	20130830	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120429
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EP1754713 B1	20141031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20121101
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ES2274480 T3	20240429	PEXP		Calculated Patent Term Expiry	
ES2322182 T3	20090617	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2322182 T3	20240429	PEXP		Calculated Patent Term Expiry	
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US2007066800 AA	20070322	LSPB	+	published / reissued	
US2007066800 AA	20051108	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GENENTECH, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:SIDHU, SACHDEV

					S.; LI, BING; REEL/FRAME:017909/0500 EFFECTIVE DATE : 20051019
US2007066800 AA	20110120	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
WO04101608 A2	20041125	LSPB	+	published / reissued	
WO04101608 A3	20051102	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2524456 COUNTRY OF REF DOCUMENT : CA
WO04101608 A3	20051102	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 171733 COUNTRY OF REF DOCUMENT : IL
WO04101608 A3	20051108	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2004238794 COUNTRY OF REF DOCUMENT : AU
WO04101608 A3	20051108	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 10556106 COUNTRY OF REF DOCUMENT : US
WO04101608 A3	20051108	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2007066800 COUNTRY OF REF DOCUMENT : US
WO04101608 A3	20051109	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2006532534 COUNTRY OF REF DOCUMENT : JP
WO04101608 A3	20051109	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2004760861 COUNTRY OF REF DOCUMENT : EP
WO04101608 A3	20051201	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2004238794 COUNTRY OF REF DOCUMENT : AU DATE OF REF DOCUMENT : 20040429 KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO04101608 A3	20051201	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2004238794 COUNTRY OF REF DOCUMENT : AU
WO04101608 A3	20060208	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2004760861 COUNTRY OF REF DOCUMENT : EP
WO04101608 A3	20061011	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2004760861 COUNTRY OF REF DOCUMENT : EP
WO04101608 A3	20070322	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 10556106 COUNTRY OF REF DOCUMENT : US

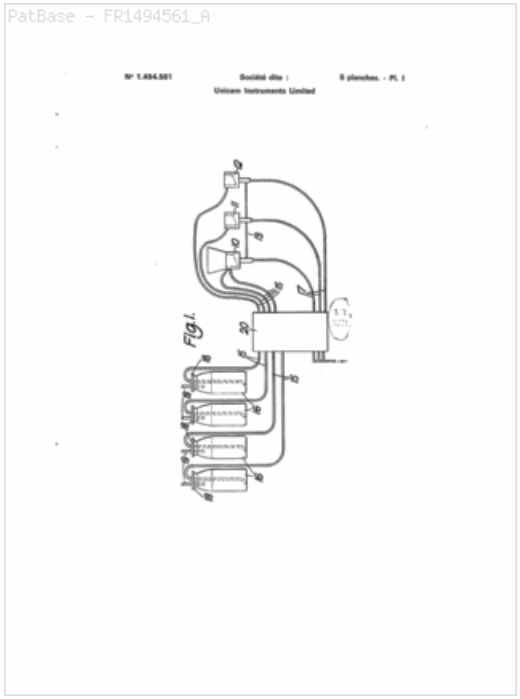
16) Family number: 22694023 (FR1494561A)

Title: PROCEDE ET APPAREIL POUR L'ANALYSE D'UN **LIQUIDE** METHOD AND APPARATUS FOR ANALYSIS OF A **LIQUID** (Machine translation)

Abstract: Source: FR1494561A [FR] [Source: Claim 1] vis 64 et 65 au moyen desquelles ces plaques de roulement 58, 59 sont attachees en Ieur milieu aux arbres 60 et 61. Entre ces plaques de roulement et les rouleaux passent deux series de tuyaux flexibles 15 et 17, chaque tuyau etant retenu au moyen d'un collier 64 ou il entre par un trou dans la plaque et en ressort par une ouverture dans Ie support 65, attache a la plaque. La plaque de roulement 58 est sollicitee vers le bas par des moyens elastiques indiques eehematiquez ment en 75 dans la figure 8 et la plaque 59 est sollicitee vers le haut par des moyens analogues indiques en 76. Des tiges 66 et 67 sont disposees dans les positions representees dans la figure 8 et reliees entre elles au moyen d'une tringlerie indiquee par la ligue en pointilles 68 et sont reliees en outre par une liaison supplementaire indiquee par Ia ligne en pointilles 59 a une poignee exterieure 70. Le fonctionnement s'effectue de la maniere suivante Dans la position representee dans la figure 8 la tige 66 exerce une force dirigee vers le haut a l'encontre de la force dirigee vers le bas du ressort 75 provoquant le deplacement de la plaque 58 et par consequent des tuyaux 15 dans une position qui les met hors de contact effectif avec les rouleaux 57, obturant en meme temps, d'une facon efficace les tayaux 15 a des points disposes entre la tige 66 et la plaque 58. Lorsque la tige 66 est engagee ainsi qu'on l'a represente, la tige 67 est degagee des tuyaux 17 et le ressort 76 agit de facon a forcer la plaque 59 vers Ie haut de facon a ce que les tuyaux 17 soient serres entre cette derniere et au moins deux des rouleaux 57. Si on fait tourner la couronne a rouleaux 51 au moyen de la poignee 54 dans la direction de la fleche A, les rouleaux 57 se deplacent progressivement le long des tuyaux 15 produisant une action de pompage peristaltique dans la direction indiquee par les fleches, c'est-a-dire a partir des garnitures interieures de decharge 42 jusqu'a la tubulure de sortie. Lorsque l'on fait passer la poignee 70 sur l'autre de ses deux positions, la tige 67 est deplacee vers le bas a l'encontre du ressort 76 associe a la plaque 59 de facon a rompre le contact des tuyaux 17 avec les rouleaux 57 et a obturer ces tuyaux dans la zone situee entre la tige 67 et la plaque 59. La tige 66 descend en se degageant des tuyaux 15 et la plaque 58 est refoulee vers le bas de sorte que les tuyaux 15 sont cette fois comprimes entre cette plaque et deux des rouleaux 57. La rotation de la poignee 54. dans direction A produit une action de pompage peristaltique le long des tuyaux 15 dans la direction indi quee par les fleches, c'est-a-dire a partir des flacons de reactifs vers les garnitures d'introduction de reactifs 38. La fonction des pivots cites ci-dessus est de permettre aux deux plaques de roulement de maintenir leurs jeux respectifs de tuyaux en une position optimale pour le pompage entre les plaques et les rouleaux evitant la necessite d'une operation de reglage precis pour chaque pompe. On notera, qu'a l'aide du procede et du dispositif decrits ci-dessus le dosage est partiellement mecanise et qu'un certain nombre de dosages separes sont effectues simultanement. Une economie considerable est ainsi obtenue en ce qui concerne le temps du personnel qualifie et specialise et les depenses de materiaux. On obtient une distribution de **liquides** porportionnelle, relativement precise, susceptible d'etre predeterminee, ce qui permet d'obtenir une reduction du facteur d'incertitude. En outre, l'utilisation de tubes a essais est completement eliminee. On peut aussi construire cet appareil de maniere a ce que les contacts indesirables, entre les **liquides** utilises et les parties metalliques exposees a la corrosion, par exemple, les joints metalliques, soient completement elimines. RESU 10 Procede pour l'analyse simultanee d'un **liquide** pour la recherche d'un certain nombre de constituants differents, caracterise en ce qu'on prepare une pluralite d'echantillons du **liquide**, on ajoute a un echantillon une premiere solution ou des solutions de reactifs, on ajoute a un autre echantillon une autre solution ou des solutions de reactifs et ainsi de suite pour d'autres echantillons, les reactifs dans chaque cas etant appropries a l'analyse particuliere et le volume de la solution ou des solutions de reactif, selon le cas, pour chacun des echantillons etant en un rapport connu au volume de l'echantillon associe et la nature des solutions de reactifs etant telle que dans chaque cas, dans une courte duree de temps predeterminee apres ladite addition, une reaction a lieu de facon a fournir une indication d'une propriete ou d'un constituant particulier dans le **liquide**; 20 Procede selon 10 dans lequel les echantillons sont d'un volume egal et dans lequel les reactifs sont tels que le volume exige de reactif pour chaque echantillon est egal a ou est en rapport avec le simple volume de l'echantillon; 3 Appareil pour l'analyse simultanee d'un **liquide** pour la recherche d'un certain nombre de constituants differents, comportant un certain nombre de chambres renfermant des echantillons du **liquide** a analyser, des moyens pour l'introduction de volumes predetermines de **liquide** dans chacune des chambres a partir d'une arrivee commune, des moyens pour delivrer simultanement des volumes predetermines de reactifs a partir de recipients a reactifs aux diverses chambres et des moyens pour la vidange subsequente simultanee des chambres; 4" Un tel appareil remarquable, en outre, par les points suivants pris separement ou en combinaisons; a. Les chambres sont disposees en lignes avec au moins les parois avant et les parois arriere, transparentes, et des moyens d'illumination sont amenages derriere les parois arriere; b. Les chambres sont formees dans un bloc de materiau transparent; c. Le moyen d'introduction de volumes predetermines du **liquide** dans chaque chambre comporte une conduite de communication desservant les fonds de toutes les chambres; d. Des moyens de pompage sont prevus pour debiter des quantites predeterminees de reactifs simultanement vers toutes les chambres; e. Le moyen de pompage delivre les reactifs aux arrivees aux chambres qui sont disposees et orientees de facon a ce que le courant de reactif a travers l'arrivee agite et melange les contenus de la chambre; f. Des moyens de pompage sont amenages pour la vidange des chambres; g. Le moyen de pompage comprend un systeme de pompage peristaltique; h. Il est prevu une seule pompe peristaltique comportant des elements actifs disposes de facon a intervenir alternativement sur des tubes flexibles d'alimentation en reactif des chambres ou sur des tubes flexibles de vidange desdites chambres; i. Des moyens - sont prevus pour deplacer les tubes flexibles de facon a les amener en engageant avec les elements actifs de la pompe; j. Les elements actifs de la pompe sont montes de facon a pouvoir etre deplaces en bloc vers les tubes d'admission et eloignes des tubes d'evacuation et inversement; k. Des moyens de pincement ajustables sont prevus pour pincer et ainsi fermer les tubes flexibles qui ne sont pas engages par les elements actifs de la pompe. **Machine translation:** [Source: Claim 1] screws 64 and 65 through which the bearing plates 58, 59 have concentrated in middle IOR trees 60 and 61. Between the bearing plates and rollers spend two series of hoses 15 and 17, each pipe being retained by means of a collar 64 or it enters a hole in the plate and exits through an opening in bracket 65 Ie, attaches to the plate. The bearing plate 58 is pushed down by elastic means indicated eehematiquez ment by 75 in Figure 8 and the plate 59 is urged upward by INDICATED similar means 76. Rods 66 and 67 are arranged in positions represented in Figure 8 and interconnected by means of a linkage indicated by the dotted league and 68 are connected further by an additional bond Ia indicated by dashed line 59 has an external **handle** 70. the operation is carried out in the following manner the position represented in Figure 8, the rod 66 exerts upward force directed against a force directed down the spring 75 causing the displacement of the plate 58 and therefore in a pipe 15 position that puts them out of actual contact with the rollers 57, closing at the same time, an effective way the tayaux 15 a willing points between the rod 66 and the plate 58. When the rod 66 is engaged so that the has represented the rod 67 is degagee pipes 17 and the spring 76 is a way to force the plate 59 Ie top of a way that the pipes are 17 greenhouses between the latter and at least two rollers 57. If turns the crown rollers 51 by the **handle** 54 in the direction of the arrow a, the rollers 57 move progressively along the pipe 15 producing peristaltic pumping action in the direction indicated by the arrows, that is to say from the inland trim discharge 42 until the outlet pipe. When passing the **handle** 70 on the other of its two positions, the pin 67 is moved downward against a spring 76 associated to the plate 59 of a way to break contact with the pipe 17 rolls 57 and block the pipes in the area between the rod 67 and the plate 59. the rod 66 drops emerging from the pipes 15 and the plate 58 is pushed downwards so that the pipes 15 are this time between the tablets plate and two rollers 57. the rotation of the **handle** 54. a product management in a peristaltic pumping action along the pipes 15 in the direction indi quee by the arrows, that is to say from bottles of reagents to the introduction of reagents linings 38. the function of pivots cited above is to enable the two bearing plates to maintain their respective sets of pipes in an optimal position for pumping between the plates and rollers avoiding the necessity of an operation for precise adjustment for each pump. Note, that using the method and apparatus described above the dosage is partially mechanized, and a number of separated dosages shall be effected simultaneously. A considerable economy is obtained regarding the time of the qualified and specialized personnel and materials of expenses. One obtains a distribution porportionnelle **liquid**, relatively precise, may be predetermined which allows a reduction of the uncertainty factor. In addition, the use of test tubes is completely eliminated. We can also build this way a device that unwanted contact between the **liquid** and used metal parts exposed to corrosion, for example, metal seals, are completely eliminated.RESU 10 Process for the simultaneous analysis of a **liquid** to research a number of different components, characterizes in that prepare a plurality of samples of the **liquid** is added to a sample solution or a first reagents solutions were added to another sample or an alternative reagents solutions and so on for

other samples, the reagents in each case being suitable for the particular analysis and the volume of the solution or solutions of reactive, as applicable, for each of the samples being in a known relationship to the volume of the sample associates and nature of reactive solutions being such that in each case, in a short duration of time after PREDETERMINED said addition, a reaction to instead of a way to provide an indication of a property or of a particular constituent in the **liquid**; 20 Method according to 10 where the samples are of equal volume and in which the reagents are such that the volume of reagent required for each sample is equal to or is associated with the sheer volume of the sample; 3 Device for the simultaneous analysis of a **liquid** to research a number of different components, including a number of rooms containing samples of the **liquid** to be analyzed, means for the introduction of **liquid** in each of predetermined volumes rooms from a common arrival, means for simultaneously delivering predetermined volumes of reagents from containers is reactive to the various chambers and means for subsequent simultaneous emptying the chambers; 4 "Such a remarkable device, moreover, by the following points taken separately or in combination;. A The rooms are arranged in rows with at least the front walls and rear walls, transparent, and illumination means are behind feeders the rear walls;. b the rooms are formed from a transparent material block;. c Average predetermined volumes of introduction of the **liquid** in each room includes a communication pipe serving the funds of all rooms;. d means of pumping are provided for debit on the predetermined amounts of reagents simultaneously to all rooms;. e pumping Average issued the reagents arrivals to the rooms that are arranged centric focus of a way that the reactive current through the arrival and stirred mix the contents of the room. f pumping means are feeders for emptying the chambers; g the pumping means comprises a peristaltic pumping system. h. It is expected a single peristaltic pump having active way of Elements willing to intervene alternately on flexible tubes supply reactive chambers or on flexible drain tubes of said chambers; i. Resources - are planned to move the flexible tubes of the way to bring engaging with assets Elements of the pump; j. Active Elements of the pump are mounted in a way to be displaced to block the intake pipes and tubes of distant evacuation and vice versa; k. Adjustable clamping means are provided for pinching and thus close the flexible tubes that are not incurred by assets Elements of the pump.

Classifications:
International (IPC 8-9): F04B43/12 G01N35/02 (Advanced/Invention); F04B43/12 G01N35/02 (Core/Invention)
International (IPC 1-7): G01N33/50
CPC: F04B43/1223 F04B43/1284 F04B43/1292 G01N35/02
European: F04B43/12D F04B43/12G10 F04B43/12G8 G01N35/02



Family:

Publication number	Publication date	Application number	Application date
FR1494561 A	19670908	FR19660077728	19660927

Priority:
FR19660077728 19660927

Probable Assignee: UNICAM INSTR LTD
Assignee(s): (std): UNICAM INSTR LTD
Assignee(s): UNICAM INSTRUMENTS LIMITED ; UNICAM INSTRUMENTS LTD

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
FR1494561 A	19670908	LSGT	+	granted / extensions (spc, cpc, pte)	
FR1494561 A	19860927	PEXP		Calculated Patent Term Expiry	

17) Family number: 23434023 (EP0253554A2)

Title: Controlled release drug-containing fibers.

Abstract: Orally administerable drug-containing fibers for controlling drug release in the gastrointestinal tract of a mammal.
Classifications:
International (IPC 8-9): A61J3/07 A61K47/30 A61K9/00 A61K9/22 A61K9/70 (Advanced/Invention);
A61J3/07 A61K9/22 A61K9/70 (Advanced/Non-invention);
A61J3/07 A61K9/00 A61K9/22 A61K9/70 (Core/Invention)
International (IPC 1-7): A61J3/07 A61K31/74 A61K47/00 A61K47/30 A61K9/00 A61K9/14 A61K9/22 A61K9/32 A61K9/70
CPC: A61K9/0092
European: A61K9/00K4 A61K9/00Z4

Family:

Publication number	Publication date	Application number	Application date
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Priority:
US19860885975 19860715 CA19870541904 19870713

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Designated states: AT BE CH DE ES FR GB GR IT LI LU NL SE

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
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EP0253554 A2	19880120	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19870715
EP0253554 A3	19900816	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 19900628
EP0253554 A3	19910710	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 19910109
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FI873114 A	19881223	LSGT	+FG	PATENT GRANTED	PARTYTYPE : OWNER OWNER : FOSECO INTERNATIONAL LIMITED
FI873114 A	19931009	LSLE	-FD	APPLICATION LAPSED	
FI873114 A	19961016	LSPB	BB	PUBLICATION OF EXAMINED APPLICATION	
FI873114 A	20040831	LSLE	-FD	APPLICATION LAPSED	PARTYTYPE : OWNER OWNER : PFIZER INC.
HU45195 A2	19880628	LSPB	+	published / reissued	
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KR900000512 B1	19891223	LSPB	G160	DECISION TO PUBLISH PATENT APPLICATION	
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KR900000512 B1	19900714	LSGT	+GRNT	WRITTEN DECISION TO GRANT	
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PT85315 B	19900430	LSGT	+	granted / extensions (spc, cpc, pte)	
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YU46903 B	19940624	LSPB	+	published / reissued	

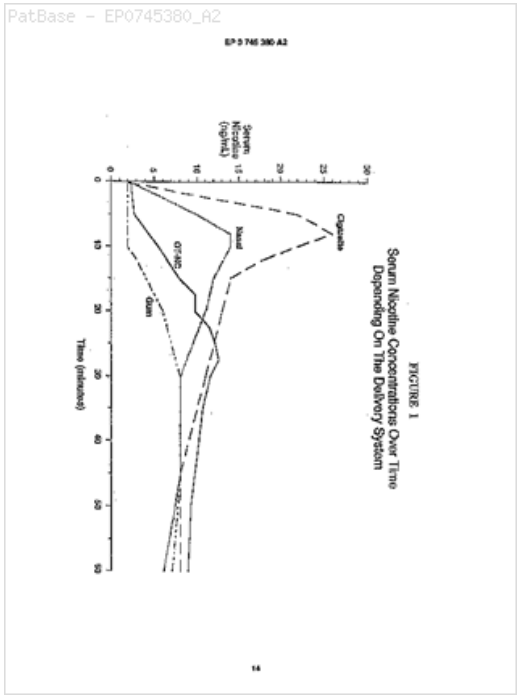
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ZA8705125 A	20070713	PEXP		Calculated Patent Term Expiry

18) Family number: 33544027 (EP0745380A2)

Title: Tobacco substitute

Abstract: The present invention relates generally to a ciagrette substitute for administering a dose of nicotine. More specifically, the present invention is directed to a nicotine-containing dosage-form comprising a holder member which may be used as part of an effective smoking cessation program or in situations where smoking is undesirable or not permitted. The dosage form is configured as a dosage form having a nicotine-containing composition attached to a holder member. Nicotine is released from the dosage form and absorbed through the intra-oral mucosal surfaces as the nicotine-containing composition releases nicotine within a user's mouth. The holder member facilitates insertion and removal of the dosage form into and out of a user's mouth. The user can selectively insert and remove the dosage form as desired to selectively control the release of nicotine. In addition, the user can insert and remove the dosage form in a manner which meets the user's psychological need or desire for ritualistic oral stimulation similar to cigarette smoking.

Classifications:
International (IPC 8-9): A23G3/00 A23G3/56 A24B15/16 A24F47/00 A61J7/00 A61K31/465 A61K9/00 A61P1/04 A61P25/08 A61P25/16 A61P25/28 A61P25/34 (Advanced/Invention);
A23G3/00 A23G3/34 A24B15/00 A24F47/00 A61J7/00 A61K31/465 A61K9/00 A61P1/00 A61P25/00 (Core/Invention)
International (IPC 1-7): A61K31/465 A61K9/00 A61P1/04 A61P25/08 A61P25/16 A61P25/28 A61P25/34
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Family:

Publication number	Publication date	Application number	Application date
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ES2247598 T3	20060301	ES19960303285T	19960510

Priority:

US19950439127 19950511

Probable Assignee: UNIVERSITY OF UTAH RESEARCH FOUNDATION

Assignee(s): (std)**:** UNIV UTAH RES FOUND

Assignee(s): UNIVERSITY OF UTAH RESEARCH FOUNDATION ; UNIVERSITY OF UTAH RESEARCH FOUNDATION SALT LAKE C ; UNIVERSITY OF UTAH RESEARCH FOUNDATION SALT LAKE CITY ; UTAH RESEARCH FOUNDATION UNIV ; OF UTAH RESEARCH FOUNDATION UNIV

Inventor(s): (std)**:** HAGUE BRIAN ; STANLEY THEODORE H

Designated states: AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
AT300937 E	20050815	LSGT	+	granted / extensions (spc, cpc, pte)	
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19) Family number: 30111028 (US2002198259A)

Title: NOVEL FATTY ACID ANALOGUES FOR THE TREATMENT AND PREVENTION OF DISEASES CAUSED BY THE PATHOLOGICAL PROLIFERATION OF SMOOTH MUSCLE CELLS

Abstract: The present invention relates to novel fatty acid analogues of the general formula (I): CH3-[CH2]m-[xi-CH2]n-COOR, wherein n is an integer from 1 to 12, and wherein m is an integer from 0 to 23, and wherein i is an odd number which indicates the position relative to COOR, and wherein Xi independent of each other are selected from the group comprising O, S, SO, SO2, Se and CH2, and wherein R represents hydrogen or C1-C4 alkl, with the proviso that at least one of the Xi is not CH2, or a salt, prodrug or complex thereof, for the preparation of a pharmaceutical composition for the treatment and/or prevention of primary and/or secondary stenosis. Further the present invention relates to the use of said compounds for the prevention and/or treatment of a disease caused by procedural vascular trauma and/or pathological proliferation of smooth muscle cells, and/or an increased level of plasma homocysteine.

Classifications:

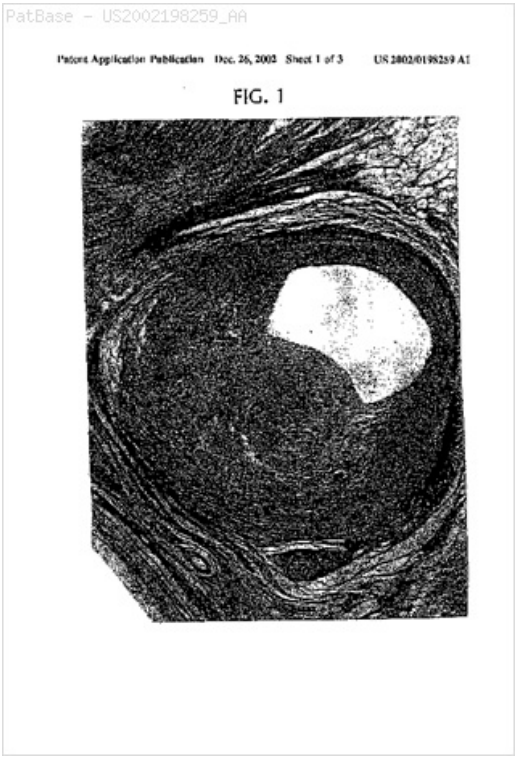
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A23D9/007 A23L1/29 A23L1/307 A61K31/20 A61P3/06 A61P9/10 (Advanced/Non-invention);
A23D9/00 A61K31/185 (Core/Invention);
A61P3/00 A61P9/00 (Core/Non-invention);
A61K (Subclass/Invention)

International (IPC 1-7): A01N37/02 A01N37/24 A01N43/08 A01N47/38 A23D9/007 A23L1/29 A23L1/30 A23L1/307 A61K31/19 A61K31/20 A61K31/215 A61K31/22 A61K31/23 A61K31/255 A61K31/265 A61P1/16 A61P3/02 A61P3/04 A61P3/06 A61P3/08 A61P3/10 A61P43/00 A61P5/50 A61P9/00 A61P9/08 A61P9/10 A61P9/12 C07C323/51 C07C323/52 C07C327/06 C07C327/06 C07C391/00 C07C391/00 C07C53/00

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European: A23L1/30C A23L1/30C2 A61K31/19 A61K31/20 A61K31/215 A61K31/22 A61K31/23 A61K31/255 A61K31/28

US: 514/492 514/546 514/550 514/552 514/552S 514/557 514/558 514/558S 514/866 554/213 554/218 554/77 554/85 554/88 560/147 560/149 560/155 560/179 562/899



Family:

Publication number	Publication date	Application number	Application date
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AT247464 E	20030915	AT19990933292T	19990423
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AT334666 E	20060815	AT19990024388T	19990423
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Priority:

WO1998NO00143 19980508 EP19990933292 19990423 WO1999NO00136 19990423
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Probable Assignee: THIA MEDICA AS

Assignee(s): (std): LIFE SCIENCE NUTRITION AS ; ROLF BERGE ; THIA MEDICA ; THIA MEDICA AS ; THIA MEDICA BERGEN AS ; BERGE ROLF ; THIA MEDICA AS BERGEN ; THIA MEDICA A S

Assignee(s): THIA MEDICA C O TERJE MOE ; BERGEN TEKNOLOGIOVERFOERING AS ; THIA MEDICA KALFARVEIEN AS ;

THIA MEDICA TERJE MOE KALFARVEIEN AS ; THIA MEDICA TERJE MOC KALFARVEIEN AS

Inventor(s): (std): BERGE ROLF ; ROLF BERGE ; BERGE ROLF KRISTIAN ; BERGE ROL F

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; CHINA PATENT AGENT HK LTD; REED IP LAW GROUP

Designated states: AE AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CU CY CZ DE DK EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT UA UG US UZ VN YU ZA ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT245416 E	20030815	LSGT	+	granted / extensions (spc, cpc, pte)	
AT245416 E	20040315	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	REF DOCUMENT NUMBER : 1075259 COUNTRY OF REF DOCUMENT : EP
AT245416 E	20120115	LSLE	-REN	CEASED DUE TO NON-PAYMENT OF THE ANNUAL FEE	
AT245416 E	20190423	PEXP		Calculated Patent Term Expiry	
AT247464 E	20030915	LSGT	+	granted / extensions (spc, cpc, pte)	
AT247464 E	20040715	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	REF DOCUMENT NUMBER : 1075258 COUNTRY OF REF DOCUMENT : EP
AT247464 E	20120115	LSLE	-REN	CEASED DUE TO NON-PAYMENT OF THE ANNUAL FEE	
AT247464 E	20190423	PEXP		Calculated Patent Term Expiry	
AT306916 E	20051115	LSGT	+	granted / extensions (spc, cpc, pte)	
AT306916 E	20060515	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	REF DOCUMENT NUMBER : 1075260 COUNTRY OF REF DOCUMENT : EP
AT306916 E	20110215	LSLE	-REN	CEASED DUE TO NON-PAYMENT OF THE ANNUAL FEE	
AT306916 E	20190507	PEXP		Calculated Patent Term Expiry	
AT334666 E	20060815	LSGT	+	granted / extensions (spc, cpc, pte)	
AT334666 E	20070215	LSLE	-RER	CEASED AS TO PARAGRAPH 5 LIT. 3 LAW INTRODUCING PATENT TREATIES	
AT334666 E	20190423	PEXP		Calculated Patent Term Expiry	
AT336239 E	20060915	LSGT	+	granted / extensions (spc, cpc, pte)	
AT336239 E	20070215	LSLE	-RER	CEASED AS TO PARAGRAPH 5 LIT. 3 LAW INTRODUCING PATENT TREATIES	
AT336239 E	20190423	PEXP		Calculated Patent Term Expiry	
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AU199872403 A1	20000323	LSLE	-MK6	APPLICATION LAPSED SECTION 142(2) (F)/REG. 8.3(3) - PCT APPLIC. NOT ENTERING NATIONAL PHASE	
AU199949366 A1	19991129	LSPB	+	published / reissued	
AU199949367 A1	19991129	LSPB	+	published / reissued	

AU199954517 A1	19991129	LSPB	+	published / reissued	
AU761355 B2	20030605	LSGT	+	granted / extensions (spc, cpc, pte)	
AU761355 B2	20031002	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU761355 B2	20190507	PEXP		Calculated Patent Term Expiry	
AU762790 B2	20030703	LSGT	+	granted / extensions (spc, cpc, pte)	
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BRPI9910296 A	20080408	LSES	B07A	TECHNICAL EXAMINATION (OPINION): PUBLICATION OF TECHNICAL EXAMINATION (OPINION)	
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BRPI9910296 A	20101013	LSAL	B12B	APPEAL: APPEAL AGAINST REFUSAL	
BRPI9910296 A	20130416	LSFE	-B08F	APPLICATION FEES: DISMISSAL - ARTICLE 86 OF INDUSTRIAL PROPERTY LAW	TEXT : REFERENTE AO NAO RECOLHIMENTO DA 12A, 13A E 14A ANUIDADES.
BRPI9910296 A	20130827	LSLE	-B08K	LAPSE AS NO EVIDENCE OF PAYMENT OF THE ANNUAL FEE HAS BEEN FURNISHED TO INPI (ACC. ART. 87)	TEXT : REFERENTE AO DESPACHO 8.6 PUBLICADO NA RPI 2206 DE 16/04/2013.
BRPI9910297 A	20020102	LSPB	+	published / reissued	
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BRPI9910297 A	20090317	LSES	B07A	TECHNICAL EXAMINATION (OPINION): PUBLICATION OF TECHNICAL EXAMINATION (OPINION)	
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CA2331393 AA	19991118	LSPB	+	published / reissued	
CA2331393 AA	20021210	LSES	+EEER	EXAMINATION REQUEST	
CA2331393 C	20090811	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2331393 C	20160620	LSLE	-MKLA	LAPSED	EFFECTIVE DATE : 20160509
CA2331393 C	20190507	PEXP		Calculated Patent Term Expiry	

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CN1300211 A	20010620	LSPB	+C06	PUBLICATION	
CN1300212 A	20010620	LSPB	+	published / reissued	
CN1300212 A	20010620	LSPB	+C06	PUBLICATION	
CN1302204 A	20010704	LSPB	+	published / reissued	
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DE69932864 D1	20070719	LSWD	-8332	NO LEGAL EFFECT FOR DE	
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DK1075259 T3	20031103	LSGT	+	granted / extensions (spc, cpc, pte)	
DK1075259 T3	20190423	PEXP		Calculated Patent Term Expiry	
DK1075260 T3	20060206	LSGT	+	granted / extensions (spc, cpc, pte)	
DK1075260 T3	20190507	PEXP		Calculated Patent Term Expiry	
EP1075258 A1	20010214	LSPB	+	published / reissued	
EP1075258 A1	20010214	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20001208
EP1075258 A1	20020619	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20020502
EP1075258 A1	20030108	LSRE	RTI1	TITLE (CORRECTION)	TEXT : NOVEL FATTY ANALOGUES FOR THE TREATMENT OF OBESITY
EP1075258 B1	20030820	LSGT	+	granted / extensions (spc, cpc, pte)	
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EP1075258 B1	20030829	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1075258 B1	20030917	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
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EP1075258 B1	20160425	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 18
EP1075258 B1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20160427 YEAR OF FEE PAYMENT : 18
EP1075258 B1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20160427 YEAR OF FEE PAYMENT : 18
EP1075258 B1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20160425 YEAR OF FEE PAYMENT : 18
EP1075258 B1	20171103	LSDW	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R119 REF DOCUMENT NUMBER : 69910559 COUNTRY OF REF DOCUMENT : DE
EP1075258 B1	20171227	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20170423
EP1075258 B1	20180126	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20171229
EP1075258 B1	20180131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE	COUNTRY OF REF DOCUMENT : DE

				[ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20171103
EP1075258 B1	20180131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20170502
EP1075258 B1	20180228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20170423
EP1075258 B1	20190423	PEXP		Calculated Patent Term Expiry	
EP1075259 A1	20010214	LSPB	+	published / reissued	
EP1075259 A1	20010214	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20001208
EP1075259 A1	20020619	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20020502
EP1075259 B1	20030723	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1075259 B1	20030723	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20030723
EP1075259 B1	20030723	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP1075259 B1	20030731	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1075259 B1	20030820	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP1075259 B1	20031023	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20031023
EP1075259 B1	20031229	LSRV	-LTIE	LT: INVALIDATION OF EUROPEAN PATENT OR PATENT EXTENSION	REF COUNTRY CODE : EP EFFECTIVE DATE : 20030723
EP1075259 B1	20040416	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2204142 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP1075259 B1	20040423	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20040423
EP1075259 B1	20040430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20040430

EP1075259 B1	20040714	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20040426
EP1075259 B1	20110131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20101031 YEAR OF FEE PAYMENT : 12
EP1075259 B1	20110131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20101101 YEAR OF FEE PAYMENT : 12
EP1075259 B1	20110131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20101101 YEAR OF FEE PAYMENT : 12
EP1075259 B1	20110228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20101101 YEAR OF FEE PAYMENT : 12
EP1075259 B1	20110228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20101022 YEAR OF FEE PAYMENT : 12
EP1075259 B1	20110331	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20101102 YEAR OF FEE PAYMENT : 12
EP1075259 B1	20110331	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20101101 YEAR OF FEE PAYMENT : 12
EP1075259 B1	20110331	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20101103 YEAR OF FEE PAYMENT : 12
EP1075259 B1	20110630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20101124 YEAR OF FEE PAYMENT : 12
EP1075259 B1	20111031	LSLE	-BERE	BE: LAPSED	PARTYTYPE : OWNER REF COUNTRY CODE : EP OWNER : *THIA MEDICA A/S EFFECTIVE DATE : 20110430
EP1075259 B1	20111102	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : PT REF LEGAL EVENT CODE : MM4A TEXT : LAPSE DUE TO NON-PAYMENT OF FEES EFFECTIVE DATE : 20111024
EP1075259 B1	20111129	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SE REF LEGAL EVENT CODE : EUG
EP1075259 B1	20120115	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MM01 REF DOCUMENT NUMBER : 245416 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20110423
EP1075259 B1	20120131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20110430
EP1075259 B1	20120131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20111024

EP1075259 B1	20120131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20110423
EP1075259 B1	20120201	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP1075259 B1	20120206	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DK REF LEGAL EVENT CODE : EBP
EP1075259 B1	20120229	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20110423
EP1075259 B1	20120229	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20110423
EP1075259 B1	20120430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20110423
EP1075259 B1	20120604	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20120604
EP1075259 B1	20120629	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20110430
EP1075259 B1	20120731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20110424
EP1075259 B1	20130430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20110424
EP1075259 B1	20130731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20130429 YEAR OF FEE PAYMENT : 15
EP1075259 B1	20130830	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20130426 YEAR OF FEE PAYMENT : 15
EP1075259 B1	20141126	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : V1 EFFECTIVE DATE : 20141101
EP1075259 B1	20141128	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP1075259 B1	20150130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20140430
EP1075259 B1	20150130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT	COUNTRY OF REF DOCUMENT : CH NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF

				INFORMATION FROM NATIONAL OFFICE TO EPO]	DUE FEES LAPSED DATE : 20140430
EP1075259 B1	20150227	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20141101
EP1075259 B1	20150417	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 17
EP1075259 B1	20160113	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : DE OWNER : BERGEN TEKNOLOGIOVERFORING AS, NO REF LEGAL EVENT CODE : R081 REF DOCUMENT NUMBER : 69909775 COUNTRY OF REF DOCUMENT : DE OLDPARTY : FORMER OWNER: THIA MEDICA AS, BERGEN, NO
EP1075259 B1	20160113	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : DE OWNER : BERGEN TEKNOLOGIOVERFORING AS, NO REF LEGAL EVENT CODE : R081 REF DOCUMENT NUMBER : 69909775 COUNTRY OF REF DOCUMENT : DE OLDPARTY : FORMER OWNER: LIFE SCIENCE NUTRITION AS, HOVDEBYGDA, NO
EP1075259 B1	20160311	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : FR OWNER : BERGEN TEKNOLOGIOVERFORING AS, NO REF LEGAL EVENT CODE : TP EFFECTIVE DATE : 20160204
EP1075259 B1	20160425	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 18
EP1075259 B1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20160427 YEAR OF FEE PAYMENT : 18
EP1075259 B1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20160427 YEAR OF FEE PAYMENT : 18
EP1075259 B1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20160425 YEAR OF FEE PAYMENT : 18
EP1075259 B1	20171103	LSDW	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R119 REF DOCUMENT NUMBER : 69909775 COUNTRY OF REF DOCUMENT : DE
EP1075259 B1	20171227	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20170423
EP1075259 B1	20180126	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20171229
EP1075259 B1	20180131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20170502
EP1075259 B1	20180131	LSLE	-PG25	LAPSED IN A	COUNTRY OF REF DOCUMENT :

				CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	DE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20171103
EP1075259 B1	20180228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20170423
EP1075259 B1	20190423	PEXP		Calculated Patent Term Expiry	
EP1075260 A2	20010214	LSPB	+	published / reissued	
EP1075260 A2	20010214	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20001208
EP1075260 A2	20010523	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20010410
EP1075260 A2	20050406	LSRE	RTI1	TITLE (CORRECTION)	TEXT : NOVEL FATTY ACID ANALOGUES FOR THE TREATMENT OF SECONDARY RESTENOSIS
EP1075260 B1	20051019	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1075260 B1	20051019	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP1075260 B1	20051031	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1075260 B1	20051116	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP1075260 B1	20060119	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20060119
EP1075260 B1	20060327	LSRV	-LTIE	LT: INVALIDATION OF EUROPEAN PATENT OR PATENT EXTENSION	REF COUNTRY CODE : EP EFFECTIVE DATE : 20051019
EP1075260 B1	20060331	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HK REF LEGAL EVENT CODE : GR REF DOCUMENT NUMBER : 1034911 COUNTRY OF REF DOCUMENT : HK
EP1075260 B1	20060416	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2251218 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP1075260 B1	20060531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20060531
EP1075260 B1	20060927	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20060720
EP1075260 B1	20080731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20060507
EP1075260 B1	20081128	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA	COUNTRY OF REF DOCUMENT : CY NOTIFICATIONOFLAPSE : LAPSE

				POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20051019
EP1075260 B1	20090731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20090511 YEAR OF FEE PAYMENT : 11
EP1075260 B1	20090731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20090423 YEAR OF FEE PAYMENT : 11
EP1075260 B1	20090731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20090511 YEAR OF FEE PAYMENT : 11
EP1075260 B1	20090731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20090519 YEAR OF FEE PAYMENT : 11
EP1075260 B1	20090831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20090518 YEAR OF FEE PAYMENT : 11
EP1075260 B1	20090831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20090527 YEAR OF FEE PAYMENT : 11
EP1075260 B1	20090831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20090512 YEAR OF FEE PAYMENT : 11
EP1075260 B1	20090831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20090512 YEAR OF FEE PAYMENT : 11
EP1075260 B1	20090831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20090526 YEAR OF FEE PAYMENT : 11
EP1075260 B1	20090831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20090508 YEAR OF FEE PAYMENT : 11
EP1075260 B1	20090930	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20090608 YEAR OF FEE PAYMENT : 11
EP1075260 B1	20091030	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20090611 YEAR OF FEE PAYMENT : 11
EP1075260 B1	20091130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20090513 YEAR OF FEE PAYMENT : 11
EP1075260 B1	20101130	LSLE	-BERE	BE: LAPSED	PARTYTYPE : OWNER REF COUNTRY CODE : EP OWNER : *THIA MEDICA A/S EFFECTIVE DATE : 20100531
EP1075260 B1	20101208	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : V1 EFFECTIVE DATE : 20101201
EP1075260 B1	20101231	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL

EP1075260 B1	20110117	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DK REF LEGAL EVENT CODE : EBP
EP1075260 B1	20110126	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20100507
EP1075260 B1	20110131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20100507
EP1075260 B1	20110131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20100507
EP1075260 B1	20110215	LSLE	-EUG	SE: EUROPEAN PATENT HAS LAPSED	REF COUNTRY CODE : EP
EP1075260 B1	20110218	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20110131
EP1075260 B1	20110228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20100531
EP1075260 B1	20110228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20100531
EP1075260 B1	20110228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20101105 YEAR OF FEE PAYMENT : 12
EP1075260 B1	20110302	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP1075260 B1	20110331	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20100507
EP1075260 B1	20110331	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20101201
EP1075260 B1	20110331	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20100508
EP1075260 B1	20110331	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20100531
EP1075260 B1	20110429	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20100507
EP1075260 B1	20110429	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA	COUNTRY OF REF DOCUMENT : DE NOTIFICATIONOFLAPSE : LAPSE

				POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20101201
EP1075260 B1	20110429	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20100531
EP1075260 B1	20110531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20100531
EP1075260 B1	20110718	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20110718
EP1075260 B1	20110729	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20100507
EP1075260 B1	20110729	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20110706
EP1075260 B1	20110930	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20100508
EP1075260 B1	20111115	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : PT REF LEGAL EVENT CODE : MM4A TEXT : LAPSE DUE TO NON-PAYMENT OF FEES EFFECTIVE DATE : 20111107
EP1075260 B1	20120131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20111107
EP1075260 B1	20190507	PEXP		Calculated Patent Term Expiry	
EP1284139 A1	20030219	LSPB	+	published / reissued	
EP1284139 A1	20030709	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20030506
EP1284139 A1	20031105	LSFE	+AKX	DESIGNATION FEES PAID	COUNTRY OF REF DOCUMENT : AT COUNTRY OF REF DOCUMENT : BE COUNTRY OF REF DOCUMENT : CH COUNTRY OF REF DOCUMENT : CY COUNTRY OF REF DOCUMENT : DE COUNTRY OF REF DOCUMENT : DK COUNTRY OF REF DOCUMENT : ES COUNTRY OF REF DOCUMENT : FI COUNTRY OF REF DOCUMENT : FR COUNTRY OF REF DOCUMENT : GB COUNTRY OF REF DOCUMENT : GR COUNTRY OF REF DOCUMENT : IE COUNTRY OF REF DOCUMENT : IT COUNTRY OF REF DOCUMENT : LI COUNTRY OF REF DOCUMENT : LU COUNTRY OF REF DOCUMENT : MC

					COUNTRY OF REF DOCUMENT : NL COUNTRY OF REF DOCUMENT : PT COUNTRY OF REF DOCUMENT : SE
EP1284139 A1	20031105	LSFE	+AXX	PAYMENT OF EXTENSION FEES	COUNTRY OF REF DOCUMENT : AL PAYMENT DATE : 20030819
EP1284139 A1	20031105	LSFE	+AXX	PAYMENT OF EXTENSION FEES	COUNTRY OF REF DOCUMENT : LT PAYMENT DATE : 20030819
EP1284139 A1	20031105	LSFE	+AXX	PAYMENT OF EXTENSION FEES	COUNTRY OF REF DOCUMENT : LV PAYMENT DATE : 20030819
EP1284139 A1	20031105	LSFE	+AXX	PAYMENT OF EXTENSION FEES	COUNTRY OF REF DOCUMENT : MK PAYMENT DATE : 20030819
EP1284139 A1	20031105	LSFE	+AXX	PAYMENT OF EXTENSION FEES	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20030819
EP1284139 A1	20031105	LSFE	+AXX	PAYMENT OF EXTENSION FEES	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20030819
EP1284139 A1	20050803	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20050616
EP1284139 B1	20060802	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1284139 B1	20060802	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20060802
EP1284139 B1	20060802	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20060802
EP1284139 B1	20060802	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20060802
EP1284139 B1	20060802	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20060802
EP1284139 B1	20060802	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20060802
EP1284139 B1	20060802	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA	COUNTRY OF REF DOCUMENT : LI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT

				POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20060802
EP1284139 B1	20060802	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20060802
EP1284139 B1	20060802	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP1284139 B1	20060831	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1284139 B1	20060906	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP1284139 B1	20061102	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20061102
EP1284139 B1	20061102	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20061102
EP1284139 B1	20061103	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20061103
EP1284139 B1	20061113	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20061113
EP1284139 B1	20070102	LSLE	-NLV1	NL: LAPSED OR ANNULLED DUE TO FAILURE TO FULFILL THE REQUIREMENTS OF ART. 29P AND 29M OF THE PATENTS ACT	REF COUNTRY CODE : EP
EP1284139 B1	20070102	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20070102
EP1284139 B1	20070125	LSRV	-LTIE	LT: INVALIDATION OF EUROPEAN PATENT OR PATENT EXTENSION	REF COUNTRY CODE : EP EFFECTIVE DATE : 20060802
EP1284139 B1	20070215	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP1284139 B1	20070711	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20070503

EP1284139 B1	20071227	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20070423
EP1284139 B1	20080430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20070423
EP1284139 B1	20080430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20070511
EP1284139 B1	20080430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20061103
EP1284139 B1	20080530	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20070423
EP1284139 B1	20081128	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20060802
EP1284139 B1	20090331	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20070430
EP1284139 B1	20090831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20070423
EP1284139 B1	20090831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20060802
EP1284139 B1	20091204	LSWD	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HK REF LEGAL EVENT CODE : WD REF DOCUMENT NUMBER : 1051967 COUNTRY OF REF DOCUMENT : HK
EP1284139 B1	20190423	PEXP		Calculated Patent Term Expiry	
EP1285652 A1	20030226	LSPB	+	published / reissued	
EP1285652 A1	20030820	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20030620
EP1285652 A1	20031112	LSFE	+AKX	DESIGNATION FEES PAID	COUNTRY OF REF DOCUMENT : AT COUNTRY OF REF DOCUMENT :

					BE COUNTRY OF REF DOCUMENT : CH COUNTRY OF REF DOCUMENT : CY COUNTRY OF REF DOCUMENT : DE COUNTRY OF REF DOCUMENT : DK COUNTRY OF REF DOCUMENT : ES COUNTRY OF REF DOCUMENT : FI COUNTRY OF REF DOCUMENT : FR COUNTRY OF REF DOCUMENT : GB COUNTRY OF REF DOCUMENT : GR COUNTRY OF REF DOCUMENT : IE COUNTRY OF REF DOCUMENT : IT COUNTRY OF REF DOCUMENT : LI COUNTRY OF REF DOCUMENT : LU COUNTRY OF REF DOCUMENT : MC COUNTRY OF REF DOCUMENT : NL COUNTRY OF REF DOCUMENT : PT COUNTRY OF REF DOCUMENT : SE
EP1285652 A1	20031112	LSFE	+AXX	PAYMENT OF EXTENSION FEES	COUNTRY OF REF DOCUMENT : AL PAYMENT DATE : 20030826
EP1285652 A1	20031112	LSFE	+AXX	PAYMENT OF EXTENSION FEES	COUNTRY OF REF DOCUMENT : LT PAYMENT DATE : 20030826
EP1285652 A1	20031112	LSFE	+AXX	PAYMENT OF EXTENSION FEES	COUNTRY OF REF DOCUMENT : LV PAYMENT DATE : 20030826
EP1285652 A1	20031112	LSFE	+AXX	PAYMENT OF EXTENSION FEES	COUNTRY OF REF DOCUMENT : MK PAYMENT DATE : 20030826
EP1285652 A1	20031112	LSFE	+AXX	PAYMENT OF EXTENSION FEES	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20030826
EP1285652 A1	20031112	LSFE	+AXX	PAYMENT OF EXTENSION FEES	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20030826
EP1285652 A1	20050803	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20050615
EP1285652 B1	20060816	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1285652 B1	20060816	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20060816
EP1285652 B1	20060816	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20060816
EP1285652 B1	20060816	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20060816

EP1285652 B1	20060816	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20060816
EP1285652 B1	20060816	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20060816
EP1285652 B1	20060816	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20060816
EP1285652 B1	20060816	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20060816
EP1285652 B1	20060816	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP1285652 B1	20060915	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1285652 B1	20060920	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP1285652 B1	20061116	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20061116
EP1285652 B1	20061116	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20061116
EP1285652 B1	20061117	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20061117
EP1285652 B1	20061127	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20061127
EP1285652 B1	20070116	LSLE	-PG25	LAPSED IN A CONTRACTING STATE	COUNTRY OF REF DOCUMENT : PT

				[ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20070116
EP1285652 B1	20070125	LSRV	-LTIE	LT: INVALIDATION OF EUROPEAN PATENT OR PATENT EXTENSION	REF COUNTRY CODE : EP EFFECTIVE DATE : 20060816
EP1285652 B1	20070201	LSLE	-NLV1	NL: LAPSED OR ANNULLED DUE TO FAILURE TO FULFILL THE REQUIREMENTS OF ART. 29P AND 29M OF THE PATENTS ACT	REF COUNTRY CODE : EP
EP1285652 B1	20070228	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP1285652 B1	20070725	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20070518
EP1285652 B1	20071227	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20070423
EP1285652 B1	20080430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20070423
EP1285652 B1	20080430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20070511
EP1285652 B1	20080430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20061117
EP1285652 B1	20080530	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20070423
EP1285652 B1	20081128	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20060816
EP1285652 B1	20090331	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20070430
EP1285652 B1	20090831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20070423
EP1285652 B1	20090831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT	COUNTRY OF REF DOCUMENT : CY NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT

				INFORMATION FROM NATIONAL OFFICE TO EPO]	A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20060816
EP1285652 B1	20091204	LSWD	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HK REF LEGAL EVENT CODE : WD REF DOCUMENT NUMBER : 1053265 COUNTRY OF REF DOCUMENT : HK
EP1285652 B1	20190423	PEXP		Calculated Patent Term Expiry	
ES2204142 T3	20040416	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2204142 T3	20190423	PEXP		Calculated Patent Term Expiry	
ES2207253 T3	20040516	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2207253 T3	20190423	PEXP		Calculated Patent Term Expiry	
ES2251218 T3	20060416	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2251218 T3	20190507	PEXP		Calculated Patent Term Expiry	
HK1034909 A1	20031121	LSPB	+	published / reissued	
HK1034909 A1	20041215	LSFE	+PF	PATENT IN FORCE	
HK1034909 A1	20111209	LSLE	-PC	PATENT CEASED (I.E. PATENT HAS LAPSED DUE TO THE FAILURE TO PAY THE RENEWAL FEE)	EFFECTIVE DATE : 20110423
HK1034909 A1	20210814	PEXP		Calculated Patent Term Expiry	
HK1034911 A1	20060331	LSPB	+	published / reissued	
HK1034911 A1	20111223	LSLE	-PC	PATENT CEASED (I.E. PATENT HAS LAPSED DUE TO THE FAILURE TO PAY THE RENEWAL FEE)	EFFECTIVE DATE : 20110507
HK1034911 A1	20210814	PEXP		Calculated Patent Term Expiry	
HK1034911 B	20060331	LSGT	+	granted / extensions (spc, cpc, pte)	
HK1034911 B	20210814	PEXP		Calculated Patent Term Expiry	
HK1034912 A1	20040227	LSPB	+	published / reissued	
HK1034912 A1	20041215	LSFE	+PF	PATENT IN FORCE	
HK1034912 A1	20111209	LSLE	-PC	PATENT CEASED (I.E. PATENT HAS LAPSED DUE TO THE FAILURE TO PAY THE RENEWAL FEE)	EFFECTIVE DATE : 20110423
HK1034912 A1	20210814	PEXP		Calculated Patent Term Expiry	
JP2002514594 T2	20020521	LSPB	+	published / reissued	
JP2002514594 T2	20040825	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20040824
JP2002514594 T2	20080423	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20080422
JP2002514594 T2	20080802	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20080801
JP2002514594 T2	20081202	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20081201
JP2002514594 T2	20090331	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE

					CODE: A523 EFFECTIVE DATE : 20090330
JP2002514594 T2	20090513	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20090415
JP2002514594 T2	20090521	LSAL	A911	TRANSFER OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A911 EFFECTIVE DATE : 20090520
JP2002514594 T2	20091102	LSAL	-A912	REMOVAL OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A912 EFFECTIVE DATE : 20091030
JP2002514594 T2	20120107	LSRE	A524	WRITTEN SUBMISSION OF COPY OF AMENDMENT UNDER SECTION 19 (PCT)	TEXT : JAPANESE INTERMEDIATE CODE: A524 EFFECTIVE DATE : 20120106
JP2002514594 T2	20120322	LSAS	A711	NOTIFICATION OF CHANGE IN APPLICANT	TEXT : JAPANESE INTERMEDIATE CODE: A711 EFFECTIVE DATE : 20120302
JP2002514594 T2	20120418	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A821 EFFECTIVE DATE : 20120330
JP2002514594 T2	20120519	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20120518
JP2002514594 T2	20120621	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01
JP2002514594 T2	20120809	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20120717
JP2002514594 T2	20120810	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP2002514594 T2	20120810	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP2002514595 T2	20020521	LSPB	+	published / reissued	
JP2002514595 T2	20040825	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20040824
JP2002514595 T2	20080423	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20080422
JP2002514595 T2	20080802	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20080801
JP2002514595 T2	20081210	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20081209
JP2002514595 T2	20090404	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20090403
JP2002514595 T2	20090520	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20090422
JP2002514595 T2	20090602	LSAL	A911	TRANSFER OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A911 EFFECTIVE DATE : 20090601
JP2002514595 T2	20091102	LSAL	-A912	REMOVAL OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A912 EFFECTIVE DATE : 20091030
JP2002514596 T2	20020521	LSPB	+	published / reissued	

JP2002514596 T2	20040927	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20040924
JP2002514596 T2	20080423	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20080422
JP2002514596 T2	20080802	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20080801
JP2002514596 T2	20081210	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20081209
JP2002514596 T2	20090407	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20090406
JP2002514596 T2	20090513	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20090512
JP2002514596 T2	20090827	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20090826
JP2002514596 T2	20091021	LSAL	A911	TRANSFER OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A911 EFFECTIVE DATE : 20091020
JP2002514596 T2	20091104	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20091102
JP2002514596 T2	20091218	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20091217
JP2002514596 T2	20100113	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2002514596 T2	20100120	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20100119
JP2002514596 T2	20100121	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01
JP2002514596 T2	20100304	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20100212
JP2002514596 T2	20100305	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP2002514596 T2	20100308	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP4465672 B2	20100519	LSGT	+	granted / extensions (spc, cpc, pte)	
JP4465672 B2	20100302	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP4465672 B2	20130307	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4465672 B2	20130403	LSLE	R280	納付書補充指令書 (Payment refilling order form)	
JP4465672 B2	20130502	LSFE	R21	特許料納付書 (補充) (Patent fee payment form (replenishment))	
JP4465672 B2	20130514	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4465672 B2	20140306	LSFE	R20	特許料納付書 (Patent fee payment form)	

JP4465672 B2	20140402	LSLE	R280	納付書補充指令書 (Payment refilling order form)	
JP4465672 B2	20140501	LSFE	R21	特許料納付書 (補充) (Patent fee payment form (replenishment))	
JP4465672 B2	20140513	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4465672 B2	20150305	LSLE	-LAPS	CANCELLATION BECAUSE OF NO PAYMENT OF ANNUAL FEES	
JP4465672 B2	20190507	PEXP		Calculated Patent Term Expiry	
JP5057003 B2	20121024	LSGT	+	granted / extensions (spc, cpc, pte)	
JP5057003 B2	20120807	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP5057003 B2	20150730	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5057003 B2	20150804	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5057003 B2	20160728	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5057003 B2	20160802	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5057003 B2	20170412	LSAS	S111	REQUEST FOR CHANGE OF OWNERSHIP OR PART OF OWNERSHIP	TEXT : JAPANESE INTERMEDIATE CODE: R313113
JP5057003 B2	20170420	LSAS	R350	WRITTEN NOTIFICATION OF REGISTRATION OF TRANSFER	TEXT : JAPANESE INTERMEDIATE CODE: R350
JP5057003 B2	20170810	LSLE	-LAPS	CANCELLATION BECAUSE OF NO PAYMENT OF ANNUAL FEES	
JP5057003 B2	20190423	PEXP		Calculated Patent Term Expiry	
KR100701502 B1	20070402	LSGT	+	granted / extensions (spc, cpc, pte)	
KR100701502 B1	20040219	LSES	A201	REQUEST FOR EXAMINATION	
KR100701502 B1	20060124	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR100701502 B1	20061226	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
KR100701502 B1	20070323	LSGT	+GRNT	WRITTEN DECISION TO GRANT	
KR100701502 B1	20100924	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20100927 YEAR OF FEE PAYMENT : 4
KR100701502 B1	20110324	LSLE	-LAPS	LAPSE DUE TO UNPAID ANNUAL FEE	
KR100701502 B1	20201104	PEXP		Calculated Patent Term Expiry	
KR100701503 B1	20070402	LSGT	+	granted / extensions (spc, cpc, pte)	
KR100701503 B1	20040219	LSES	A201	REQUEST FOR EXAMINATION	
KR100701503 B1	20060124	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR100701503 B1	20061226	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
KR100701503 B1	20070323	LSGT	+GRNT	WRITTEN DECISION TO GRANT	
KR100701503 B1	20100924	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20100927 YEAR OF FEE PAYMENT : 4

KR100701503 B1	20110324	LSLE	-LAPS	LAPSE DUE TO UNPAID ANNUAL FEE
KR100701503 B1	20201104	PEXP		Calculated Patent Term Expiry
KR100822077 B1	20080414	LSGT	+	granted / extensions (spc, cpc, pte)
KR100822077 B1	20040302	LSES	A201	REQUEST FOR EXAMINATION
KR100822077 B1	20060126	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL
KR100822077 B1	20070426	LSRE	AMND	AMENDMENT
KR100822077 B1	20070817	LSRV	-E601	DECISION TO REFUSE APPLICATION
KR100822077 B1	20071224	LSRE	AMND	AMENDMENT
KR100822077 B1	20080107	LSGT	+B701	DECISION TO GRANT
KR100822077 B1	20080407	LSGT	+GRNT	WRITTEN DECISION TO GRANT
KR100822077 B1	20110408	LSLE	-LAPS	LAPSE DUE TO UNPAID ANNUAL FEE
KR100822077 B1	20190507	PEXP		Calculated Patent Term Expiry
KR20010043314 A	20010525	LSPB	+	published / reissued
KR20010043315 A	20010525	LSPB	+	published / reissued
KR20010043316 A	20010525	LSPB	+	published / reissued
NO20005461 A	20010108	LSPB	+	published / reissued
NO20005461 A	20131007	LSRV	-FC2A	WITHDRAWAL, REJECTION OR DISMISSAL OF LAID OPEN PATENT APPLICATION
NO20005462 A	20010108	LSPB	+	published / reissued
NO20005463 A	20010108	LSPB	+	published / reissued
NO20005463 A	20101227	LSRV	-FC2A	WITHDRAWAL, REJECTION OR DISMISSAL OF LAID OPEN PATENT APPLICATION
NO333143 B1	20130318	LSGT	+	granted / extensions (spc, cpc, pte)
NO333143 B1	20141124	LSLE	-MM1K	LAPSED BY NOT PAYING THE ANNUAL FEES
NO333143 B1	20201030	PEXP		Calculated Patent Term Expiry
NZ508045 A	20030829	LSPB	+	published / reissued
NZ508045 A	20040130	LSGT	+PSEA	PATENT SEALED
NZ508045 A	20040430	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)
NZ508045 A	20060428	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)
NZ508045 A	20091127	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)
NZ508045 A	20101126	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)
NZ508045 A	20190426	LSLE	-EXPY	PATENT EXPIRED
NZ508046 A	20030829	LSPB	+	published / reissued
NZ508046 A	20040130	LSGT	+PSEA	PATENT SEALED
NZ508046 A	20040430	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)
NZ508046 A	20060428	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)
NZ508046 A	20080530	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)
NZ508046 A	20120525	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)
NZ508047 A	20030530	LSPB	+	published / reissued

NZ508047 A	20030926	LSGT	+PSEA	PATENT SEALED	
NZ508047 A	20031219	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	
NZ508047 A	20060428	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	
NZ508047 A	20091127	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	
NZ508047 A	20101126	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	
NZ508047 A	20190426	LSLE	-EXPY	PATENT EXPIRED	
PT1075258 T	20040130	LSGT	+	granted / extensions (spc, cpc, pte)	
PT1075258 T	20190423	PEXP		Calculated Patent Term Expiry	
PT1075259 T	20031231	LSGT	+	granted / extensions (spc, cpc, pte)	
PT1075259 T	20190423	PEXP		Calculated Patent Term Expiry	
RU2219920 C2	20031227	LSGT	+	granted / extensions (spc, cpc, pte)	
RU2219920 C2	20130220	LSLE	-MM4A	THE PATENT IS INVALID DUE TO NON-PAYMENT OF FEES	EFFECTIVE DATE : 20120424
RU2219920 C2	20190423	PEXP		Calculated Patent Term Expiry	
RU2221558 C2	20040120	LSGT	+	granted / extensions (spc, cpc, pte)	
RU2221558 C2	20130220	LSLE	-MM4A	THE PATENT IS INVALID DUE TO NON-PAYMENT OF FEES	EFFECTIVE DATE : 20120424
RU2221558 C2	20190423	PEXP		Calculated Patent Term Expiry	
RU2223095 C2	20040210	LSGT	+	granted / extensions (spc, cpc, pte)	
RU2223095 C2	20120320	LSLE	-MM4A	THE PATENT IS INVALID DUE TO NON-PAYMENT OF FEES	EFFECTIVE DATE : 20110508
RU2223095 C2	20190507	PEXP		Calculated Patent Term Expiry	
US2002198259 AA	20021226	LSPB	+	published / reissued	
US6365628 BA	20020402	LSGT	+	granted / extensions (spc, cpc, pte)	
US6365628 BA	20010105	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : THIA MEDICA AS, NORWAY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:BERGE, ROLF; REEL/FRAME:011217/0666 EFFECTIVE DATE : 20001129
US6365628 BA	20020314	LSGT	PAT1	Patented Case	
US6365628 BA	20020314	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US6365628 BA	20020917	LSRE	CC	CERTIFICATE OF CORRECTION	
US6365628 BA	20050930	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6365628 BA	20090909	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US6365628 BA	20111104	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : LIFE SCIENCE NUTRITION AS, NORWAY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:THIA MEDICA AS; REEL/FRAME:027175/0850 EFFECTIVE DATE : 20110830
US6365628 BA	20131002	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US6365628 BA	20151103	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER

					OWNER : BERGEN TEKNOLOGIOVERFOERING AS, NORWAY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:LIFE SCIENCE NUTRITION AS; REEL/FRAME:036943/0723 EFFECTIVE DATE : 20151022
US6365628 BA	20210108	PEXP		Calculated Patent Term Expiry	
US6417232 BA	20020709	LSGT	+	granted / extensions (spc, cpc, pte)	
US6417232 BA	20010105	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : THIA MEDICA AS, NORWAY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:BERGE, ROLF; REEL/FRAME:011217/0671 EFFECTIVE DATE : 20001129
US6417232 BA	20020620	LSGT	PAT1	Patented Case	
US6417232 BA	20020620	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US6417232 BA	20051227	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6417232 BA	20091223	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US6417232 BA	20140106	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US6417232 BA	20210108	PEXP		Calculated Patent Term Expiry	
US6441036 BA	20020827	LSGT	+	granted / extensions (spc, cpc, pte)	
US6441036 BA	20010111	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : THIA MEDICA AS, NORWAY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:BERGE, ROLF; REEL/FRAME:011234/0903 EFFECTIVE DATE : 20001129
US6441036 BA	20010111	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : THIA MEDICA AS, NORWAY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:BERGE, ROLF; REEL/FRAME:011234/0947 EFFECTIVE DATE : 20001129
US6441036 BA	20020808	LSGT	PAT1	Patented Case	
US6441036 BA	20020808	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US6441036 BA	20060213	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6441036 BA	20100202	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US6441036 BA	20111104	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : LIFE SCIENCE NUTRITION AS, NORWAY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:THIA MEDICA AS; REEL/FRAME:027175/0850 EFFECTIVE DATE : 20110830
US6441036 BA	20140227	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US6441036 BA	20151103	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BERGEN TEKNOLOGIOVERFOERING AS, NORWAY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:LIFE SCIENCE NUTRITION AS;

					REEL/FRAME:036943/0723 EFFECTIVE DATE : 20151022
US6441036 BA	20210127	PEXP		Calculated Patent Term Expiry	
US7026356 BB	20060411	LSGT	+	granted / extensions (spc, cpc, pte)	
US7026356 BB	20060322	LSGT	PAT1	Patented Case	
US7026356 BB	20090916	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US7026356 BB	20130915	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US7026356 BB	20140130	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : THIA MEDICA AS, NORWAY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:BERGE, ROLF; REEL/FRAME:032098/0552 EFFECTIVE DATE : 20001129
US7026356 BB	20171120	LSFE	FEPP	FEE PAYMENT PROCEDURE	TEXT : MAINTENANCE FEE REMINDER MAILED (ORIGINAL EVENT CODE: REM.)
US7026356 BB	20180507	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	TEXT : PATENT EXPIRED FOR FAILURE TO PAY MAINTENANCE FEES (ORIGINAL EVENT CODE: EXP.)
US7026356 BB	20180507	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US7026356 BB	20180507	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US7026356 BB	20180529	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20180411
US7026356 BB	20221218	PEXP		Calculated Patent Term Expiry (PTA 215 days)	
WO9958120 A1	19991118	LSPB	+	published / reissued	
WO9958120 A1	20000108	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : KR
WO9958120 A1	20000907	LSWD	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : 8642
WO9958120 A1	20010131	LSNE	-122	EP: PCT APPLICATION NON-ENTRY IN EUROPEAN PHASE	REF COUNTRY CODE : WO
WO9958121 A1	19991118	LSPB	+	published / reissued	
WO9958121 A1	19990423	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 99805968.4 COUNTRY OF REF DOCUMENT : CN
WO9958121 A1	20001103	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2331408 COUNTRY OF REF DOCUMENT : CA
WO9958121 A1	20001104	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1020007012281 COUNTRY OF REF DOCUMENT : KR
WO9958121 A1	20001108	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 508045 COUNTRY OF REF DOCUMENT : NZ
WO9958121 A1	20001108	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : IN/PCT/2000/622/CHE COUNTRY OF REF DOCUMENT : IN
WO9958121 A1	20001207	LSNP	+WWE	WIPO INFORMATION:	REF DOCUMENT NUMBER :

				ENTRY INTO NATIONAL PHASE	1999933292 COUNTRY OF REF DOCUMENT : EP
WO9958121 A1	20001208	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 49366/99 COUNTRY OF REF DOCUMENT : AU
WO9958121 A1	20010127	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 09700061 COUNTRY OF REF DOCUMENT : US
WO9958121 A1	20010214	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1999933292 COUNTRY OF REF DOCUMENT : EP
WO9958121 A1	20010308	LSWD	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : 8642
WO9958121 A1	20010525	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1020007012281 COUNTRY OF REF DOCUMENT : KR
WO9958121 A1	20030820	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1999933292 COUNTRY OF REF DOCUMENT : EP
WO9958121 A1	20031016	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 49366/99 COUNTRY OF REF DOCUMENT : AU
WO9958121 A1	20061226	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1020007012281 COUNTRY OF REF DOCUMENT : KR
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WO9958122 A1	19990423	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 99805966.8 COUNTRY OF REF DOCUMENT : CN
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WO9958122 A1	20001208	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 49367/99 COUNTRY OF REF DOCUMENT : AU

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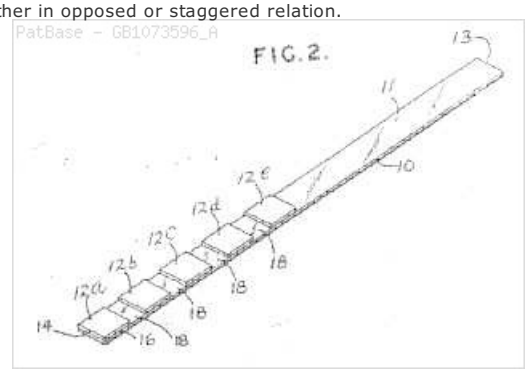
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20) Family number: 39029 (GB1073596A)

Title: TEST DEVICE

Abstract: 1,073,596. Composite diagnostic test (strip. MILES LABORATORIES Inc. Oct. 13. 1965 [Oct. 19, 1964], No. 43458/65. Heading B1X. [Also in Division B5] A device for testing for the presence or amount of a specific substance in a **liquid** comprises a base member 10 of transparent polystyrene, or some other organo-plastic material, or of wood, paper, glass, or metal, and at least one test segment e.g. 12a of bibulous material, e.g. filter paper, containing a test reagent. As shown the device includes five test segments containing reagents to analyse for pH (Methyl red, bromthymol glue reagent of specification No. 997,603) occult blood (cumene hydroperoxide, o-tolidine, quinine reagent of specification 893,318) albumin (tetrabromphenol reagent of specification 853,643), glucose (glucose oxidase, peroxidase, o-tolidine reagent of specification 949,716), and ketone bodies (sodium nitroprusside, glycine, diaminopropanol, aminomethyl-propane diol reagent of specification 884,165), respectively. The segments are secured to the base member mechanically, by fusing, by an adhesive, or by double side pressure-sensitive adhesive tape, and may be secured to both sides of the base member either in opposed or staggered relation.

Classifications:
International (IPC 8-9): G01N31/22 G01N33/50
G01N33/52 (Advanced/Invention);
G01N31/22 G01N33/52 (Core/Invention)
International (IPC 1-7): A61L C12K1/10 G01N31/22 G01N33/52
CPC: G01N33/525 G01N31/22 G01N33/526
European: G01N31/22 G01N33/52C G01N33/52C2



Family:

Publication number	Publication date	Application number	Application date
AT268534 B	19690210	AT19650009476	19651019
AU6405665 A1	19670316	AU19650064056	19650915
BE671087 A	19660214		19651019
CH456199 A	19680515	CH19650014301	19651018
ES318619 A1	19660416	ES19650318619	19651018
FR1459970 A	19660617	FR19650034646	19651012
GB1073596 A	19670628	GB19650043458	19651013
NL6513381 A	19660420	NL19650013381	19651015

Priority:
US19640404878 19641019 AU19650064056 19650915

Probable Assignee: MILES LAB
Assignee(s): (std): MILES LAB
Assignee(s): MILES LABORATORIES INC
Inventor(s): (std): ADAMS ERNEST CLARENCE JR ; ERNEST CLARENCE JR ADAMS
Inventor(s): CLARENCE JR ADAMS ERNEST

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
AT268534 B	19690210	LSGT	+	granted / extensions (spc, cpc, pte)	
AT268534 B	19851019	PEXP		Calculated Patent Term Expiry	
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BE671087 A	19660214	LSPB	+	published / reissued	
BE671087 A	19851019	PEXP		Calculated Patent Term Expiry	
CH456199 A	19680515	LSGT	+	granted / extensions (spc, cpc, pte)	
CH456199 A	19851018	PEXP		Calculated Patent Term Expiry	
ES318619 A1	19660416	LSGT	+	granted / extensions (spc, cpc, pte)	
FR1459970 A	19660617	LSGT	+	granted / extensions (spc, cpc, pte)	
FR1459970 A	19851012	PEXP		Calculated Patent Term Expiry	
GB1073596 A	19670628	LSGT	+	granted / extensions (spc, cpc, pte)	
GB1073596 A	19851013	PEXP		Calculated Patent Term Expiry	
NL6513381 A	19660420	LSPB	+	published / reissued	

21) Family number: 23917031 (US2004127408A)

Title: SYNTHETIC HUMAN PEPTIDES AND PHARMACEUTICAL COMPOSITIONS COMPRISING THEM FOR THE TREATMENT OF SYSTEMIC LUPUS ERYTHEMATOSUS

Abstract: Synthetic peptides of at least 12 and at most 30 amino acid residues comprising a sequence consisting of, or found within, a complementarity-determining region (CDR) found in the heavy or light chain of the human anti-DNA 16/6Id monoclonal antibody, or a sequence obtained by replacement and/or deletion and/or addition of one or more amino residues to said sequence, and salts, chemical derivatives and polymers of said peptides can be used for immunomodulation of systemic lupus erythematosus-associated responses.

Classifications:
International (IPC 8-9): A61K38/00 A61K38/04 A61K38/10 A61K38/16 A61K39/395 A61K47/48 A61P17/00 A61P29/00 A61P37/02 A61P37/06 A61P43/00 C07K14/00 C07K14/47 C07K16/00 C07K16/18 C07K16/46 C07K19/00 C07K7/00 C07K7/08 C12P21/08 C12Q1/20 C12Q1/37 G01N33/15 G01N33/50 G01N33/53 G01N33/564 (Advanced/Invention);
A61K39/00 C07K16/46 (Advanced/Non-invention);
A61K38/00 A61K38/04 A61K38/16 A61K39/395 A61K47/00 A61K47/48 A61P17/00 A61P29/00 A61P37/00 A61P43/00 C07K14/00 C07K14/435 C07K16/00 C07K16/18 C07K16/46 C07K19/00 C07K7/00 C12P21/08 C12Q1/18 C12Q1/37 G01N33/00 G01N33/15 G01N33/50 G01N33/53 G01N33/564 (Core/Invention);
A61K39/00 (Core/Non-invention);
A61K C07K G01N (Subclass/Invention);
A61K G01N (Subclass/Non-invention)
International (IPC 1-7): A61K38/00 A61K38/04 A61K38/10 A61K38/16 A61K39/395 A61K47/48 A61P29/00 A61P37/02 A61P37/06 A61P43/00 C07K14/00 C07K16/18 C07K16/46 C07K7/08 C12Q1/37 G01N33/53 G01N33/564
CPC: C07K16/18 A61K39/00 A61K2039/505 C07K2317/21 C07K2317/565 C07K2317/73
European: C07K16/18 K61K39/00 K61K39/505 M07K317/210 M07K317/565 M07K317/730
US: 424/130.1 424/130.100S 424/133.1 424/133.100P 435/29 435/29S 514/12 514/13 514/14 514/2 514/8.9 514/8.900S 530/300 530/300S 530/324 530/324S 530/325 530/325S 530/326 530/326S 530/388.1 530/388.100S

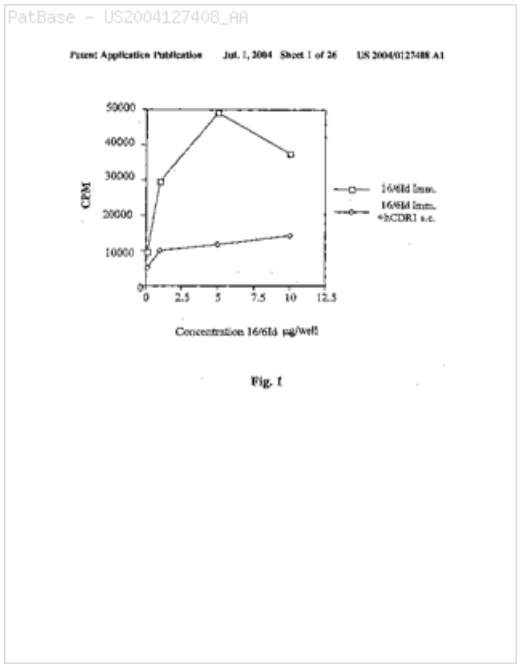


Fig. 1

Family:

Publication number	Publication date	Application number	Application date
AT346094 E	20061215	AT20020700553T	20020226
AU2002233618 AA	20020912	AU20020233618	20020226
AU2002233618 BB	20061221	AU20020233618	20020226
BRPI0207586 A	20061107	BR2002PI07586	20020226
CA2439051 AA	20030820	CA20022439051	20020226
CA2439051 C	20100202	CA20022439051	20020226
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HU0600778 AC	20120928	HU20060000778	20020226
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NO20033718 A0	20030821	NO20030003718	20030821
NO20033718 L	20031009	NO20030003718	20030821
NO331820 B1	20120410	NO20030003718	20030821
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PL373520 A1	20050905	PL20020373520	20020226
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SI1370575 T1	20070430	SI20020030463T	20020226
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US7858738 BB	20101228	US20070894472	20070820
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ZA200305874 A	20050627	ZA20030005874	20030730
ZA200305874 A	20050831	ZA20030005874	20030730

Priority:

IL20010141647 20010226 EP20020700553 20020226 US20020468924 20020226
WO2002IL00148 20020226 IL20030157550 20030824 WO2002IL00148 20030826
US20040468924 20040126 US20070894472 20070820

Probable Assignee: YEDA RESEARCH AND DEVELOPMENT CO LTD

Assignee(s): (std): MOZES EDNA ; VEDA RES AND DEV CO LTD ; VEDA RESEARCH AND DEVELOPMENT CO LTD ; YEDA RES AND DEV ; YEDA RES AND DEV CO LTD AT ; YEDA RESERACH AND DEV CO LTD ; YEDA RESEARCH AND DEVELOPMENT CO ; YEDA RESEARCH AND DEVELOPMENT CO LTD

Assignee(s): YEDA RESEARCH AND DEVELOPMENT CO LTD AT THE WEIZMANN INSTITUTE OF SCIENCE ; EDNA MOZES ; YEDA RESEARCH AND DEVELOPMENT COLTD ; YEDA RESEARCH AND DEVELOPMENT COMPANY LTD ; YEDA RESEARCH DEVELOPMENT CO LTD ; YEDA RESEARCH DEVELOPMENT CO ; YEDA RESERACH AND DEVELOPMENT CO LTD

Inventor(s): (std): E MOZES ; EDNA MOZES ; MOZES EDNA ; MOZES E

Agent(s): FB RICE PTY LTD; FB RICE; HEENAN BLAIKIE LLP; YEDA RESEARCH AND DEVELOPMENT CO LTD; BEN AMI AND ASSOCIATES; JOHN P WHITE COOPER AND DUNHAM LLP; COOPER AND DUNHAM LLP; JOHN P

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT346094 E	20061215	LSGT	+	granted / extensions (spc, cpc, pte)	
AT346094 E	20070715	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	REF DOCUMENT NUMBER : 1370575 COUNTRY OF REF DOCUMENT : EP
AT346094 E	20220226	PEXP		Calculated Patent Term Expiry	
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AU2002233618 BB	20061221	LSGT	+	granted / extensions (spc, cpc, pte)	
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CN1309733 C	20220226	PEXP		Calculated Patent Term Expiry	
CN1503806 A	20040609	LSPB	+	published / reissued	
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CR7058 A	20041101	LSPB	+	published / reissued	
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CU23276 B7	20130820	PEXP		Calculated Patent Term Expiry	
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EA200300939 A1	20041230	LSPB	+	published / reissued	
ECSP034743 A	20040128	LSPB	+	published / reissued	
EP1370575 A2	20031217	LSPB	+	published / reissued	
EP1370575 A2	20031217	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20030825
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EP1370575 A2	20160531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20160217 YEAR OF FEE PAYMENT : 15
EP1370575 A2	20160531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20160217 YEAR OF FEE PAYMENT : 15
EP1370575 A4	20040929	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	EFFECTIVE DATE : 20040812
EP1370575 A4	20041229	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20041116
EP1370575 B1	20061122	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1370575 B1	20061122	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP1370575 B1	20061215	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1370575 B1	20061229	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP1370575 B1	20070215	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : EP REF DOCUMENT NUMBER : 20070400279 COUNTRY OF REF DOCUMENT : GR

EP1370575 B1	20070427	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HK REF LEGAL EVENT CODE : GR REF DOCUMENT NUMBER : 1059790 COUNTRY OF REF DOCUMENT : HK
EP1370575 B1	20070616	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2275832 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP1370575 B1	20071024	LSAS	RAP2	RIGHTS OF A PATENT TRANSFERRED	PARTYTYPE : OWNER OWNER : YEDA RESEARCH AND DEVELOPMEMT CO., LTD.
EP1370575 B1	20071031	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20070823
EP1370575 B1	20080530	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20080303 YEAR OF FEE PAYMENT : 7
EP1370575 B1	20080530	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20080128 YEAR OF FEE PAYMENT : 7
EP1370575 B1	20080530	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20080204 YEAR OF FEE PAYMENT : 7
EP1370575 B1	20080930	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20080131 YEAR OF FEE PAYMENT : 7
EP1370575 B1	20080930	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20080422 YEAR OF FEE PAYMENT : 7
EP1370575 B1	20081231	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY PAYMENT DATE : 20080201 YEAR OF FEE PAYMENT : 7
EP1370575 B1	20090227	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20080129 YEAR OF FEE PAYMENT : 7
EP1370575 B1	20090831	LSLE	-BERE	BE: LAPSED	PARTYTYPE : OWNER REF COUNTRY CODE : EP OWNER : YEDA RESEARCH AND DEVELOPMENT CO. LTD. EFFECTIVE DATE : 20090228
EP1370575 B1	20090902	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : PT REF LEGAL EVENT CODE : MM4A TEXT : LAPSE DUE TO NON-PAYMENT OF FEES EFFECTIVE DATE : 20090826
EP1370575 B1	20090930	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-

				EPO]	PAYMENT OF DUE FEES LAPSED DATE : 20090228
EP1370575 B1	20091026	LSLE	-LTLA	LT: LAPSE OF EUROPEAN PATENT OR PATENT EXTENSION	REF COUNTRY CODE : EP EFFECTIVE DATE : 20090226
EP1370575 B1	20091030	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20090826
EP1370575 B1	20091231	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20090226
EP1370575 B1	20091231	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SI REF LEGAL EVENT CODE : KO00 EFFECTIVE DATE : 20091112
EP1370575 B1	20100226	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20090228
EP1370575 B1	20100226	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20090902
EP1370575 B1	20110429	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20090226
EP1370575 B1	20110914	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : V1 EFFECTIVE DATE : 20110901
EP1370575 B1	20130131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20090226
EP1370575 B1	20160218	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 15
EP1370575 B1	20160715	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : CH OWNER : YEDA RESEARCH AND DEVELOPMENT CO. LTD. THE WEI, IL REF LEGAL EVENT CODE : PFA OLDPARTY : FORMER OWNER: YEDA RESEARCH AND DEVELOPMENT CO. LTD. THE WEIZMANN INSTITUTE OF SCIENCE, IL
EP1370575 B1	20170217	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 16

EP1370575 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20170213 YEAR OF FEE PAYMENT : 16
EP1370575 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20170216 YEAR OF FEE PAYMENT : 16
EP1370575 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20170217 YEAR OF FEE PAYMENT : 16
EP1370575 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170217 YEAR OF FEE PAYMENT : 16
EP1370575 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170217 YEAR OF FEE PAYMENT : 16
EP1370575 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20170216 YEAR OF FEE PAYMENT : 16
EP1370575 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20170216 YEAR OF FEE PAYMENT : 16
EP1370575 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20170220 YEAR OF FEE PAYMENT : 16
EP1370575 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20170216 YEAR OF FEE PAYMENT : 16
EP1370575 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20170217 YEAR OF FEE PAYMENT : 16
EP1370575 B1	20170630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20170221 YEAR OF FEE PAYMENT : 16
EP1370575 B1	20170630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20170213 YEAR OF FEE PAYMENT : 16
EP1370575 B1	20180223	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT :

					17
EP1370575 B1	20180330	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20180216 YEAR OF FEE PAYMENT : 17
EP1370575 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20180216 YEAR OF FEE PAYMENT : 17
EP1370575 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20180216 YEAR OF FEE PAYMENT : 17
EP1370575 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20180219 YEAR OF FEE PAYMENT : 17
EP1370575 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180219 YEAR OF FEE PAYMENT : 17
EP1370575 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20180216 YEAR OF FEE PAYMENT : 17
EP1370575 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20180219 YEAR OF FEE PAYMENT : 17
EP1370575 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20180227 YEAR OF FEE PAYMENT : 17
EP1370575 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20180223 YEAR OF FEE PAYMENT : 17
EP1370575 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20180219 YEAR OF FEE PAYMENT : 17
EP1370575 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20180227 YEAR OF FEE PAYMENT : 17
EP1370575 B1	20190329	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20190218 YEAR OF FEE PAYMENT : 18
EP1370575 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE :

					20190219 YEAR OF FEE PAYMENT : 18
EP1370575 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20190219 YEAR OF FEE PAYMENT : 18
EP1370575 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20190222 YEAR OF FEE PAYMENT : 18
EP1370575 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20190218 YEAR OF FEE PAYMENT : 18
EP1370575 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20190218 YEAR OF FEE PAYMENT : 18
EP1370575 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20190320 YEAR OF FEE PAYMENT : 18
EP1370575 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20190225 YEAR OF FEE PAYMENT : 18
EP1370575 B1	20190531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20190219 YEAR OF FEE PAYMENT : 18
EP1370575 B1	20190531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20190219 YEAR OF FEE PAYMENT : 18
EP1370575 B1	20190531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20190218 YEAR OF FEE PAYMENT : 18
EP1370575 B1	20190531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20190220 YEAR OF FEE PAYMENT : 18
EP1370575 B1	20220226	PEXP		Calculated Patent Term Expiry	
ES2275832 T3	20070616	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2275832 T3	20220226	PEXP		Calculated Patent Term Expiry	
HK1059790 A1	20070427	LSPB	+	published / reissued	
HK1059790 A1	20240414	PEXP		Calculated Patent Term Expiry	
HK1059790 A3	20040716	LSPB	+	published / reissued	
HR20030667 A2	20050630	LSPB	+	published / reissued	
HU0600778 AB	20070129	LSPB	+	published / reissued	

HU0600778 AC	20130828	LSRE	-FA9A	LAPSE OF PROVISIONAL PATENT PROTECTION DUE TO RELINQUISHMENT OR PROTECTION CONSIDERED RELINQUISHED	
HU230372 B1	20160329	LSGT	+	granted / extensions (spc, cpc, pte)	
HU230372 B1	20220226	PEXP		Calculated Patent Term Expiry	
IL157550 A1	20100531	LSPB	+	published / reissued	
IL157550 A1	20101230	LSGT	+FF	PATENT GRANTED	
IL157550 A1	20101230	LSFE	+KB	PATENT RENEWED	
IL157550 A1	20120329	LSFE	+KB	PATENT RENEWED	
IL157550 A1	20160229	LSFE	+KB	PATENT RENEWED	
IN01347DN2003 A	20070803	LSPB	+	published / reissued	
IN232386 B	20090327	LSGT	+	granted / extensions (spc, cpc, pte)	
IN232386 B	20230825	PEXP		Calculated Patent Term Expiry	
IS6908 A	20030811	LSPB	+	published / reissued	
JP2005505493 T2	20050224	LSPB	+	published / reissued	
JP2005505493 T2	20061031	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20061030
JP2005505493 T2	20080312	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20080311
JP2005505493 T2	20080812	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20080811
JP2005505493 T2	20080923	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A821 EFFECTIVE DATE : 20080825
JP2005505493 T2	20081014	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20081010
JP2005505493 T2	20090114	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20090113
JP2005505493 T2	20090417	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2005505493 T2	20090422	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20090421
JP2005505493 T2	20090423	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01
JP2005505493 T2	20090528	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20090521
JP2005505493 T2	20090529	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP2005505493 T2	20090601	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF	YEAR OF FEE PAYMENT : 3

				DATABASE)	
JP4316886 B2	20090819	LSGT	+	granted / extensions (spc, cpc, pte)	
JP4316886 B2	20050107	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20050106
JP4316886 B2	20050107	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20050106
JP4316886 B2	20090526	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP4316886 B2	20120510	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4316886 B2	20120515	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 4
JP4316886 B2	20131107	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4316886 B2	20131112	LSFE	+R250	年金領収書, 年金領収書 (分納) (Pension receipt, annuity receipt (scheduled))	
JP4316886 B2	20140522	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4316886 B2	20140527	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4316886 B2	20150528	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4316886 B2	20150602	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4316886 B2	20160519	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4316886 B2	20160524	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4316886 B2	20170525	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4316886 B2	20170530	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4316886 B2	20180524	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4316886 B2	20180529	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4316886 B2	20190523	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4316886 B2	20190528	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4316886 B2	20220226	PEXP		Calculated Patent Term Expiry	
KR100860735 B1	20080929	LSGT	+	granted / extensions (spc, cpc, pte)	
KR100860735 B1	20120907	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20120907 YEAR OF FEE PAYMENT : 5
KR100860735 B1	20130923	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20130923 YEAR OF FEE PAYMENT : 6
KR100860735 B1	20140912	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20140912 YEAR OF FEE PAYMENT : 7

KR100860735 B1	20150911	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20150911 YEAR OF FEE PAYMENT : 8
KR100860735 B1	20160919	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20160919 YEAR OF FEE PAYMENT : 9
KR100860735 B1	20220226	PEXP		Calculated Patent Term Expiry	
KR20030092004 A	20031203	LSPB	+	published / reissued	
KR20030092004 A	20070226	LSES	A201	REQUEST FOR EXAMINATION	
KR20030092004 A	20080129	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR20030092004 A	20080718	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
KR20030092004 A	20080923	LSGT	+GRNT	WRITTEN DECISION TO GRANT	
MXPA03007622 A1	20040914	LSPB	+	published / reissued	
MXPA03007622 A1	20070924	LSGT	+FG	GRANT OR REGISTRATION	
NO20033718 A	20031009	LSPB	+	published / reissued	
NO331820 B1	20120410	LSGT	+	granted / extensions (spc, cpc, pte)	
NO331820 B1	20230821	PEXP		Calculated Patent Term Expiry	
NZ527499 A	20051223	LSPB	+	published / reissued	
NZ527499 A	20060331	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	
NZ527499 A	20060428	LSGT	+PSEA	PATENT SEALED	
PL373520 A1	20050905	LSPB	+	published / reissued	
PT1370575 T	20070131	LSGT	+	granted / extensions (spc, cpc, pte)	
PT1370575 T	20220226	PEXP		Calculated Patent Term Expiry	
SI1370575 T1	20070430	LSGT	+	granted / extensions (spc, cpc, pte)	
SI1370575 T1	20220226	PEXP		Calculated Patent Term Expiry	
US2004127408 AA	20040701	LSPB	+	published / reissued	
US2004127408 AA	20040126	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : YEDA RESEARCH AND DEVELOPMENT CO., LTD., ISRAEL OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:MOZES, EDNA; REEL/FRAME:014933/0609 EFFECTIVE DATE : 20030831
US2004127408 AA	20080606	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2008119390 AA	20080522	LSPB	+	published / reissued	
US2008119390 AA	20101208	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
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US7858738 BB	20180618	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US7858738 BB	20280320	PEXP		Calculated Patent Term Expiry (PTA 213 days)	
WO02067848 A2	20020906	LSPB	+	published / reissued	
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WO02067848 A3	20030826	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1020037011235 COUNTRY OF REF DOCUMENT : KR
WO02067848 A3	20030827	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 03074108 COUNTRY OF REF DOCUMENT : CO
WO02067848 A3	20030925	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 200300939 COUNTRY OF REF DOCUMENT : EA
WO02067848 A3	20031023	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 028087127 COUNTRY OF REF DOCUMENT : CN
WO02067848 A3	20031203	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1020037011235 COUNTRY OF REF DOCUMENT : KR

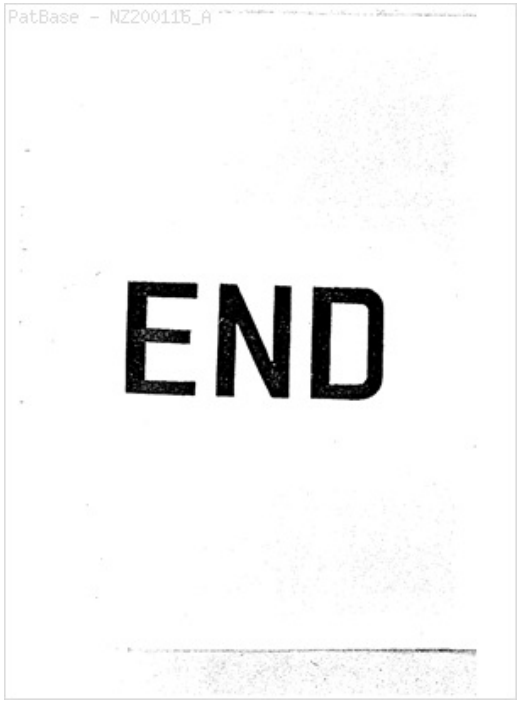
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WO02067848 A3	20051223	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 527499 COUNTRY OF REF DOCUMENT : NZ
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WO02067848 A3	20061122	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2002700553 COUNTRY OF REF DOCUMENT : EP
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ZA200305874 A	20050831	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA200305874 A	20230729	PEXP		Calculated Patent Term Expiry	
ZA200305874 A	20230729	PEXP		Calculated Patent Term Expiry	

22) Family number: 29169033 (US4312994A)

Title: ALPHA CHAIN DIENIC PROSTANOIC ACID DERIVATIVES

Abstract: alpha Diene 16-hydroxy prostanoic acid derivatives displaying valuable pharmacological properties, e.g., gastric antisecretory, are described herein.

Classifications:
International (IPC 8-9): A61K31/557 A61K31/5575 A61P1/04 A61P43/00 C07C29/42 C07C401/00 C07C405/00 C07C45/29 C07C45/59 C07C45/63 C07C49/16 C07C49/207 C07C49/24 C07C59/76 C07C59/82 C07C59/90 C07C67/00 C07D309/12 C07F7/18 C07F7/22 (Advanced/Invention); A61K31/557 A61P43/00 C07C401/00 C07C67/00 (Advanced/Non-invention); A61K31/557 A61P1/00 A61P43/00 C07C29/00 C07C401/00 C07C405/00 C07C45/00 C07C49/00 C07C59/00 C07C67/00 C07D309/00 C07F7/00 (Core/Invention)
International (IPC 1-7): A61K31/557 C07C177/00 C07C405/00 C07C49/16 C07C49/207 C07C49/24 C07C59/00 C07C59/76 C07C59/82 C07C59/88 C07C59/90 C07C61/16 C07C61/38 C07C69/00 C07C69/74 C07C69/757 C07D309/12 C07D317/16 C07D317/26 C07D407/12 C07F7/18 C07F7/22
CPC: C07F7/22 C07C29/42 C07C45/292 C07C45/59 C07C45/63 C07C49/16 C07C49/207 C07C49/24 C07C59/76 C07C59/82 C07C59/90 C07C405/00 C07D309/12 C07F7/1804
European: 124CA7F5 C07C29/42 C07C405/00 C07C45/29C C07C45/59 C07C45/63 C07C49/16 C07C49/207 C07C49/24 C07C59/76 C07C59/82 C07C59/90 C07D309/12 C07F7/18C4D4C C07F7/18C4D4D C07F7/22
US: 554/119 560/118 560/121 562/500 562/503



Family:

Publication number	Publication date	Application number	Application date
AU198281868 A1	19820930	AU19820081868	19820324
AU549996 B2	19860227	AU19820081868	19820324
CA1250835 A1	19890307	CA19820399258	19820324
DE3271238 D1	19860626	DE19823271238	19820324
DK134082 A	19821108	DK19820001340	19820324
EP0061197 A1	19820929	EP19820102451	19820324
EP0061197 B1	19860521	EP19820102451	19820324
ES510819 A0	19840116	ES19820510819	19820325
ES510819 A2	19840216	ES19820510819	19820325
ES524635 A0	19841201	ES19830524635	19830801
ES524635 A2	19841228	ES19830524635	19830801
ES8402267 A1	19840116	ES19820510819	19820325
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FI821042 A	19820926	FI19820001042	19820324
FI821042 A0	19820324	FI19820001042	19820324
FI821042 L	19820926	FI19820001042	19820324
GR81539 B	19841211	GR19820167704	19820323
IE52349 B	19870916	IE19820000686	19820324
IE820686 L	19820925	IE19820000686	19820324
IL65355 A0	19820531	IL19820065355	19820325
IL65355 A1	19851231	IL19820065355	19820325
JP1648552 C3	19920313	JP19820048085	19820325
JP3014017 B4	19910225	JP19820048085	19820325
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NO820983 A	19820927	NO19820000983	19820324
NO820983 L	19820927	NO19820000983	19820324
NZ200116 A	19860124	NZ19820200116	19820524
PH17480 A	19840903	PH19820027053	19820324
PT74635 A	19820401	PT19820074635	19820323
PT74635 B	19831020	PT19820074635	19820323
US4312994 A	19820126	US19810247453	19810325
ZA8201996 A	19830427	ZA19820001996	19820324

Priority:
US19810247453 19810325 CA19820399258 19820324

Probable Assignee: SEARLE AND CO

Assignee(s): (std): SEARLE AND CO ; SEARLE AND CO G D

Assignee(s):	GDS NEWCO INC A CORP OF DE ; SEARLE GD AND CO ; GDS NEWCO INC ; SEARLE G D AND CO ; COLLINS PAUL W ; G D SEARLE AND CO ; GD SEARLE AND CO ; GD SEARLE AND CO 1751 LAKE COOK RD DEERFIELD IL 60 ; GD SEARLE AND CO 1751 LAKE COOK RD DEERFIELD IL 60015 A CORP OF DE ; GD SEARLE AND CO A CORP OF DE ; GD SEARLE LLC
Inventor(s): (std):	COLLINS P W ; PAUL W COLLINS ; HOORU UADERU KORINZU ; COLLINS PAUL W ; COLINS PAUL WADDELL ; COLLINS P ; POORU UADERU KORINZU ; COLLINS PW ; PAUL WADDELL COLINS ; COLLINS PAUL WADDELL
Inventor(s):	PAUL WADDELL COLLINS
Agent(s):	E F WELLINGTON AND CO; OSLER HOSKIN AND HARCOURT LLP; REINHOLD COHN AND PARTNERS
Designated states:	AT BE CH DE FR GB IT LI NL SE

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
AU198281868 A1	19820930	LSPB	+	published / reissued	
AU549996 B2	19860227	LSGT	+	granted / extensions (spc, cpc, pte)	
AU549996 B2	20020324	PEXP		Calculated Patent Term Expiry	
DE3271238 D1	19870619	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE3271238 D1	19940310	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
DK134082 A	19821108	LSPB	+	published / reissued	
DK134082 A	19860414	LSLE	-PBP	PATENT LAPSED	
EP0061197 A1	19820929	LSPB	+	published / reissued	
EP0061197 A1	19830525	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19830317
EP0061197 B1	19860521	LSGT	+	granted / extensions (spc, cpc, pte)	
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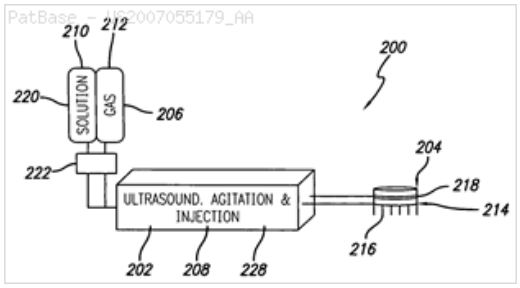
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ES8402267 A1	20040116	PEXP		Calculated Patent Term Expiry	
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FI821042 A	20040831	LSLE	-FD	APPLICATION LAPSED	PARTYTYPE : OWNER OWNER : G.D. SEARLE & CO
GR81539 B	19841211	LSGT	+	granted / extensions (spc, cpc, pte)	
GR81539 B	20020323	PEXP		Calculated Patent Term Expiry	
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JP1648552 C3	20020325	PEXP		Calculated Patent Term Expiry	
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NO820983 A	19820927	LSPB	+	published / reissued	
NZ200116 A	19860124	LSPB	+	published / reissued	
PH17480 A	19840903	LSGT	+	granted / extensions (spc, cpc, pte)	
PH17480 A	20010903	PEXP		Calculated Patent Term Expiry	
PT74635 A	19820401	LSPB	+	published / reissued	
PT74635 B	19831020	LSGT	+	granted / extensions (spc, cpc, pte)	
PT74635 B	20020323	PEXP		Calculated Patent Term Expiry	
US4312994 A	19820126	LSGT	+	granted / extensions (spc, cpc, pte)	
US4312994 A	19810325	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : G.D. SEARLE & CO., P.O. BOX 1045, SKOKIE, ILL. 600 OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNOR:COLLINS PAUL W.; REEL/FRAME:003874/0652 EFFECTIVE DATE : 19810319
US4312994 A	19820203	LSGT	PAT1	Patented Case	
US4312994 A	19820203	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US4312994 A	19850826	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US4312994 A	19860421	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GDS NEWCO INC., 4711 GOLF ROAD, SKOKIE, ILLINOIS A OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNOR:G. D. SEARLE & CO.; REEL/FRAME:004536/0818 EFFECTIVE DATE : 19860101
US4312994 A	19890705	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US4312994 A	19910226	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : G.D. SEARLE AND CO., 1751 LAKE COOK RD., DEERFIELD OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNOR:NUTRASWEET COMPANY, THE; REEL/FRAME:005614/0177 EFFECTIVE DATE : 19910214
US4312994 A	19930628	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US4312994 A	20010325	PEXP		Calculated Patent Term Expiry	
ZA8201996 A	19830427	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA8201996 A	20020323	PEXP		Calculated Patent Term Expiry	

23) Family number: 34277035 (US2007055179A)

Title: METHOD FOR TREATING SUBCUTANEOUS TISSUES

Abstract: An apparatus and method for treating subcutaneous tissues using acoustic waves in the range of low acoustic pressure ultrasound waves is disclosed. The method includes injections of enhancing agents, wherein disruption of subcutaneous tissues and subcutaneous cavitational bioeffects are produced by ultrasound waves having a power that will not produce tissue cavitation in the absence of the enhancing agents. The apparatus and method of use is useful for treatment of subcutaneous abnormalities including cellulite, lipomas, and tumors.



Classifications:

International (IPC 8-9): A61B A61B17/00 A61B17/03 A61B17/20 A61B17/225 A61B17/30 A61B17/32 A61B17/3201 A61B17/3203 A61B17/3209 A61B17/3211 A61B17/34 A61B18/00 A61B18/06 A61B18/12 A61B18/14 A61B18/18 A61B18/20 A61B90/00 A61F2/00 A61F2/02 A61F7/00 A61F7/12 A61H A61H1/00 A61H1/02 A61H23/02 A61H5/00 A61K31/137 A61K38/22 A61K41/00 A61K45/00 A61K9/12 A61M1/00 A61M37/00 A61M5/00 A61M5/142 A61M5/145 A61M5/158 A61M5/32 A61M5/42 A61M5/46 A61M5/50 A61N1/06 A61N1/18 A61N1/30 A61N1/32 A61N5/06 A61N5/067 A61N7/00 A61N7/02 A61P17/00 A61P3/06 B01D47/02 C12N1/06 C12N13/00 (Advanced/Invention); A61B17/00 A61B17/22 A61B17/30 A61B17/32 A61B17/3201 A61B17/3203 A61B17/34 A61B18/00 A61B18/06 A61B18/08 A61B18/14 A61B18/20 A61B19/00 A61B90/00 A61F2/00 A61H23/02 A61M5/30 A61N1/32 A61N1/40 A61N5/06 A61N7/00 A61N7/02 (Advanced/Non-invention); A61B17/00 A61B17/20 A61B17/32 A61B17/34 A61B18/00 A61B18/14 A61B18/18 A61F7/00 A61F7/12 A61H1/00 A61M1/00 A61M37/00 A61M5/00 A61M5/32 A61N1/06 A61N1/18 A61N1/30 A61N1/32 A61N7/00 B01D47/02 C12N1/06 C12N13/00 (Core/Invention)

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European: A61B17/3203 A61B17/3209F A61B17/32E A61B18/14 A61B18/14N A61K41/00M A61M37/00U A61N1/04E1E A61N1/04E2P A61N1/30B4 A61N1/32S A61N7/00 K61B17/00C1T K61B17/00C2A K61B17/00C4P2B K61B17/00R2 K61B17/00R2R K61B17/22B1C2 K61B17/30S K61B17/30S2 K61B17/3201 K61B17/3203 K61B17/3209F K61B17/32E2R K61B17/32K K61B17/32L K61B17/32S K61B17/34D1 K61B17/34D1B K61B17/34J K61B18/00B14 K61B18/00B16C K61B18/00B4 K61B18/00B6 K61B18/00F8 K61B18/00F8B K61B18/00G6 K61B18/00H10A K61B18/00H12B K61B18/00H12R K61B18/00H14 K61B18/14B K61B18/14C12 K61B18/14C12B K61B18/14C12C K61B18/14C4 K61B18/14N K61B18/14V K61B18/18 K61B18/18M8 K61B18/20 K61B18/20H K61B19/46H2 K61B19/48H8 K61B19/48N K61B218/00D2 K61H201/02H K61H201/10 K61H201/10N K61H23/02P K61K9/00L8 K61M202/09B K61M37/00M2 K61M37/00U K61M5/158G K61M5/30J K61N1/30B4 K61N1/32S K61N1/32T K61N1/40T K61N5/06W4 K61N7/00A2 K61N7/00B K61N7/02

US: 1/1 261/77 261/77P 424/9.5 424/9.52 435/259 435/259P 600/2 600/439 600/461 600/464 600/471 600/560 601/1 601/17 601/2 601/2P 601/3 601/6 604/115 604/151 604/151P 604/173 604/173P 604/174 604/20 604/20S 604/21 604/21P 604/22 604/22P 604/22S 604/24 604/24P 604/257 604/257S 604/272 604/272S 604/319 604/319P 604/500 604/506 604/506S 604/511 604/518 604/93.01 604/93.010S 606/1 606/108 606/13 606/151 606/151S 606/166 606/167 606/167 606/170 606/171 606/171S 606/172 606/185 606/185S 606/186 606/33 606/33S 606/34 606/37 606/41 606/41S 606/45 606/46 606/49 606/9 607/99 607/99P

Family:

Publication number	Publication date	Application number	Application date
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Probable Assignee: ULTHERA INC

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Agent(s): SHELSTON IP; SHELSTON IP PTY LTD; FB RICE; FB RICE PTY LTD; IN LEGAL LTD; SMART AND BIGGAR; STOLMAR AND PARTNER PATENTANWAELTE PARTG MBB; WALLINGER RICKER SCHLOTTER TOSTMANN PATENT U RECHTSANWAELTE PARTNERSCHAFT MBB; MCLEISH NICHOLAS ALISTAIR MAXWELL; RICKER MATHIAS; BOULT WADE TENNANT; LINAGE RAFAEL; ELZABURU SLP ELZABURU SLP; MARKS AND CLERK; SPRUSON AND FERGUSON HONG KONG LTD; NAGAI HIROSHI; TACHIBANA KENJI; TANAKA JUNYA; CANAN OEZTUERKER; AYLIN SENER; FULWIDER PATTON - CABOCHON AESTHETICS; FULWIDER PATTON CABOCHON AESTHETICS; FULWIDER PATTON; FULWIDER PATTON LLP; JONATHAN; KNOBBE MARTENS OLSON AND BEAR LLP; NAGY JOHN S; JOHN S NAGY; KENNETH C CHENEY

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AU2006287633 AA	20070315	LSPB	+	published / reissued	
AU2006287633 AA	20091126	LSLE	-MK1	APPLICATION LAPSED SECTION 142(2)(A) - NO REQUEST FOR EXAMINATION IN RELEVANT PERIOD	
AU2006287633 AA	20120329	LSLE	-MK4	APPLICATION LAPSED SECTION 142(2)(D) - NO CONTINUATION FEE PAID FOR THE APPLICATION	
AU2006287678 AA	20070315	LSPB	+	published / reissued	
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AU2008270794 AA	20090108	LSPB	+	published / reissued	
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AU2011285506 AA	20141211	LSLE	-MK1	APPLICATION LAPSED SECTION 142(2)(A) - NO REQUEST FOR EXAMINATION IN RELEVANT PERIOD	
AU2015201960 AA	20150507	LSPB	+	published / reissued	
AU2015201960 AA	20170817	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU2015201960 BB	20170420	LSGT	+	granted / extensions (spc, cpc, pte)	
AU2015201960 BB	20350417	PEXP		Calculated Patent Term Expiry	
AU2017204393 AA	20170720	LSPB	+	published / reissued	
AU2017204393 BB	20180315	LSGT	+	granted / extensions (spc, cpc, pte)	
AU2017204393 BB	20180712	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU2017204393 BB	20370628	PEXP		Calculated Patent Term Expiry	
BR112013002988 A2	20180116	LSAS	B25A	REQUESTED TRANSFER OF RIGHTS APPROVED	PARTYTYPE : OWNER OWNER : ULTHERA, INC. (US)
CA2621354 AA	20080304	LSPB	+	published / reissued	
CA2621354 AA	20100519	LSES	+EEER	EXAMINATION REQUEST	
CA2621354 AA	20120830	LSLE	-FZDE	DEAD	
CA2621535 AA	20080305	LSPB	+	published / reissued	
CA2621535 AA	20120905	LSLE	-FZDE	DEAD	
CA2702420 AA	20090108	LSPB	+	published / reissued	
CA2702420 AA	20120618	LSLE	-FZDE	DEAD	
CA2769813 AA	20120130	LSPB	+	published / reissued	
CA2769813 AA	20150817	LSES	+EEER	EXAMINATION REQUEST	EFFECTIVE DATE : 20150805
CA2769813 C	20180109	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2769813 C	20300806	PEXP		Calculated Patent	

				Term Expiry	
CA2800553 AA	20121122	LSPB	+	published / reissued	
CA2800553 AA	20160530	LSES	+EEER	EXAMINATION REQUEST	EFFECTIVE DATE : 20160524
CA2800553 C	20180515	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2800553 C	20310524	PEXP		Calculated Patent Term Expiry	
CA2807563 AA	20130205	LSPB	+	published / reissued	
CA2807563 AA	20160921	LSLE	-FZDE	DEAD	EFFECTIVE DATE : 20160810
CN103153227 A	20130612	LSPB	+	published / reissued	
CN103153227 A	20130612	LSPB	+C06	PUBLICATION	
CN103153227 A	20140806	LSAS	ASS	SUCCESSION OR ASSIGNMENT OF PATENT RIGHT	PARTYTYPE : OWNER OWNER : ULTHERA INC. OLDPARTY : FORMER OWNER: CABOCHON AESTHETICS INC. EFFECTIVE DATE : 20140715
CN103153227 A	20140806	LSAS	C41	TRANSFER OF PATENT APPLICATION OR PATENT RIGHT OR UTILITY MODEL	
CN103153227 B	20160309	LSGT	+	granted / extensions (spc, cpc, pte)	
CN103153227 B	20160309	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN103153227 B	20310808	PEXP		Calculated Patent Term Expiry	
CN103153227 B8	20160810	LSRE	C53	CORRECTION OF PATENT FOR INVENTION OR PATENT APPLICATION	
CN105963014 A	20160928	LSPB	+	published / reissued	
CN105963014 A	20160928	LSPB	+C06	PUBLICATION	
CN105963014 A	20180904	LSAS	CB02	CHANGE OF APPLICANT INFORMATION	
CN105963014 B	20180907	LSGT	+	granted / extensions (spc, cpc, pte)	
CN105963014 B	20180907	LSGT	+GR01	PATENT GRANT	
CN105963014 B	20310808	PEXP		Calculated Patent Term Expiry	
DK2461758 T3	20170717	LSGT	+	granted / extensions (spc, cpc, pte)	
DK2461758 T3	20300806	PEXP		Calculated Patent Term Expiry	
DK2575647 T3	20160517	LSGT	+	granted / extensions (spc, cpc, pte)	
DK2575647 T3	20310524	PEXP		Calculated Patent Term Expiry	
EP1928540 A2	20080611	LSPB	+	published / reissued	
EP1928540 A2	20080611	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20080328
EP1928540 A4	20100310	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	EFFECTIVE DATE : 20100204

EP1928540 A4	20110105	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20100504
EP1940300 A2	20080709	LSPB	+	published / reissued	
EP1940300 A2	20080709	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20080328
EP1940300 A4	20100224	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	EFFECTIVE DATE : 20100126
EP1940300 A4	20100714	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20100614
EP1940300 A4	20110622	LSRE	RTI1	TITLE (CORRECTION)	TEXT : APPARATUS FOR TREATING SUBCUTANEOUS TISSUES
EP1940300 A4	20120502	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20111103
EP2173870 A1	20100414	LSPB	+	published / reissued	
EP2173870 A1	20100414	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20100129
EP2173870 A1	20120627	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20120103
EP2461758 A1	20120613	LSPB	+	published / reissued	
EP2461758 A1	20120613	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20120305
EP2461758 A4	20130918	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	EFFECTIVE DATE : 20130821
EP2461758 A4	20141015	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : ULTHERA, INC.
EP2461758 A4	20160127	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20160104
EP2461758 A4	20161221	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20161123
EP2461758 B1	20170607	LSGT	+	granted / extensions (spc, cpc, pte)	
EP2461758 B1	20170607	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20170502
EP2461758 B1	20170607	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP2461758 B1	20170615	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP2461758 B1	20170615	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 898631 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20170615
EP2461758 B1	20170628	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP2461758 B1	20170720	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602010042865 COUNTRY OF REF DOCUMENT : DE

EP2461758 B1	20170731	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NO REF LEGAL EVENT CODE : T2 EFFECTIVE DATE : 20170607
EP2461758 B1	20170801	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2628009 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) : EFFECTIVE DATE : 20170801
EP2461758 B1	20170823	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 8
EP2461758 B1	20170929	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20170823 YEAR OF FEE PAYMENT : 8
EP2461758 B1	20170929	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20170823 YEAR OF FEE PAYMENT : 8
EP2461758 B1	20171025	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : LT REF LEGAL EVENT CODE : MG4D
EP2461758 B1	20171031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170908
EP2461758 B1	20171031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170607
EP2461758 B1	20171031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170607
EP2461758 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20170901 YEAR OF FEE PAYMENT : 8
EP2461758 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20170726 YEAR OF FEE PAYMENT : 8
EP2461758 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170823 YEAR OF FEE PAYMENT : 8
EP2461758 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NO PAYMENT DATE : 20170822 YEAR OF FEE PAYMENT : 8
EP2461758 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170823 YEAR OF FEE PAYMENT : 8
EP2461758 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20170824 YEAR OF FEE PAYMENT : 8

				[ANNOUNCED FROM NATIONAL OFFICE TO EPO]	
EP2461758 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20170821 YEAR OF FEE PAYMENT : 8
EP2461758 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20170822 YEAR OF FEE PAYMENT : 8
EP2461758 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20170830 YEAR OF FEE PAYMENT : 8
EP2461758 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20170928 YEAR OF FEE PAYMENT : 8
EP2461758 B1	20171130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LV NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170607
EP2461758 B1	20171130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170907
EP2461758 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20170727 YEAR OF FEE PAYMENT : 8
EP2461758 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20170824 YEAR OF FEE PAYMENT : 8
EP2461758 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20170802 YEAR OF FEE PAYMENT : 8
EP2461758 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20170821 YEAR OF FEE PAYMENT : 8
EP2461758 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20170830 YEAR OF FEE PAYMENT : 8
EP2461758 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20170822 YEAR OF FEE PAYMENT : 8
EP2461758 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20170726 YEAR OF FEE PAYMENT : 8
EP2461758 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20170823 YEAR OF FEE PAYMENT : 8

				[ANNOUNCED FROM NATIONAL OFFICE TO EPO]	
EP2461758 B1	20180131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170607
EP2461758 B1	20180131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170607
EP2461758 B1	20180131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170607
EP2461758 B1	20180228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SM NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170607
EP2461758 B1	20180228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IS NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20171007
EP2461758 B1	20180308	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 602010042865 COUNTRY OF REF DOCUMENT : DE
EP2461758 B1	20180516	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20180308
EP2461758 B1	20180531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170607
EP2461758 B1	20180824	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 9
EP2461758 B1	20180928	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20170806
EP2461758 B1	20180928	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20180822 YEAR OF FEE PAYMENT : 9
EP2461758 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20180921 YEAR OF FEE PAYMENT : 9
EP2461758 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20180822 YEAR OF FEE PAYMENT : 9

EP2461758 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20180823 YEAR OF FEE PAYMENT : 9
EP2461758 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20180824 YEAR OF FEE PAYMENT : 9
EP2461758 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180827 YEAR OF FEE PAYMENT : 9
EP2461758 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20180823 YEAR OF FEE PAYMENT : 9
EP2461758 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NO PAYMENT DATE : 20180823 YEAR OF FEE PAYMENT : 9
EP2461758 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20180823 YEAR OF FEE PAYMENT : 9
EP2461758 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20180821 YEAR OF FEE PAYMENT : 9
EP2461758 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20180827 YEAR OF FEE PAYMENT : 9
EP2461758 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20180726 YEAR OF FEE PAYMENT : 9
EP2461758 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20180828 YEAR OF FEE PAYMENT : 9
EP2461758 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20180827 YEAR OF FEE PAYMENT : 9
EP2461758 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20180724 YEAR OF FEE PAYMENT : 9
EP2461758 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20180827 YEAR OF FEE PAYMENT : 9
EP2461758 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20180821 YEAR OF FEE PAYMENT : 9
EP2461758 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20180725 YEAR OF FEE PAYMENT : 9

				[ANNOUNCED FROM NATIONAL OFFICE TO EPO]	
EP2461758 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20180822 YEAR OF FEE PAYMENT : 9
EP2461758 B1	20181231	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20180730 YEAR OF FEE PAYMENT : 9
EP2461758 B1	20190415	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : UEP REF DOCUMENT NUMBER : 898631 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20170607
EP2461758 B1	20190628	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT; INVALID AB INITIO LAPSED DATE : 20100806
EP2461758 B1	20300806	PEXP		Calculated Patent Term Expiry	
EP2575647 A1	20130410	LSPB	+	published / reissued	
EP2575647 A1	20130410	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20121130
EP2575647 A1	20141015	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : ULTHERA, INC.
EP2575647 A1	20160630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20160513 YEAR OF FEE PAYMENT : 6
EP2575647 A1	20160630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20160510 YEAR OF FEE PAYMENT : 6
EP2575647 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20160509 YEAR OF FEE PAYMENT : 6
EP2575647 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NO PAYMENT DATE : 20160513 YEAR OF FEE PAYMENT : 6
EP2575647 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20160505 YEAR OF FEE PAYMENT : 6
EP2575647 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20160621 YEAR OF FEE PAYMENT : 6
EP2575647 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HR PAYMENT DATE : 20160523 YEAR OF FEE PAYMENT : 6
EP2575647 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20160511

				OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	YEAR OF FEE PAYMENT : 6
EP2575647 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20160518 YEAR OF FEE PAYMENT : 6
EP2575647 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20160511 YEAR OF FEE PAYMENT : 6
EP2575647 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20160511 YEAR OF FEE PAYMENT : 6
EP2575647 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20160509 YEAR OF FEE PAYMENT : 6
EP2575647 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20160518 YEAR OF FEE PAYMENT : 6
EP2575647 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20160531 YEAR OF FEE PAYMENT : 6
EP2575647 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20160510 YEAR OF FEE PAYMENT : 6
EP2575647 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20160513 YEAR OF FEE PAYMENT : 6
EP2575647 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20160516 YEAR OF FEE PAYMENT : 6
EP2575647 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20160506 YEAR OF FEE PAYMENT : 6
EP2575647 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20160516 YEAR OF FEE PAYMENT : 6
EP2575647 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20160509 YEAR OF FEE PAYMENT : 6
EP2575647 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20160511 YEAR OF FEE PAYMENT : 6
EP2575647 A1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20160715 YEAR OF FEE PAYMENT : 6

EP2575647 A1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20160509 YEAR OF FEE PAYMENT : 6
EP2575647 A1	20170228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20160620 YEAR OF FEE PAYMENT : 6
EP2575647 A4	20150923	LSES	+RA4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED (CORRECTED)	EFFECTIVE DATE : 20150821
EP2575647 A4	20151118	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20151021
EP2575647 A4	20160217	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20160119
EP2575647 B1	20160427	LSGT	+	granted / extensions (spc, cpc, pte)	
EP2575647 B1	20160427	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP2575647 B1	20160429	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP2575647 B1	20160515	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 793856 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20160515
EP2575647 B1	20160516	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 6
EP2575647 B1	20160518	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP2575647 B1	20160526	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2571736 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) : EFFECTIVE DATE : 20160526
EP2575647 B1	20160616	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602011025984 COUNTRY OF REF DOCUMENT : DE
EP2575647 B1	20160711	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NO REF LEGAL EVENT CODE : T2 EFFECTIVE DATE : 20160427
EP2575647 B1	20160825	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : LT REF LEGAL EVENT CODE : MG4D
EP2575647 B1	20161003	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : EP REF DOCUMENT NUMBER : 20160401255 COUNTRY OF REF DOCUMENT : GR EFFECTIVE DATE : 20160729
EP2575647 B1	20161031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160427

EP2575647 B1	20161128	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HU REF LEGAL EVENT CODE : AG4A REF DOCUMENT NUMBER : E027951 COUNTRY OF REF DOCUMENT : HU
EP2575647 B1	20161130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LV NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160427
EP2575647 B1	20161130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RS NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160427
EP2575647 B1	20170130	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 602011025984 COUNTRY OF REF DOCUMENT : DE
EP2575647 B1	20170131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160427
EP2575647 B1	20170131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160427
EP2575647 B1	20170131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160427
EP2575647 B1	20170228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SM NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160427
EP2575647 B1	20170405	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20170130
EP2575647 B1	20170522	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 7
EP2575647 B1	20170630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20170522 YEAR OF FEE PAYMENT : 7
EP2575647 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20170517 YEAR OF FEE PAYMENT : 7
EP2575647 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20170523 YEAR OF FEE PAYMENT : 7
EP2575647 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170522 YEAR OF FEE PAYMENT : 7

				OFFICE TO EPO]	
EP2575647 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170522 YEAR OF FEE PAYMENT : 7
EP2575647 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NO PAYMENT DATE : 20170523 YEAR OF FEE PAYMENT : 7
EP2575647 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20170522 YEAR OF FEE PAYMENT : 7
EP2575647 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20170524 YEAR OF FEE PAYMENT : 7
EP2575647 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20170524 YEAR OF FEE PAYMENT : 7
EP2575647 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20170523 YEAR OF FEE PAYMENT : 7
EP2575647 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HR PAYMENT DATE : 20170515 YEAR OF FEE PAYMENT : 7
EP2575647 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20170519 YEAR OF FEE PAYMENT : 7
EP2575647 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20170522 YEAR OF FEE PAYMENT : 7
EP2575647 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20170519 YEAR OF FEE PAYMENT : 7
EP2575647 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20170524 YEAR OF FEE PAYMENT : 7
EP2575647 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20170519 YEAR OF FEE PAYMENT : 7
EP2575647 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20170518 YEAR OF FEE PAYMENT : 7
EP2575647 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20170601 YEAR OF FEE PAYMENT : 7
EP2575647 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID	COUNTRY OF REF DOCUMENT : PT

				TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	PAYMENT DATE : 20170519 YEAR OF FEE PAYMENT : 7
EP2575647 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20170522 YEAR OF FEE PAYMENT : 7
EP2575647 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20170515 YEAR OF FEE PAYMENT : 7
EP2575647 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20170523 YEAR OF FEE PAYMENT : 7
EP2575647 B1	20170929	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20170522 YEAR OF FEE PAYMENT : 7
EP2575647 B1	20170929	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20170512 YEAR OF FEE PAYMENT : 7
EP2575647 B1	20180523	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 8
EP2575647 B1	20180531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160427
EP2575647 B1	20180629	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20160531
EP2575647 B1	20180629	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160427
EP2575647 B1	20180629	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IS NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160427
EP2575647 B1	20180629	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20180523 YEAR OF FEE PAYMENT : 8
EP2575647 B1	20180731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160427
EP2575647 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20180523 YEAR OF FEE PAYMENT : 8

				FROM NATIONAL OFFICE TO EPO]	
EP2575647 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180524 YEAR OF FEE PAYMENT : 8
EP2575647 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20180517 YEAR OF FEE PAYMENT : 8
EP2575647 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20180518 YEAR OF FEE PAYMENT : 8
EP2575647 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20180514 YEAR OF FEE PAYMENT : 8
EP2575647 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20180515 YEAR OF FEE PAYMENT : 8
EP2575647 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NO PAYMENT DATE : 20180522 YEAR OF FEE PAYMENT : 8
EP2575647 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HR PAYMENT DATE : 20180514 YEAR OF FEE PAYMENT : 8
EP2575647 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20180521 YEAR OF FEE PAYMENT : 8
EP2575647 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20180523 YEAR OF FEE PAYMENT : 8
EP2575647 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20180626 YEAR OF FEE PAYMENT : 8
EP2575647 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20180523 YEAR OF FEE PAYMENT : 8
EP2575647 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20180517 YEAR OF FEE PAYMENT : 8
EP2575647 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20180521 YEAR OF FEE PAYMENT : 8
EP2575647 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20180523 YEAR OF FEE PAYMENT : 8
EP2575647 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID	COUNTRY OF REF DOCUMENT : FR

				TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	PAYMENT DATE : 20180523 YEAR OF FEE PAYMENT : 8
EP2575647 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20180515 YEAR OF FEE PAYMENT : 8
EP2575647 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20180516 YEAR OF FEE PAYMENT : 8
EP2575647 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20180511 YEAR OF FEE PAYMENT : 8
EP2575647 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20180518 YEAR OF FEE PAYMENT : 8
EP2575647 B1	20180928	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20180511 YEAR OF FEE PAYMENT : 8
EP2575647 B1	20180928	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20180523 YEAR OF FEE PAYMENT : 8
EP2575647 B1	20181015	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : UEP REF DOCUMENT NUMBER : 793856 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20160427
EP2575647 B1	20181031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160427
EP2575647 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20180523 YEAR OF FEE PAYMENT : 8
EP2575647 B1	20190628	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20190521 YEAR OF FEE PAYMENT : 9
EP2575647 B1	20190628	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20190521 YEAR OF FEE PAYMENT : 9
EP2575647 B1	20310524	PEXP		Calculated Patent Term Expiry	
EP2600793 A1	20130612	LSPB	+	published / reissued	
EP2600793 A1	20130612	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20130220
EP2600793 A4	20140521	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	EFFECTIVE DATE : 20140424

EP2600793 A4	20141112	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : ULTHERA, INC.
EP2600793 A4	20150722	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20141125
EP2987459 A1	20160224	LSPB	+	published / reissued	
EP2987459 A1	20161005	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20160824
EP2987459 A1	20161116	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20161017
EP2987459 B1	20170405	LSGT	+	granted / extensions (spc, cpc, pte)	
EP2987459 B1	20170405	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP2987459 B1	20170413	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP2987459 B1	20170415	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 881038 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20170415
EP2987459 B1	20170503	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP2987459 B1	20170518	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602011036797 COUNTRY OF REF DOCUMENT : DE
EP2987459 B1	20170531	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 7
EP2987459 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170531 YEAR OF FEE PAYMENT : 7
EP2987459 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170531 YEAR OF FEE PAYMENT : 7
EP2987459 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20170530 YEAR OF FEE PAYMENT : 7
EP2987459 B1	20170825	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : LT REF LEGAL EVENT CODE : MG4D
EP2987459 B1	20170915	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MK05 REF DOCUMENT NUMBER : 881038 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20170405
EP2987459 B1	20170929	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170405
EP2987459 B1	20171031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE	COUNTRY OF REF DOCUMENT : NO NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A

				[ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170705
EP2987459 B1	20171031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170405
EP2987459 B1	20171031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170706
EP2987459 B1	20171031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170405
EP2987459 B1	20171031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170405
EP2987459 B1	20171031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170405
EP2987459 B1	20171031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170405
EP2987459 B1	20171130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170405
EP2987459 B1	20171130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IS NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170805
EP2987459 B1	20171130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RS NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170405
EP2987459 B1	20171130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LV NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170405
EP2987459 B1	20171130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION	COUNTRY OF REF DOCUMENT : SE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT

				FROM NATIONAL OFFICE TO EPO]	LAPSED DATE : 20170405
EP2987459 B1	20171130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170705
EP2987459 B1	20171229	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP2987459 B1	20180108	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 602011036797 COUNTRY OF REF DOCUMENT : DE
EP2987459 B1	20180131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170405
EP2987459 B1	20180131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170405
EP2987459 B1	20180131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170405
EP2987459 B1	20180131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170405
EP2987459 B1	20180131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170405
EP2987459 B1	20180131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170405
EP2987459 B1	20180221	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP2987459 B1	20180228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20170531
EP2987459 B1	20180228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SM NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170405
EP2987459 B1	20180228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE	COUNTRY OF REF DOCUMENT : IT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A

				[ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170405
EP2987459 B1	20180228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20170531
EP2987459 B1	20180314	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20180108
EP2987459 B1	20180330	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20170524
EP2987459 B1	20180413	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HK REF LEGAL EVENT CODE : GR REF DOCUMENT NUMBER : 1224536 COUNTRY OF REF DOCUMENT : HK
EP2987459 B1	20180430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20170524
EP2987459 B1	20180523	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 8
EP2987459 B1	20180531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170405
EP2987459 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180524 YEAR OF FEE PAYMENT : 8
EP2987459 B1	20180831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20170531
EP2987459 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20180523 YEAR OF FEE PAYMENT : 8
EP2987459 B1	20180928	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20170524
EP2987459 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20180523 YEAR OF FEE PAYMENT : 8
EP2987459 B1	20190628	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL	COUNTRY OF REF DOCUMENT : HU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT; INVALID AB INITIO

				OFFICE TO EPO]	LAPSED DATE : 20110524
EP2987459 B1	20310524	PEXP		Calculated Patent Term Expiry	
EP3272303 A1	20180124	LSPB	+	published / reissued	
EP3272303 A1	20180829	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20180724
EP3272303 A1	20190508	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20190404
ES2571736 T3	20160526	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2571736 T3	20310524	PEXP		Calculated Patent Term Expiry	
ES2628009 T3	20170801	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2628009 T3	20300806	PEXP		Calculated Patent Term Expiry	
HK1224536 A1	20170825	LSPB	+	published / reissued	
HK1224536 B	20180413	LSGT	+	granted / extensions (spc, cpc, pte)	
HK1224536 B	20360812	PEXP		Calculated Patent Term Expiry	
HK1228713 A1	20171110	LSPB	+	published / reissued	
HR20160498 T1	20160715	LSPB	+	published / reissued	
HU027951 T2	20161128	LSPB	+	published / reissued	
IN00500KN2013 A	20130712	LSPB	+	published / reissued	
JP2009506870 T2	20090219	LSPB	+	published / reissued	
JP2009506870 T2	20090829	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20090828
JP2009506870 T2	20090829	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20090828
JP2009506870 T2	20100211	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20100210
JP2009506870 T2	20110831	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20110830
JP2009506870 T2	20120208	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20120207
JP2009506873 T2	20090219	LSPB	+	published / reissued	
JP2009506873 T2	20090908	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20090907
JP2009506873 T2	20120125	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20120124
JP2009506873 T2	20120723	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20120720
JP2010532219 T2	20101007	LSPB	+	published /	

				reissued	
JP2010532219 T2	20110906	LSWD	-A300	WITHDRAWAL OF APPLICATION BECAUSE OF NO REQUEST FOR EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A300 EFFECTIVE DATE : 20110906
JP2013501538 T2	20130117	LSPB	+	published / reissued	
JP2013501538 T2	20130517	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20130516
JP2013501538 T2	20140226	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20140225
JP2013501538 T2	20140711	LSAS	A711	NOTIFICATION OF CHANGE IN APPLICANT	TEXT : JAPANESE INTERMEDIATE CODE: A712 EFFECTIVE DATE : 20140710
JP2013501538 T2	20140806	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A821 EFFECTIVE DATE : 20140710
JP2013501538 T2	20140823	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20140822
JP2013501538 T2	20150204	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20150203
JP2013501538 T2	20150427	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20150427
JP2013501538 T2	20150812	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20150811
JP2013501538 T2	20151009	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20151009
JP2013501538 T2	20160229	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2013501538 T2	20160309	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20160308
JP2013501538 T2	20160407	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20160331
JP2013501538 T2	20160408	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 5912080 COUNTRY OF REF DOCUMENT : JP
JP2013526967 T2	20130627	LSPB	+	published / reissued	
JP2013526967 T2	20140524	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20140523
JP2013526967 T2	20140711	LSAS	A711	NOTIFICATION OF CHANGE IN APPLICANT	TEXT : JAPANESE INTERMEDIATE CODE: A712 EFFECTIVE DATE : 20140710
JP2013526967 T2	20150126	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20150125
JP2013526967 T2	20150129	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20150129

JP2013526967 T2	20150129	LSAS	A711	NOTIFICATION OF CHANGE IN APPLICANT	TEXT : JAPANESE INTERMEDIATE CODE: A711 EFFECTIVE DATE : 20150129
JP2013526967 T2	20150217	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A821 EFFECTIVE DATE : 20150129
JP2013526967 T2	20150311	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20150310
JP2013526967 T2	20150601	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20150531
JP2013526967 T2	20150721	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2013526967 T2	20150729	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20150728
JP2013526967 T2	20150903	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20150826
JP2013526967 T2	20150904	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 5801386 COUNTRY OF REF DOCUMENT : JP
JP2013534156 T2	20130902	LSPB	+	published / reissued	
JP2013534156 T2	20140711	LSAS	A711	NOTIFICATION OF CHANGE IN APPLICANT	TEXT : JAPANESE INTERMEDIATE CODE: A712 EFFECTIVE DATE : 20140710
JP2013534156 T2	20141104	LSWD	-A300	WITHDRAWAL OF APPLICATION BECAUSE OF NO REQUEST FOR EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A300 EFFECTIVE DATE : 20141104
JP2016013451 A2	20160128	LSPB	+	published / reissued	
JP2016013451 A2	20160830	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20160830
JP2016013451 A2	20161122	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20161122
JP2016013451 A2	20170110	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20170110
JP2016013451 A2	20170323	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20170323
JP2016013451 A2	20170525	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2016013451 A2	20170530	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20170530
JP2016013451 A2	20170706	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20170629
JP2016013451 A2	20170707	LSGT	+R150	CERTIFICATE OF PATENT OR	TEXT : JAPANESE INTERMEDIATE CODE: R150

				REGISTRATION OF UTILITY MODEL	REF DOCUMENT NUMBER : 6170105 COUNTRY OF REF DOCUMENT : JP
JP2017196464 A2	20171102	LSPB	+	published / reissued	
JP2017196464 A2	20170725	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20170725
JP2017196464 A2	20170725	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20170725
JP2017196464 A2	20180424	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20180424
JP2017196464 A2	20180720	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20180720
JP2017196464 A2	20180927	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2017196464 A2	20181002	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20181002
JP2017196464 A2	20181101	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20181024
JP2017196464 A2	20181102	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 6426238 COUNTRY OF REF DOCUMENT : JP
JP5801386 B2	20151028	LSGT	+	granted / extensions (spc, cpc, pte)	
JP5801386 B2	20150730	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP5801386 B2	20150901	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP5801386 B2	20150904	LSGT	+R150	特許証 (Patent certificate)	
JP5801386 B2	20180830	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5801386 B2	20180904	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5801386 B2	20310524	PEXP		Calculated Patent Term Expiry	
JP5912080 B2	20160427	LSGT	+	granted / extensions (spc, cpc, pte)	
JP5912080 B2	20160310	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP5912080 B2	20160405	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP5912080 B2	20160408	LSGT	+R150	特許証 (Patent certificate)	
JP5912080 B2	20190404	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5912080 B2	20190409	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5912080 B2	20300806	PEXP		Calculated Patent Term Expiry	

JP6170105 B2	20170726	LSGT	+	granted / extensions (spc, cpc, pte)
JP6170105 B2	20170601	LSGT	+A01	特許査定書 (Decision of patent grant)
JP6170105 B2	20170704	LSFE	R100	特許料納付書 (Patent fee payment form)
JP6170105 B2	20170707	LSGT	+R150	特許証 (Patent certificate)
JP6170105 B2	20350826	PEXP		Calculated Patent Term Expiry
JP6426238 B2	20181121	LSGT	+	granted / extensions (spc, cpc, pte)
JP6426238 B2	20181004	LSGT	+A01	特許査定書 (Decision of patent grant)
JP6426238 B2	20181030	LSFE	R100	特許料納付書 (Patent fee payment form)
JP6426238 B2	20181102	LSGT	+R150	特許証 (Patent certificate)
JP6426238 B2	20370629	PEXP		Calculated Patent Term Expiry
KR101708888 B1	20170221	LSGT	+	granted / extensions (spc, cpc, pte)
KR101708888 B1	20140711	LSAS	N231	NOTIFICATION OF CHANGE OF APPLICANT
KR101708888 B1	20160804	LSES	A201	REQUEST FOR EXAMINATION
KR101708888 B1	20160804	LSES	A302	REQUEST FOR ACCELERATED EXAMINATION
KR101708888 B1	20160830	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL
KR101708888 B1	20161116	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT
KR101708888 B1	20310808	PEXP		Calculated Patent Term Expiry
KR101899422 B1	20181004	LSGT	+	granted / extensions (spc, cpc, pte)
KR101899422 B1	20310808	PEXP		Calculated Patent Term Expiry
KR20130094818 A	20130826	LSPB	+	published / reissued
KR20130094818 A	20160804	LSES	A201	REQUEST FOR EXAMINATION
KR20130094818 A	20160804	LSES	A302	REQUEST FOR ACCELERATED EXAMINATION
KR20130094818 A	20160830	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL
KR20130094818 A	20161116	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT
KR20170020938 A	20170224	LSPB	+	published / reissued
KR20170020938 A	20170316	LSES	A201	REQUEST FOR EXAMINATION
KR20170020938 A	20180309	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL

KR20170020938 A	20180711	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
KR20170020938 A	20180911	LSGT	+GRNT	WRITTEN DECISION TO GRANT	
MX2013001440 A1	20130605	LSPB	+	published / reissued	
MX2013001440 A1	20140915	LSAS	GB	TRANSFER OR ASSIGNMENT	
MX2013001440 A1	20140915	LSAS	GB	TRANSFER OR ASSIGNMENT	PARTYTYPE : OWNER OWNER : ULTHERA, INC.
MX2013001440 A1	20181217	LSGT	+FG	GRANT OR REGISTRATION	
MX361803 B	20181217	LSGT	+	granted / extensions (spc, cpc, pte)	
MX361803 B	20310808	PEXP		Calculated Patent Term Expiry	
PL2461758 T3	20170929	LSGT	+	granted / extensions (spc, cpc, pte)	
PL2575647 T3	20170228	LSGT	+	granted / extensions (spc, cpc, pte)	
PT2461758 T	20170705	LSGT	+	granted / extensions (spc, cpc, pte)	
PT2461758 T	20300806	PEXP		Calculated Patent Term Expiry	
SI2575647 T1	20160729	LSGT	+	granted / extensions (spc, cpc, pte)	
SI2575647 T1	20310524	PEXP		Calculated Patent Term Expiry	
TR201606297 T4	20160621	LSGT	+	granted / extensions (spc, cpc, pte)	
TR201606297 T4	20310524	PEXP		Calculated Patent Term Expiry	
TR201709479 T4	20170721	LSGT	+	granted / extensions (spc, cpc, pte)	
TR201709479 T4	20300806	PEXP		Calculated Patent Term Expiry	
US10271866 BB	20190430	LSGT	+	granted / extensions (spc, cpc, pte)	
US10271866 BB	20190410	LSGT	PAT1	Patented Case	
US10271866 BB	20371007	PEXP		Calculated Patent Term Expiry (PTA 341 days and a terminal disclaimer has been filed)	
US2007055179 AA	20070308	LSPB	+	published / reissued	
US2007055179 AA	20090715	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CABOCHON AESTHETICS, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:THE FOUNDRY, INC.; REEL/FRAME:022961/0788 EFFECTIVE DATE : 20090710
US2007055179 AA	20101014	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CABOCHON AESTHETICS, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:THE FOUNDRY, LLC; REEL/FRAME:025139/0799 EFFECTIVE DATE : 20100827

US2007055179 AA	20110608	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2007055180 AA	20070308	LSPB	+	published / reissued	
US2007055180 AA	20090826	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2007055181 AA	20070308	LSPB	+	published / reissued	
US2007055181 AA	20090923	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2007060989 AA	20070315	LSPB	+	published / reissued	
US2007060989 AA	20070122	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : FOUNDRY, INC., THE, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:DEEM, MARK E.; GIFFORD, HANSON; REEL/FRAME:018812/0970; SIGNING DATES FROM 20061101 TO 20061103
US2007060989 AA	20100719	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2007060989 AA	20100720	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CABOCHON AESTHETICS, INC., A DELAWARE CORPORATION, OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:THE FOUNDRY, LLC, A CALIFORNIA LIMITED LIABILITY; REEL/FRAME:024716/0571 EFFECTIVE DATE : 20100720
US2007060989 AA	20140506	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ULTHERA, INC., ARIZONA OLDPARTY : MERGER; ASSIGNOR:CABOCHON AESTHETICS, INC.; REEL/FRAME:032833/0251 EFFECTIVE DATE : 20140203
US2008014627 AA	20080117	LSPB	+	published / reissued	
US2008014627 AA	20070727	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CABOCHON AESTHETICS, INC, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:MERCHANT, ADNAN I; HOLZBAUR, MICHAEL C; HOFFMANN, STEPHAN T; AND OTHERS; REEL/FRAME:019616/0256; SIGNING DATES FROM 20070629 TO 20070723
US2008014627 AA	20120614	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2008014627 AA	20140506	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ULTHERA, INC., ARIZONA OLDPARTY : MERGER; ASSIGNOR:CABOCHON AESTHETICS, INC.; REEL/FRAME:032833/0251 EFFECTIVE DATE : 20140203
US2008195036 AA	20080814	LSPB	+	published / reissued	
US2008195036 AA	20070727	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CABOCHON AESTHETICS, INC, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:MERCHANT, ADNAN I; HOLZBAUR, MICHAEL C; HOFFMANN, STEPHAN T; AND OTHERS; REEL/FRAME:019616/0330; SIGNING DATES FROM 20070629 TO 20070723

US2008195036 AA	20070727	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CABOCHON AESTHETICS, INC, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:MERCHANT, ADNAN I; HOLZBAUR, MICHAEL C; HOFFMANN, STEPHAN T; AND OTHERS; SIGNING DATES FROM 20070629 TO 20070723; REEL/FRAME:019616/0330
US2008195036 AA	20110112	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2008195036 AA	20140506	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ULTHERA, INC., ARIZONA OLDPARTY : MERGER; ASSIGNOR:CABOCHON AESTHETICS, INC.; REEL/FRAME:032833/0251 EFFECTIVE DATE : 20140203
US2008197517 AA	20080821	LSPB	+	published / reissued	
US2008197517 AA	20070629	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CABOCHON AESTHETICS, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:MERCHANT, ADNAN I; DEEM, MARK E; REEL/FRAME:019500/0762 EFFECTIVE DATE : 20070629
US2008197517 AA	20130418	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2008197517 AA	20140506	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ULTHERA, INC., ARIZONA OLDPARTY : MERGER; ASSIGNOR:CABOCHON AESTHETICS, INC.; REEL/FRAME:032833/0251 EFFECTIVE DATE : 20140203
US2008200863 AA	20080821	LSPB	+	published / reissued	
US2008200863 AA	20070629	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CABOCHON AESTHETICS, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:MERCHANT, ADNAN I; DEEM, MARK E; CHOMAS, JAMES E; REEL/FRAME:019500/0748 EFFECTIVE DATE : 20070629
US2008200863 AA	20120530	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2008200863 AA	20140506	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ULTHERA, INC., ARIZONA OLDPARTY : MERGER; ASSIGNOR:CABOCHON AESTHETICS, INC.; REEL/FRAME:032833/0251 EFFECTIVE DATE : 20140203
US2008200864 AA	20080821	LSPB	+	published / reissued	
US2008200864 AA	20070727	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CABOCHON AESTHETICS, INC, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:HOLZBAUR, MICHAEL C; MERCHANT, ADNAN I; HOFFMANN, STEPHAN T; AND OTHERS; REEL/FRAME:019616/0083; SIGNING DATES FROM 20070629 TO 20070723
US2008200864 AA	20090818	LSWD	-ABD3	Abandoned -- Failure to Respond to an	

				Office Action	
US2008200864 AA	20140506	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ULTHERA, INC., ARIZONA OLDPARTY : MERGER; ASSIGNOR:CABOCHON AESTHETICS, INC.; REEL/FRAME:032833/0251 EFFECTIVE DATE : 20140203
US2008248554 AA	20081009	LSPB	+	published / reissued	
US2008248554 AA	20140430	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ULTHERA, INC., ARIZONA OLDPARTY : MERGER; ASSIGNOR:CABOCHON AESTHETICS, INC.; REEL/FRAME:032795/0126 EFFECTIVE DATE : 20140203
US2008248554 AA	20160113	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2009275879 AA	20091105	LSPB	+	published / reissued	
US2009275879 AA	20121218	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2009275899 AA	20091105	LSPB	+	published / reissued	
US2009275899 AA	20131202	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2009275899 AA	20140430	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CABOCHON AESTHETICS, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:THE FOUNDRY, LLC; REEL/FRAME:032794/0050 EFFECTIVE DATE : 20100827
US2009275899 AA	20140506	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ULTHERA, INC., ARIZONA OLDPARTY : MERGER; ASSIGNOR:CABOCHON AESTHETICS, INC.; REEL/FRAME:032833/0251 EFFECTIVE DATE : 20140203
US2009326439 AA	20091231	LSPB	+	published / reissued	
US2009326439 AA	20090908	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CABOCHON AESTHETICS, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:CHOMAS, JAMES E.; DEEM, MARK E.; GIFFORD, HANSON S.; AND OTHERS; REEL/FRAME:023203/0746; SIGNING DATES FROM 20090812 TO 20090904
US2009326439 AA	20140430	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ULTHERA, INC., ARIZONA OLDPARTY : MERGER; ASSIGNOR:CABOCHON AESTHETICS, INC.; REEL/FRAME:032795/0126 EFFECTIVE DATE : 20140203
US2009326439 AA	20180329	LSES	-NFA2	Non Final Action Counted, Not Yet Mailed	
US2009326439 AA	20180403	LSES	NFA1	Non Final Action Mailed	
US2010010420 AA	20100114	LSPB	+	published / reissued	
US2010010420 AA	20130116	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2010228182 AA	20100909	LSPB	+	published / reissued	
US2010228182 AA	20130807	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE

US2010228207 AA	20100909	LSPB	+	published / reissued	
US2010228207 AA	20101215	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CABOCHON AESTHETICS, INC., CALIFORNIA OLDPARTY : NUNC PRO TUNC ASSIGNMENT; ASSIGNOR:CLAPPER, DAVID M.; REEL/FRAME:025506/0866 EFFECTIVE DATE : 20101201
US2010228207 AA	20140430	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ULTHERA, INC., ARIZONA OLDPARTY : MERGER; ASSIGNOR:CABOCHON AESTHETICS, INC.; REEL/FRAME:032795/0126 EFFECTIVE DATE : 20140203
US2010228207 AA	20160518	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2011028898 AA	20110203	LSPB	+	published / reissued	
US2011028898 AA	20140430	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ULTHERA, INC., ARIZONA OLDPARTY : MERGER; ASSIGNOR:CABOCHON AESTHETICS, INC.; REEL/FRAME:032795/0126 EFFECTIVE DATE : 20140203
US2011028898 AA	20161019	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2012277674 AA	20121101	LSPB	+	published / reissued	
US2012277674 AA	20140430	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ULTHERA, INC., ARIZONA OLDPARTY : MERGER; ASSIGNOR:CABOCHON AESTHETICS, INC.; REEL/FRAME:032795/0126 EFFECTIVE DATE : 20140203
US2012277674 AA	20140430	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CABOCHON AESTHETICS, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:CLARK, ROBERT L., III; CHOMAS, JAMES E.; MERCHANT, ADNAN I.; AND OTHERS; REEL/FRAME:032794/0882 EFFECTIVE DATE : 20100525
US2012277674 AA	20160525	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2013123767 AA	20130516	LSPB	+	published / reissued	
US2013123767 AA	20140430	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ULTHERA, INC., ARIZONA OLDPARTY : MERGER; ASSIGNOR:CABOCHON AESTHETICS, INC.; REEL/FRAME:032795/0126 EFFECTIVE DATE : 20140203
US2013123767 AA	20140430	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CABOCHON AESTHETICS, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:CLARK, ROBERT L., III; CHOMAS, JAMES E.; MERCHANT, ADNAN I.; AND OTHERS; REEL/FRAME:032794/0882 EFFECTIVE DATE : 20100525
US2013123771 AA	20130516	LSPB	+	published / reissued	
US2013123771 AA	20140430	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ULTHERA, INC., ARIZONA OLDPARTY : MERGER; ASSIGNOR:CABOCHON AESTHETICS, INC.; REEL/FRAME:032795/0126 EFFECTIVE DATE : 20140203
US2013123771 AA	20140430	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER

					OWNER : CABOCHON AESTHETICS, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:CLARK, ROBERT L., III; CHOMAS, JAMES E.; MERCHANT, ADNAN I.; AND OTHERS; REEL/FRAME:032794/0882 EFFECTIVE DATE : 20100525
US2013123771 AA	20150325	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2013190739 AA	20130725	LSPB	+	published / reissued	
US2013190739 AA	20140425	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ULTHERA, INC., ARIZONA OLDPARTY : MERGER; ASSIGNOR:CABOCHON AESTHETICS, INC.; REEL/FRAME:032761/0511 EFFECTIVE DATE : 20140203
US2013190739 AA	20140430	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CABOCHON AESTHETICS, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:CLARK, ROBERT L., III; CHOMAS, JAMES E.; MERCHANT, ADNAN I.; AND OTHERS; REEL/FRAME:032794/0882 EFFECTIVE DATE : 20100525
US2013190739 AA	20140430	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ULTHERA, INC., ARIZONA OLDPARTY : MERGER; ASSIGNOR:CABOCHON AESTHETICS, INC.; REEL/FRAME:032795/0126 EFFECTIVE DATE : 20140203
US2013190739 AA	20140528	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2013190740 AA	20130725	LSPB	+	published / reissued	
US2013190740 AA	20131016	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2014107682 AA	20140417	LSPB	+	published / reissued	
US2014107682 AA	20140430	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ULTHERA, INC., ARIZONA OLDPARTY : MERGER; ASSIGNOR:CABOCHON AESTHETICS, INC.; REEL/FRAME:032795/0126 EFFECTIVE DATE : 20140203
US2014107682 AA	20140430	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CABOCHON AESTHETICS, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:CLARK, ROBERT L., III; CHOMAS, JAMES E.; MERCHANT, ADNAN I.; AND OTHERS; REEL/FRAME:032794/0882 EFFECTIVE DATE : 20100525
US2014107682 AA	20151021	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2014163536 A9	20150401	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2014257272 AA	20140911	LSPB	+	published / reissued	
US2014257272 AA	20160518	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2014277024 AA	20140918	LSPB	+	published / reissued	
US2014277024 AA	20141112	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE

US2014277025 AA	20140918	LSPB	+	published / reissued	
US2014277025 AA	20141119	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2014277026 AA	20140918	LSPB	+	published / reissued	
US2014277026 AA	20141112	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2014277027 AA	20140918	LSPB	+	published / reissued	
US2014277027 AA	20141105	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2014277047 AA	20140918	LSPB	+	published / reissued	
US2014277047 AA	20141210	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2014277048 AA	20140918	LSPB	+	published / reissued	
US2014277048 AA	20150225	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2015066011 AA	20150305	LSPB	+	published / reissued	
US2015066011 AA	20161116	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2015105811 AA	20150416	LSPB	+	published / reissued	
US2015105811 AA	20150421	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ULTHERA, INC., ARIZONA OLDPARTY : MERGER; ASSIGNOR:CABOCHON AESTHETICS, INC.; REEL/FRAME:035462/0334 EFFECTIVE DATE : 20140203
US2015105811 AA	20150421	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CABOCHON AESTHETICS, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:CLARK, ROBERT L., III; CHOMAS, JAMES E.; MERCHANT, ADNAN I.; AND OTHERS; REEL/FRAME:035462/0243 EFFECTIVE DATE : 20100525
US2015105811 AA	20150513	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2015127041 AA	20150507	LSPB	+	published / reissued	
US2015127041 AA	20150624	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2016249946 AA	20160901	LSPB	+	published / reissued	
US2016249946 AA	20180409	LSES	NFA1	Non Final Action Mailed	
US2016249946 AA	20180625	LSES	-NFA2	Non Final Action Counted, Not Yet Mailed	
US2016249946 AA	20180703	LSES	NFA1	Non Final Action Mailed	
US2016249946 AA	20190528	LSES	NFA1	Non Final Action Mailed	
US2016262788 AA	20160915	LSPB	+	published / reissued	
US2016262788 AA	20170508	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2016262788 AA	20170731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER

					OWNER : CABOCHON AESTHETICS, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:CLARK, ROBERT L., III; CHOMAS, JAMES E.; MERCHANT, ADNAN I.; AND OTHERS; REEL/FRAME:043148/0485 EFFECTIVE DATE : 20100525
US2016262788 AA	20170731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ULTHERA, INC., ARIZONA OLDPARTY : MERGER; ASSIGNOR:CABOCHON AESTHETICS, INC.; REEL/FRAME:043148/0610 EFFECTIVE DATE : 20140203
US2016262788 AA	20170731	LSFE	+PPR1	Publications -- Issue Fee Payment Received	
US2016262788 AA	20170801	LSFE	+PPV1	Publications -- Issue Fee Payment Verified	
US2016262788 AA	20170803	LSFE	+AWA3	Awaiting TC Resp, Issue Fee Payment Verified	
US2016262788 AA	20170803	LSFE	+PPV1	Publications -- Issue Fee Payment Verified	
US2016262788 AA	20170823	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2017014147 AA	20170119	LSPB	+	published / reissued	
US2017014147 AA	20181119	LSES	NFA1	Non Final Action Mailed	
US2017014147 AA	20190417	LSES	NFA1	Non Final Action Mailed	
US2017042608 AA	20170216	LSPB	+	published / reissued	
US2017042608 AA	20181127	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ULTHERA, INC., ARIZONA OLDPARTY : MERGER; ASSIGNOR:CABOCHON AESTHETICS, INC.; REEL/FRAME:047596/0626 EFFECTIVE DATE : 20140203
US2017042608 AA	20181127	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CABOCHON AESTHETICS, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:CLARK, ROBERT L., III; CHOMAS, JAMES E.; MERCHANT, ADNAN I.; AND OTHERS; REEL/FRAME:047596/0606 EFFECTIVE DATE : 20140304
US2017042608 AA	20181204	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2017042608 AA	20190306	LSFE	+PPR1	Publications -- Issue Fee Payment Received	
US2017042608 AA	20190308	LSFE	+PPV1	Publications -- Issue Fee Payment Verified	
US2017042608 AA	20190410	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2017333074 AA	20171123	LSPB	+	published / reissued	
US2017333074 AA	20190521	LSES	NFA1	Non Final Action Mailed	

US2017333074 AA	20190723	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US7588547 BB	20090915	LSGT	+	granted / extensions (spc, cpc, pte)	
US7588547 BB	20090826	LSGT	PAT1	Patented Case	
US7588547 BB	20130315	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US7588547 BB	20140430	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CABOCHON AESTHETICS, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:THE FOUNDRY, LLC; REEL/FRAME:032794/0050 EFFECTIVE DATE : 20100827
US7588547 BB	20140430	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ULTHERA, INC., ARIZONA OLDPARTY : MERGER; ASSIGNOR:CABOCHON AESTHETICS, INC.; REEL/FRAME:032795/0126 EFFECTIVE DATE : 20140203
US7588547 BB	20170307	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US7588547 BB	20260117	PEXP		Calculated Patent Term Expiry	
US7601128 BB	20091013	LSGT	+	granted / extensions (spc, cpc, pte)	
US7601128 BB	20090923	LSGT	PAT1	Patented Case	
US7601128 BB	20130206	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US7601128 BB	20140430	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CABOCHON AESTHETICS, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:THE FOUNDRY, LLC; REEL/FRAME:032794/0050 EFFECTIVE DATE : 20100827
US7601128 BB	20140430	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ULTHERA, INC., ARIZONA OLDPARTY : MERGER; ASSIGNOR:CABOCHON AESTHETICS, INC.; REEL/FRAME:032795/0126 EFFECTIVE DATE : 20140203
US7601128 BB	20170406	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US7601128 BB	20260117	PEXP		Calculated Patent Term Expiry	
US7967763 BB	20110628	LSGT	+	granted / extensions (spc, cpc, pte)	
US7967763 BB	20060206	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : THE FOUNDRY, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:DEEM, MARK; GIFFORD, HANSON; SUTTON, DOUGLAS; REEL/FRAME:017532/0414 EFFECTIVE DATE : 20060127
US7967763 BB	20110608	LSGT	PAT1	Patented Case	
US7967763 BB	20140430	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ULTHERA, INC., ARIZONA OLDPARTY : MERGER; ASSIGNOR:CABOCHON AESTHETICS, INC.; REEL/FRAME:032795/0126 EFFECTIVE DATE : 20140203
US7967763 BB	20141215	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US7967763 BB	20181220	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 8

US7967763 BB	20290216	PEXP		Calculated Patent Term Expiry (PTA 1172 days and a terminal disclaimer has been filed)	
US8348867 BB	20130108	LSGT	+	granted / extensions (spc, cpc, pte)	
US8348867 BB	20121218	LSGT	PAT1	Patented Case	
US8348867 BB	20140430	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CABOCHON AESTHETICS, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:THE FOUNDRY, LLC; REEL/FRAME:032794/0050 EFFECTIVE DATE : 20100827
US8348867 BB	20140430	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ULTHERA, INC., ARIZONA OLDPARTY : MERGER; ASSIGNOR:CABOCHON AESTHETICS, INC.; REEL/FRAME:032795/0126 EFFECTIVE DATE : 20140203
US8348867 BB	20160506	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8348867 BB	20300801	PEXP		Calculated Patent Term Expiry (PTA 443 days and a terminal disclaimer has been filed)	
US8366643 BB	20130205	LSGT	+	granted / extensions (spc, cpc, pte)	
US8366643 BB	20130116	LSGT	PAT1	Patented Case	
US8366643 BB	20140430	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CABOCHON AESTHETICS, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:THE FOUNDRY, LLC; REEL/FRAME:032794/0050 EFFECTIVE DATE : 20100827
US8366643 BB	20140430	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ULTHERA, INC., ARIZONA OLDPARTY : MERGER; ASSIGNOR:CABOCHON AESTHETICS, INC.; REEL/FRAME:032795/0126 EFFECTIVE DATE : 20140203
US8366643 BB	20160804	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8366643 BB	20300806	PEXP		Calculated Patent Term Expiry (PTA 326 days and a terminal disclaimer has been filed)	
US8518069 BB	20130827	LSGT	+	granted / extensions (spc, cpc, pte)	
US8518069 BB	20100525	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CABOCHON AESTHETICS, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:CLARK, ROBERT L., III; CHOMAS, JAMES E.; MERCHANT, ADNAN I.; AND OTHERS; REEL/FRAME:024439/0785 EFFECTIVE DATE : 20100525
US8518069 BB	20130807	LSGT	PAT1	Patented Case	
US8518069 BB	20140430	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ULTHERA, INC., ARIZONA OLDPARTY : MERGER; ASSIGNOR:CABOCHON AESTHETICS, INC.; REEL/FRAME:032795/0126 EFFECTIVE DATE : 20140203

US8518069 BB	20170221	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8518069 BB	20320107	PEXP		Calculated Patent Term Expiry (PTA 592 days and a terminal disclaimer has been filed)	
US8574251 BB	20131105	LSGT	+	granted / extensions (spc, cpc, pte)	
US8574251 BB	20131016	LSGT	PAT1	Patented Case	
US8574251 BB	20140430	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CABOCHON AESTHETICS, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:CLARK, ROBERT L., III; CHOMAS, JAMES E.; MERCHANT, ADNAN I.; AND OTHERS; REEL/FRAME:032794/0882 EFFECTIVE DATE : 20100525
US8574251 BB	20140430	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ULTHERA, INC., ARIZONA OLDPARTY : MERGER; ASSIGNOR:CABOCHON AESTHETICS, INC.; REEL/FRAME:032795/0126 EFFECTIVE DATE : 20140203
US8574251 BB	20170428	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8574251 BB	20330221	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
US8753339 BB	20140617	LSGT	+	granted / extensions (spc, cpc, pte)	
US8753339 BB	20140528	LSGT	PAT1	Patented Case	
US8753339 BB	20171212	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8753339 BB	20330221	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
US8894678 BB	20141125	LSGT	+	granted / extensions (spc, cpc, pte)	
US8894678 BB	20140618	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ULTHERA, INC., ARIZONA OLDPARTY : MERGER; ASSIGNOR:CABOCHON AESTHETICS, INC.; REEL/FRAME:033132/0937 EFFECTIVE DATE : 20140203
US8894678 BB	20140618	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CABOCHON AESTHETICS, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:CLARK, ROBERT L., III; CHOMAS, JAMES E.; MERCHANT, ADNAN I.; AND OTHERS; REEL/FRAME:033130/0659 EFFECTIVE DATE : 20100525
US8894678 BB	20141105	LSGT	PAT1	Patented Case	
US8894678 BB	20180517	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8894678 BB	20340529	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
US8900261 BB	20141202	LSGT	+	granted / extensions (spc, cpc, pte)	
US8900261 BB	20140618	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ULTHERA, INC., ARIZONA

					OLDPARTY : MERGER; ASSIGNOR:CABOCHON AESTHETICS, INC.; REEL/FRAME:033132/0937 EFFECTIVE DATE : 20140203
US8900261 BB	20140618	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CABOCHON AESTHETICS, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:CLARK, ROBERT L., III; CHOMAS, JAMES E.; MERCHANT, ADNAN I.; AND OTHERS; REEL/FRAME:033130/0659 EFFECTIVE DATE : 20100525
US8900261 BB	20141112	LSGT	PAT1	Patented Case	
US8900261 BB	20180528	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8900261 BB	20340529	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
US8900262 BB	20141202	LSGT	+	granted / extensions (spc, cpc, pte)	
US8900262 BB	20140618	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ULTHERA, INC., ARIZONA OLDPARTY : MERGER; ASSIGNOR:CABOCHON AESTHETICS, INC.; REEL/FRAME:033132/0937 EFFECTIVE DATE : 20140203
US8900262 BB	20140618	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CABOCHON AESTHETICS, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:CLARK, ROBERT L., III; CHOMAS, JAMES E.; MERCHANT, ADNAN I.; AND OTHERS; REEL/FRAME:033130/0659 EFFECTIVE DATE : 20100525
US8900262 BB	20141112	LSGT	PAT1	Patented Case	
US8900262 BB	20180528	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8900262 BB	20340529	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
US8906054 BB	20141209	LSGT	+	granted / extensions (spc, cpc, pte)	
US8906054 BB	20140618	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ULTHERA, INC., ARIZONA OLDPARTY : MERGER; ASSIGNOR:CABOCHON AESTHETICS, INC.; REEL/FRAME:033132/0937 EFFECTIVE DATE : 20140203
US8906054 BB	20140618	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CABOCHON AESTHETICS, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:CLARK, ROBERT L., III; CHOMAS, JAMES E.; MERCHANT, ADNAN I.; AND OTHERS; REEL/FRAME:033130/0659 EFFECTIVE DATE : 20100525
US8906054 BB	20141119	LSGT	PAT1	Patented Case	
US8906054 BB	20180604	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8906054 BB	20340529	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
US8920452 BB	20141230	LSGT	+	granted / extensions (spc,	

				cpc, pte)	
US8920452 BB	20140618	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ULTHERA, INC., ARIZONA OLDPARTY : MERGER; ASSIGNOR:CABOCHON AESTHETICS, INC.; REEL/FRAME:033132/0937 EFFECTIVE DATE : 20140203
US8920452 BB	20140618	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CABOCHON AESTHETICS, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:CLARK, ROBERT L., III; CHOMAS, JAMES E.; MERCHANT, ADNAN I.; AND OTHERS; REEL/FRAME:033130/0659 EFFECTIVE DATE : 20100525
US8920452 BB	20141210	LSGT	PAT1	Patented Case	
US8920452 BB	20180626	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8920452 BB	20340529	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
US8979881 BB	20150317	LSGT	+	granted / extensions (spc, cpc, pte)	
US8979881 BB	20140618	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ULTHERA, INC., ARIZONA OLDPARTY : MERGER; ASSIGNOR:CABOCHON AESTHETICS, INC.; REEL/FRAME:033132/0937 EFFECTIVE DATE : 20140203
US8979881 BB	20140618	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CABOCHON AESTHETICS, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:CLARK, ROBERT L., III; CHOMAS, JAMES E.; MERCHANT, ADNAN I.; AND OTHERS; REEL/FRAME:033130/0659 EFFECTIVE DATE : 20100525
US8979881 BB	20150225	LSGT	PAT1	Patented Case	
US8979881 BB	20180910	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8979881 BB	20340529	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
US9005229 BB	20150414	LSGT	+	granted / extensions (spc, cpc, pte)	
US9005229 BB	20150325	LSGT	PAT1	Patented Case	
US9005229 BB	20331009	PEXP		Calculated Patent Term Expiry (PTA 301 days and a terminal disclaimer has been filed)	
US9011473 BB	20150421	LSGT	+	granted / extensions (spc, cpc, pte)	
US9011473 BB	20150401	LSGT	PAT1	Patented Case	
US9011473 BB	20181016	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US9011473 BB	20330926	PEXP		Calculated Patent Term Expiry (PTA 288 days and a terminal disclaimer has been filed)	
US9044259 BB	20150602	LSGT	+	granted / extensions (spc, cpc, pte)	
US9044259 BB	20150513	LSGT	PAT1	Patented Case	

US9044259 BB	20181127	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US9044259 BB	20341222	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
US9078688 BB	20150714	LSGT	+	granted / extensions (spc, cpc, pte)	
US9078688 BB	20150624	LSGT	PAT1	Patented Case	
US9078688 BB	20190109	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US9078688 BB	20341222	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
US9179928 BB	20151110	LSGT	+	granted / extensions (spc, cpc, pte)	
US9179928 BB	20151021	LSGT	PAT1	Patented Case	
US9179928 BB	20190502	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US9179928 BB	20340426	PEXP		Calculated Patent Term Expiry (PTA 267 days and a terminal disclaimer has been filed)	
US9248317 BB	20160202	LSGT	+	granted / extensions (spc, cpc, pte)	
US9248317 BB	20070629	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CABOCHON AESTHETICS, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:MERCHANT, ADNAN I; DEEM, MARK E; REEL/FRAME:019500/0735 EFFECTIVE DATE : 20070629
US9248317 BB	20150916	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US9248317 BB	20151217	LSFE	+PPR1	Publications -- Issue Fee Payment Received	
US9248317 BB	20160113	LSGT	PAT1	Patented Case	
US9248317 BB	20330311	PEXP		Calculated Patent Term Expiry (PTA 2082 days and a terminal disclaimer has been filed)	
US9358033 BB	20160607	LSGT	+	granted / extensions (spc, cpc, pte)	
US9358033 BB	20100525	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CABOCHON AESTHETICS, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BALLAKUR, SOWMYA; CLARK, ROBERT L., III; CHOMAS, JAMES E.; AND OTHERS; REEL/FRAME:024439/0766 EFFECTIVE DATE : 20100525
US9358033 BB	20160506	LSFE	+PPV1	Publications -- Issue Fee Payment Verified	
US9358033 BB	20160518	LSGT	PAT1	Patented Case	
US9358033 BB	20320314	PEXP		Calculated Patent Term Expiry (PTA	

				659 days)	
US9358064 BB	20160607	LSGT	+	granted / extensions (spc, cpc, pte)	
US9358064 BB	20140310	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CABOCHON AESTHETICS, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:CLARK, ROBERT L., III; CHOMAS, JAMES E.; MERCHANT, ADNAN I.; AND OTHERS; REEL/FRAME:032390/0710 EFFECTIVE DATE : 20140304
US9358064 BB	20140430	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ULTHERA, INC., ARIZONA OLDPARTY : MERGER; ASSIGNOR:CABOCHON AESTHETICS, INC.; REEL/FRAME:032795/0126 EFFECTIVE DATE : 20140203
US9358064 BB	20151102	LSES	NFA1	Non Final Action Mailed	
US9358064 BB	20160518	LSGT	PAT1	Patented Case	
US9358064 BB	20340728	PEXP		Calculated Patent Term Expiry (PTA 279 days and a terminal disclaimer has been filed)	
US9364246 BB	20160614	LSGT	+	granted / extensions (spc, cpc, pte)	
US9364246 BB	20150916	LSES	NFA1	Non Final Action Mailed	
US9364246 BB	20160525	LSGT	PAT1	Patented Case	
US9364246 BB	20350303	PEXP		Calculated Patent Term Expiry (PTA 980 days)	
US9486274 BB	20161108	LSGT	+	granted / extensions (spc, cpc, pte)	
US9486274 BB	20101015	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CABOCHON AESTHETICS, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:CLARK, ROBERT L., III; BRIAN, BEN F., III; CHOMAS, JAMES E.; AND OTHERS; SIGNING DATES FROM 20100828 TO 20101011; REEL/FRAME:025144/0917
US9486274 BB	20161019	LSGT	PAT1	Patented Case	
US9486274 BB	20341003	PEXP		Calculated Patent Term Expiry (PTA 1519 days)	
US9510849 BB	20161206	LSGT	+	granted / extensions (spc, cpc, pte)	
US9510849 BB	20140618	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ULTHERA, INC., ARIZONA OLDPARTY : MERGER; ASSIGNOR:CABOCHON AESTHETICS, INC.; REEL/FRAME:033132/0937 EFFECTIVE DATE : 20140203
US9510849 BB	20140618	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CABOCHON AESTHETICS, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:CLARK, ROBERT L., III; CHOMAS, JAMES E.; MERCHANT, ADNAN I.; AND OTHERS; REEL/FRAME:033130/0567 EFFECTIVE DATE : 20140304
US9510849 BB	20161116	LSGT	PAT1	Patented Case	
US9510849 BB	20350328	PEXP		Calculated Patent Term Expiry (PTA	

				297 days and a terminal disclaimer has been filed)	
US9757145 BB	20170912	LSGT	+	granted / extensions (spc, cpc, pte)	
US9757145 BB	20170823	LSGT	PAT1	Patented Case	
US9757145 BB	20360523	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
WO07030367 A2	20070315	LSPB	+	published / reissued	
WO07030367 A3	20080304	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2621354 COUNTRY OF REF DOCUMENT : CA
WO07030367 A3	20080304	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2006287678 COUNTRY OF REF DOCUMENT : AU
WO07030367 A3	20080307	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2008530099 COUNTRY OF REF DOCUMENT : JP
WO07030367 A3	20080308	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO07030367 A3	20080328	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2006802625 COUNTRY OF REF DOCUMENT : EP
WO07030367 A3	20080403	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2006287678 COUNTRY OF REF DOCUMENT : AU DATE OF REF DOCUMENT : 20060830 KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO07030415 A2	20070315	LSPB	+	published / reissued	
WO07030415 A3	20080304	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2006287633 COUNTRY OF REF DOCUMENT : AU
WO07030415 A3	20080305	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2621535 COUNTRY OF REF DOCUMENT : CA
WO07030415 A3	20080307	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2008530128 COUNTRY OF REF DOCUMENT : JP
WO07030415 A3	20080308	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO07030415 A3	20080328	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2006790161 COUNTRY OF REF DOCUMENT : EP
WO07030415 A3	20080403	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2006287633 COUNTRY OF REF DOCUMENT : AU DATE OF REF DOCUMENT : 20060905 KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO09005980 A2	20090108	LSPB	+	published / reissued	
WO09005980 A3	20091230	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO09005980 A3	20100104	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2010514945 COUNTRY OF REF DOCUMENT : JP
WO09005980 A3	20100512	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : JP
WO09005980 A3	20100728	LSNE	-122	EP: PCT	REF DOCUMENT NUMBER : 08770708

				APPLICATION NON-ENTRY IN EUROPEAN PHASE	COUNTRY OF REF DOCUMENT : EP KIND CODE OF REF DOCUMENT : A2 DESIGNATED STATE(S) :
WO09005982 A1	20090108	LSPB	+	published / reissued	
WO09005982 A1	20091230	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO09005982 A1	20100728	LSNE	-122	EP: PCT APPLICATION NON-ENTRY IN EUROPEAN PHASE	REF DOCUMENT NUMBER : 08770722 COUNTRY OF REF DOCUMENT : EP KIND CODE OF REF DOCUMENT : A1 DESIGNATED STATE(S) :
WO09005995 A1	20090108	LSPB	+	published / reissued	
WO09005995 A1	20091230	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO09005995 A1	20100728	LSNE	-122	EP: PCT APPLICATION NON-ENTRY IN EUROPEAN PHASE	REF DOCUMENT NUMBER : 08770877 COUNTRY OF REF DOCUMENT : EP KIND CODE OF REF DOCUMENT : A1 DESIGNATED STATE(S) :
WO09006001 A1	20090108	LSPB	+	published / reissued	
WO09006001 A1	20091230	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
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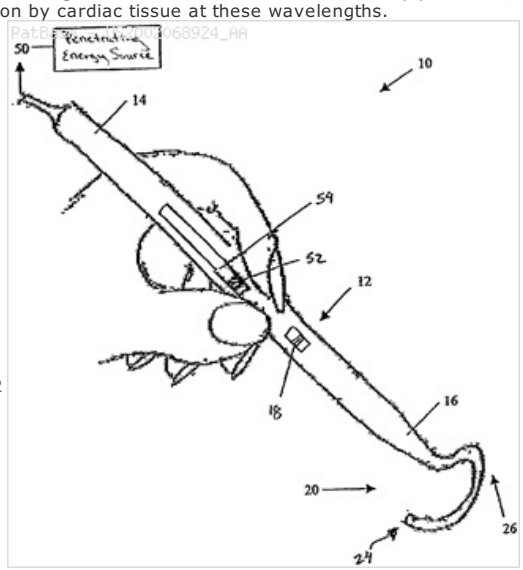
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24) Family number: 31413035 (US2002068924A)

Title: PHOTOABLATION WITH INFRARED RADIATION

Abstract: Infrared surgical photoablation instruments are disclosed for creating lesions in tissue, including cardiac tissue for treatment of arrhythmias and other diseases. The hand held instruments are especially useful in open chest or port access cardiac surgery for rapid and efficient creation of curvilinear lesions to serve as conduction blocks. Photoablative instruments are disclosed that emit radiation at a wavelength in a range from about 800 nm to about 1000 nm, and preferably emit at a wavelength in a range of about 915 nm to about 980 nm. Radiation at a wavelength of 915 nm or 980 nm is commonly preferred, in some applications, because of the optimal absorption of infrared radiation by cardiac tissue at these wavelengths.



Classifications:
International (IPC 8-9): A61B1/00 A61B1/04 A61B1/05 A61B1/06 A61B1/07 A61B1/313 A61B17/00 A61B17/125 A61B17/22 A61B18/00 A61B18/02 A61B18/04 A61B18/12 A61B18/14 A61B18/16 A61B18/18 A61B18/20 A61B18/22 A61B18/24 A61B19/00 A61B5/00 A61B5/06 A61F2/958 A61L2/10 A61L29/08 A61M25/00 A61M25/01 A61M25/10 A61N5/06 (Advanced/Invention);
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A61B1/04 A61B18/04 A61B18/14 A61B18/18 A61B18/20 A61L2/10 A61L29/00 A61M25/01 A61N5/06 (Core/Invention);
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Inventor(s): (std): MELSKY GERALD ; ARNOLD JEFFREY M ; SINOFSKY EDWARD L ; FARR NORMAN E ; BAXTER LONCOLN S ; LINCOLN S BAXTER ; NORMAN FARR ; N FARR ; LS BAXTER ; NORMAN E FARR ; L S BAXTER ; EL SINOFSKY ; E L SINOFSKY ; JEFFREY M ARNOLD ; N FERR ; EDWARD L SINOFSKY ; STANCAMPIANO ALFRED ; SAGON STEPHEN W ; BAXTER LINCOLN ; SAGON STEPHEN ; FARR E ; MCINTYRE T ; SINOFSKY L ; BAXTER S ; WIELER E ; FARR NORMAN ; BAXTER LINCOLN S ; BAXTER LICOLN S ; WIELER WILLIAM E ; MCINTYRE JON T ; MACLEAN BRIAN ; FERR N ; FARR N ; BAXTER L S ; SINOFSKY E L

Inventor(s): LICOLN S BAXTER ; BRIAN MACLEAN ; WILLIAM E WIELER ; JON T MCINTYRE ; WIELER WILLIAM ; BAXTER LICOLN S CENTERVILLE ; WIELER WILLIAM E POCASSET ; SINOFSKY EDWARD L DENNIS ; MCINTYRE JON T NEWTON ; MACLEAN BRIAN NEWTON ; SINOFSKY EDWARD ; ARNOLD JEFFREY

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; RICHES MCKENZIE AND HERBERT LLP; PATENTANWAELTE STREHL SCHUEBEL HOPF AND PARTNER; STREHL SCHUEBEL HOPF AND PARTNER; BERTSCH FLORIAN OLIVER; CURELL MIREIA; NUTTER MCCLENNEN AND FISH LLP; LEASON ELLIS LLP; ENGELLENNER THOMAS J; THOMAS J; BIELUNIS MICHELLE Z; MICHELLE Z; DOYLE MICHAEL P; MICHAEL P; ELLIS EDWARD J ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT322870 E	20060415	LSGT	+	granted / extensions (spc, cpc, pte)	

AT322870 E	20061015	LSLE	-RER	CEASED AS TO PARAGRAPH 5 LIT. 3 LAW INTRODUCING PATENT TREATIES	
AT322870 E	20200714	PEXP		Calculated Patent Term Expiry	
AU199536269 A1	19960327	LSPB	+	published / reissued	
AU200062151 A1	20010130	LSPB	+	published / reissued	
AU200062151 A5	20020418	LSLE	-MK6	APPLICATION LAPSED SECTION 142(2)(F)/REG. 8.3(3) - PCT APPLIC. NOT ENTERING NATIONAL PHASE	
AU200070762 A1	20010319	LSPB	+	published / reissued	
AU200070762 A5	20020502	LSLE	-MK6	APPLICATION LAPSED SECTION 142(2)(F)/REG. 8.3(3) - PCT APPLIC. NOT ENTERING NATIONAL PHASE	
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AU200175938 A1	20020130	LSPB	+	published / reissued	
AU2004208838 AA	20040819	LSPB	+	published / reissued	
AU2004208838 AA	20060112	LSRE	DA3	AMENDMENTS MADE SECTION 104	TEXT : THE NATURE OF THE AMENDMENT IS AS SHOWN IN THE STATEMENT(S) FILED 07 DEC 2005
AU2004208838 AA	20100128	LSLE	-MK5	APPLICATION LAPSED SECTION 142(2)(E) - PATENT REQUEST AND COMPL. SPECIFICATION NOT ACCEPTED	
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AU725320 B2	20010208	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU725320 B2	20150908	PEXP		Calculated Patent Term Expiry	
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CN1072971 C	20150908	PEXP		Calculated Patent Term Expiry	
CN1165485 A	19971119	LSPB	+	published / reissued	
CN1165485 A	19971119	LSPB	+C06	PUBLICATION	
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EP1200002 A2	20040421	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20040304
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EP1679045 B1	20140430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20130731
EP1679045 B1	20140430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20130731
EP1679045 B1	20140731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20130714
EP1679045 B1	20150731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20130714
EP1679045 B1	20160729	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 17
EP1679045 B1	20170728	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 18
EP1679045 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170728 YEAR OF FEE PAYMENT : 18
EP1679045 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20170801 YEAR OF FEE PAYMENT : 18
EP1679045 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20170719 YEAR OF FEE PAYMENT : 18
EP1679045 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170719 YEAR OF FEE PAYMENT : 18
EP1679045 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20170720 YEAR OF FEE PAYMENT : 18
EP1679045 B1	20180730	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 19

EP1679045 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20180730 YEAR OF FEE PAYMENT : 19
EP1679045 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180727 YEAR OF FEE PAYMENT : 19
EP1679045 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20180726 YEAR OF FEE PAYMENT : 19
EP1679045 B1	20200714	PEXP		Calculated Patent Term Expiry	
EP1866019 A1	20071219	LSPB	+	published / reissued	
EP1866019 A1	20071219	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20070921
EP1866019 A1	20090902	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20090730
EP1866019 A1	20170719	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20170620
EP1866019 B1	20171025	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1866019 B1	20171025	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP1866019 B1	20171031	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1866019 B1	20171115	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 939351 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20171115
EP1866019 B1	20171129	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP1866019 B1	20171130	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602006053932 COUNTRY OF REF DOCUMENT : DE
EP1866019 B1	20180227	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 13
EP1866019 B1	20180312	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : LT REF LEGAL EVENT CODE : MG4D
EP1866019 B1	20180315	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MK05 REF DOCUMENT NUMBER : 939351 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20171025
EP1866019 B1	20180330	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20171025
EP1866019 B1	20180430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20171025
EP1866019 B1	20180430	LSLE	-PG25	LAPSED IN A	COUNTRY OF REF DOCUMENT : ES

				CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20171025
EP1866019 B1	20180430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20171025
EP1866019 B1	20180430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20171025
EP1866019 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20180221 YEAR OF FEE PAYMENT : 13
EP1866019 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180214 YEAR OF FEE PAYMENT : 13
EP1866019 B1	20180531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20171025
EP1866019 B1	20180531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LV NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20171025
EP1866019 B1	20180531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20180125
EP1866019 B1	20180531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20180126
EP1866019 B1	20180531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IS NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20180225
EP1866019 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20180227 YEAR OF FEE PAYMENT : 13
EP1866019 B1	20180726	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 602006053932 COUNTRY OF REF DOCUMENT : DE
EP1866019 B1	20180731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO	COUNTRY OF REF DOCUMENT : CY NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT

				EPO]	LAPSED DATE : 20171025
EP1866019 B1	20180731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20171025
EP1866019 B1	20180731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20171025
EP1866019 B1	20180731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20171025
EP1866019 B1	20180731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20171025
EP1866019 B1	20180831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20171025
EP1866019 B1	20180831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20171025
EP1866019 B1	20180831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20171025
EP1866019 B1	20180914	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP1866019 B1	20180928	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20171025
EP1866019 B1	20181003	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20180726
EP1866019 B1	20181128	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP1866019 B1	20181130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180221
EP1866019 B1	20181130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20171025

EP1866019 B1	20181130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180228
EP1866019 B1	20181130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180228
EP1866019 B1	20190131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180221
EP1866019 B1	20190228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180228
EP1866019 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20190228 YEAR OF FEE PAYMENT : 14
EP1866019 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20190208 YEAR OF FEE PAYMENT : 14
EP1866019 B1	20260221	PEXP		Calculated Patent Term Expiry	
ES2409732 T3	20130627	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2409732 T3	20200714	PEXP		Calculated Patent Term Expiry	
JP10504989 T2	19980519	LSPB	+	published / reissued	
JP10504989 T2	20040817	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20040817
JP10504989 T2	20050303	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20050208
JP10504989 T2	20050318	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP10504989 T2	20050329	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20050329
JP10504989 T2	20050509	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20050426
JP10504989 T2	20050513	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP2003518395 T2	20030610	LSPB	+	published / reissued	
JP2003518395 T2	20070718	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20070717
JP2003518395 T2	20080326	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20080325
JP2003518395 T2	20080926	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20080925

JP2003518395 T2	20081218	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2003518395 T2	20090107	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20090106
JP2003518395 T2	20090108	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01
JP2003518395 T2	20090212	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20090205
JP2003518395 T2	20090220	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP2003518395 T2	20090220	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP2004503326 T2	20040205	LSPB	+	published / reissued	
JP2004503326 T2	20081007	LSWD	-A300	WITHDRAWAL OF APPLICATION BECAUSE OF NO REQUEST FOR EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A300 EFFECTIVE DATE : 20081007
JP2006516465 T2	20060706	LSPB	+	published / reissued	
JP2006516465 T2	20061117	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20061116
JP2006516465 T2	20070203	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20070202
JP2006516465 T2	20091007	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20091006
JP2006516465 T2	20091222	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20091221
JP2006516465 T2	20100331	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20100330
JP2006516465 T2	20100929	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20100928
JP2006516465 T2	20110330	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20110329
JP2006516465 T2	20110428	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20110420
JP2006516465 T2	20110428	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP2006516465 T2	20110428	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP2008531086 T2	20080814	LSPB	+	published / reissued	
JP2008531086 T2	20090224	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20090223
JP2008531086 T2	20110824	LSES	-A131	NOTIFICATION OF	TEXT : JAPANESE INTERMEDIATE

				REASONS FOR REFUSAL	CODE: A131 EFFECTIVE DATE : 20110823
JP2008531086 T2	20111209	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20111122
JP2008531086 T2	20120221	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20120220
JP2008531086 T2	20120704	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2008531086 T2	20120711	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20120710
JP2008531086 T2	20120712	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01
JP2008531086 T2	20120816	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20120809
JP2008531086 T2	20120817	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP2008531086 T2	20120820	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP3675482 B2	20050727	LSGT	+	granted / extensions (spc, cpc, pte)	
JP3675482 B2	20050331	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP3675482 B2	20050502	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP3675482 B2	20080515	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP3675482 B2	20080520	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 4
JP3675482 B2	20090514	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP3675482 B2	20090519	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 5
JP3675482 B2	20100506	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP3675482 B2	20100511	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 6
JP3675482 B2	20110512	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP3675482 B2	20110517	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 7
JP3675482 B2	20120510	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP3675482 B2	20120515	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 8
JP3675482 B2	20130502	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 8
JP3675482 B2	20130514	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250

JP3675482 B2	20141016	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP3675482 B2	20141021	LSFE	+R250	年金領収書, 年金領収書 (分納) (Pension receipt, annuity receipt (scheduled))	
JP3675482 B2	20150514	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP3675482 B2	20150526	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP3675482 B2	20150908	LSLE	-EXPY	CANCELLATION BECAUSE OF COMPLETION OF TERM	
JP3675482 B2	20150908	PEXP		Calculated Patent Term Expiry	
JP4261101 B2	20090430	LSGT	+	granted / extensions (spc, cpc, pte)	
JP4261101 B2	20090210	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP4261101 B2	20120209	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4261101 B2	20120214	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 4
JP4261101 B2	20130221	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4261101 B2	20130226	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 5
JP4261101 B2	20140227	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4261101 B2	20140304	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4261101 B2	20150226	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4261101 B2	20150303	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4261101 B2	20160225	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4261101 B2	20160301	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4261101 B2	20170202	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4261101 B2	20170207	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4261101 B2	20180222	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4261101 B2	20180227	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4261101 B2	20190214	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4261101 B2	20190219	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4261101 B2	20200714	PEXP		Calculated Patent Term Expiry	
JP4732330 B2	20110727	LSGT	+	granted / extensions (spc, cpc, pte)	
JP4732330 B2	20110331	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP4732330 B2	20110426	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP4732330 B2	20140424	LSFE	R20	特許料納付書 (Patent	

				fee payment form)	
JP4732330 B2	20140430	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4732330 B2	20150409	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4732330 B2	20150414	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4732330 B2	20160421	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4732330 B2	20160426	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4732330 B2	20170330	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4732330 B2	20170404	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4732330 B2	20180426	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4732330 B2	20180508	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4732330 B2	20190411	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4732330 B2	20190416	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4732330 B2	20240203	PEXP		Calculated Patent Term Expiry	
JP5065052 B2	20121031	LSGT	+	granted / extensions (spc, cpc, pte)	
JP5065052 B2	20120814	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP5065052 B2	20150730	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5065052 B2	20150804	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5065052 B2	20160728	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5065052 B2	20160802	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5065052 B2	20170803	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5065052 B2	20170808	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5065052 B2	20180809	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5065052 B2	20180814	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5065052 B2	20260221	PEXP		Calculated Patent Term Expiry	
KR19970706039 A	19971103	LSPB	+	published / reissued	
KR19977006039 A	19971103	LSPB	+	published / reissued	
KR970706039 A	19971103	LSPB	+	published / reissued	
KR970706039 A	19991012	LSAS	N231	NOTIFICATION OF CHANGE OF APPLICANT	
KR970706039 A	20000905	LSES	A201	REQUEST FOR EXAMINATION	
KR970706039 A	20020924	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
US2002068924 AA	20020606	LSPB	+	published / reissued	
US2002068924 AA	20021030	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK DBA

					SILICON VALLEY EAST, CALIF OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS,INC.; REEL/FRAME:013211/0256 EFFECTIVE DATE : 20021015
US2002068924 AA	20030529	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2002077623 AA	20020620	LSPB	+	published / reissued	
US2002077623 AA	20021030	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK DBA SILICON VALLEY EAST, CALIF OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS,INC.; REEL/FRAME:013211/0256 EFFECTIVE DATE : 20021015
US2002077623 AA	20031223	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2002183729 AA	20021205	LSPB	+	published / reissued	
US2002183729 AA	20050317	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:FARR, NORMAN E.; WIELER, WILLIAM E.; REEL/FRAME:016371/0141 EFFECTIVE DATE : 19991014
US2002183729 AA	20050511	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : VENTURE LENDING & LEASING IV, INC., CALIFORNIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:016547/0536 EFFECTIVE DATE : 20050415
US2002183729 AA	20050921	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2004006333 AA	20040108	LSPB	+	published / reissued	
US2004059397 AA	20040325	LSPB	+	published / reissued	
US2004059397 AA	20050317	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:SINOFSKY, EDWARD L.; FARR, NORMAN E.; REEL/FRAME:016366/0713 EFFECTIVE DATE : 20000721
US2004059397 AA	20050511	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : VENTURE LENDING & LEASING IV, INC., CALIFORNIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:016547/0536 EFFECTIVE DATE : 20050415
US2004059397 AA	20050824	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2004147911 AA	20040729	LSPB	+	published / reissued	
US2004147911 AA	20040113	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:SINOFSKY, EDWARD L.; REEL/FRAME:014894/0699 EFFECTIVE DATE : 20040112
US2004147911 AA	20040603	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : EDWARDS LIFESCIENCES LLC, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:015406/0296 EFFECTIVE DATE : 20040514

US2004147911 AA	20060424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : EDWARDS LIFESCIENCES CORPORATION, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:EDWARDS LIFESCIENCES LLC; REEL/FRAME:017528/0518 EFFECTIVE DATE : 20060417
US2004147911 AA	20090304	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2004147912 AA	20040729	LSPB	+	published / reissued	
US2004147912 AA	20040113	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:SINOFSKY, EDWARD L.; REEL/FRAME:014894/0739 EFFECTIVE DATE : 20040112
US2004147912 AA	20040603	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : EDWARDS LIFESCIENCES LLC, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:015406/0296 EFFECTIVE DATE : 20040514
US2004147912 AA	20060424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : EDWARDS LIFESCIENCES CORPORATION, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:EDWARDS LIFESCIENCES LLC; REEL/FRAME:017528/0518 EFFECTIVE DATE : 20060417
US2004147912 AA	20091109	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2004147913 AA	20040729	LSPB	+	published / reissued	
US2004147913 AA	20040113	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:SINOFSKY, EDWARD L.; REEL/FRAME:014899/0161 EFFECTIVE DATE : 20040112
US2004147913 AA	20040603	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : EDWARDS LIFESCIENCES LLC, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:015406/0296 EFFECTIVE DATE : 20040514
US2004147913 AA	20060424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : EDWARDS LIFESCIENCES CORPORATION, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:EDWARDS LIFESCIENCES LLC; REEL/FRAME:017528/0518 EFFECTIVE DATE : 20060417
US2004147913 AA	20100802	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2004167503 AA	20040826	LSPB	+	published / reissued	
US2004167503 AA	20040510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:SINOFSKY, EDWARD L.; REEL/FRAME:015306/0203 EFFECTIVE DATE : 20040502
US2004167503 AA	20040603	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : EDWARDS LIFESCIENCES LLC, CALIFORNIA

					OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:015406/0296 EFFECTIVE DATE : 20040514
US2004167503 AA	20060424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : EDWARDS LIFESCIENCES CORPORATION, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:EDWARDS LIFESCIENCES LLC; REEL/FRAME:017528/0518 EFFECTIVE DATE : 20060417
US2004167503 AA	20080711	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2005038419 A9	20050511	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : VENTURE LENDING & LEASING IV, INC., CALIFORNIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:016547/0536 EFFECTIVE DATE : 20050415
US2005038419 A9	20110907	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2005065504 AA	20050324	LSPB	+	published / reissued	
US2005065504 AA	20050511	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : VENTURE LENDING & LEASING IV, INC., CALIFORNIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:016547/0536 EFFECTIVE DATE : 20050415
US2005065504 AA	20090914	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:MELSKY, GERALD; ARNOLD, JEFFREY M.; SINOFSKY, EDWARD L.; AND OTHERS; REEL/FRAME:023224/0376; SIGNING DATES FROM 20090701 TO 20090904
US2005065504 AA	20090914	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:MELSKY, GERALD; ARNOLD, JEFFREY M.; SINOFSKY, EDWARD L.; AND OTHERS; SIGNING DATES FROM 20090701 TO 20090904; REEL/FRAME:023224/0376
US2005065504 AA	20130904	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2005171520 AA	20050804	LSPB	+	published / reissued	
US2005171520 AA	20080326	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2005222557 AA	20051006	LSPB	+	published / reissued	
US2005222557 AA	20110413	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2005222558 AA	20051006	LSPB	+	published / reissued	
US2005222558 AA	20050511	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : VENTURE LENDING & LEASING IV, INC., CALIFORNIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:016547/0536 EFFECTIVE DATE : 20050415
US2005222558 AA	20050622	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF

					ASSIGNORS INTEREST; ASSIGNORS:ARNOLD, JEFFREY M.; MELSKY, GERALD; BAXTER, LINCOLN S.; REEL/FRAME:016706/0675 EFFECTIVE DATE : 20050315
US2005222558 AA	20061221	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : VENTURE LENDING & LEASING IV, INC., CALIFORNIA OLDPARTY : RELEASE; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:018720/0784 EFFECTIVE DATE : 20061109
US2005222558 AA	20090121	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2005234436 AA	20051020	LSPB	+	published / reissued	
US2005234436 AA	20050511	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : VENTURE LENDING & LEASING IV, INC., CALIFORNIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:016547/0536 EFFECTIVE DATE : 20050415
US2005234436 AA	20050623	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ARNOLD, JEFFREY M.; MELSKY, GERALD; BAXTER, LINCOLN S.; REEL/FRAME:016711/0593 EFFECTIVE DATE : 20050315
US2005234436 AA	20061221	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : VENTURE LENDING & LEASING IV, INC., CALIFORNIA OLDPARTY : RELEASE; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:018720/0784 EFFECTIVE DATE : 20061109
US2005234436 AA	20090115	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2005234437 AA	20051020	LSPB	+	published / reissued	
US2005234437 AA	20050511	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : VENTURE LENDING & LEASING IV, INC., CALIFORNIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:016547/0536 EFFECTIVE DATE : 20050415
US2005234437 AA	20050623	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ARNOLD, JEFFREY M.; MELSKY, GERALD; BAXTER, LINCOLN S.; REEL/FRAME:016710/0900 EFFECTIVE DATE : 20050315
US2005234437 AA	20061221	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : VENTURE LENDING & LEASING IV, INC., CALIFORNIA OLDPARTY : RELEASE; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:018720/0784 EFFECTIVE DATE : 20061109
US2005234437 AA	20091026	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2005267452 AA	20051201	LSPB	+	published / reissued	
US2005267452 AA	20070404	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2006253113 AA	20061109	LSPB	+	published / reissued	
US2006253113 AA	20120725	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE

US2007078451 AA	20070405	LSPB	+	published / reissued	
US2008195088 AA	20080814	LSPB	+	published / reissued	
US2008195088 AA	20120321	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2009221997 AA	20090903	LSPB	+	published / reissued	
US2009221997 AA	20130116	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2009275934 AA	20091105	LSPB	+	published / reissued	
US2009275934 AA	20120709	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2009299354 AA	20091203	LSPB	+	published / reissued	
US2009299354 AA	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033434/0399 EFFECTIVE DATE : 20140730
US2009299354 AA	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033434/0399 EFFECTIVE DATE : 20140730
US2009299354 AA	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:035497/0393 EFFECTIVE DATE : 20150424
US2009299354 AA	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:035497/0393 EFFECTIVE DATE : 20150424
US2009299354 AA	20150429	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2009326320 AA	20091231	LSPB	+	published / reissued	
US2009326320 AA	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033434/0399 EFFECTIVE DATE : 20140730
US2009326320 AA	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033434/0399 EFFECTIVE DATE : 20140730
US2009326320 AA	20141112	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2011245822 AA	20111006	LSPB	+	published / reissued	
US2011245822 AA	20120711	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2011245828 AA	20111006	LSPB	+	published / reissued	
US2011245828 AA	20120829	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2012116353 AA	20120510	LSPB	+	published / reissued	
US2012116353 AA	20130501	LSGT	STCF	INFORMATION ON STATUS: PATENT	TEXT : PATENTED CASE

				GRANT	
US2013012923 AA	20130110	LSPB	+	published / reissued	
US2013012923 AA	20131230	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2014031802 AA	20140130	LSPB	+	published / reissued	
US2014031802 AA	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033434/0399 EFFECTIVE DATE : 20140730
US2014031802 AA	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033434/0399 EFFECTIVE DATE : 20140730
US2014031802 AA	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:035497/0393 EFFECTIVE DATE : 20150424
US2014031802 AA	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:035497/0393 EFFECTIVE DATE : 20150424
US2014031802 AA	20160919	LSAL	NAF1	Notice of Appeal Filed	
US2014031802 AA	20160919	LSAL	NAF1	Notice of Appeal Filed	
US2014031802 AA	20161215	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:MELSKY, GERALD; ARNOLD, JEFFREY M.; SINOFSKY, EDWARD L.; AND OTHERS; SIGNING DATES FROM 20090701 TO 20090904; REEL/FRAME:040637/0163
US2014031802 AA	20170331	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SOLAR CAPITAL LTD., NEW YORK OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:041805/0976 EFFECTIVE DATE : 20170331
US2014031802 AA	20170331	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:041805/0976 EFFECTIVE DATE : 20170331
US2014031802 AA	20171107	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2015141845 AA	20150521	LSPB	+	published / reissued	
US2015141845 AA	20160803	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2017156793 AA	20170608	LSPB	+	published / reissued	
US2017156793 AA	20170523	LSES	NFA1	Non Final Action Mailed	
US2017156793 AA	20170830	LSES	+ALW2	Allowed -- Notice of Allowance Not Yet Mailed	

US2017156793 AA	20170830	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2017156793 AA	20170922	LSFE	-AWA4	Awaiting TC Resp., Issue Fee Not Paid	
US2017156793 AA	20171020	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2017156793 AA	20171130	LSFE	+PPR1	Publications -- Issue Fee Payment Received	
US2017156793 AA	20171204	LSFE	+PPV1	Publications -- Issue Fee Payment Verified	
US2017156793 AA	20171220	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5632767 A	19970527	LSGT	+	granted / extensions (spc, cpc, pte)	
US5632767 A	19950811	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : RARE EARTH MEDICAL, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:SINOFSKY, EDWARD L.; REEL/FRAME:007566/0972 EFFECTIVE DATE : 19950807
US5632767 A	19971021	LSRE	CC	CERTIFICATE OF CORRECTION	
US5632767 A	20000524	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : CHANGE OF NAME; ASSIGNOR:RARE EARTH MEDICAL, INC.; REEL/FRAME:010822/0136 EFFECTIVE DATE : 19990305
US5632767 A	20000524	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:010822/0143 EFFECTIVE DATE : 19990618
US5632767 A	20001101	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5632767 A	20021030	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK DBA SILICON VALLEY EAST, CALIF OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS,INC.; REEL/FRAME:013211/0256 EFFECTIVE DATE : 20021015
US5632767 A	20050511	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : VENTURE LENDING & LEASING IV, INC., CALIFORNIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:016547/0536 EFFECTIVE DATE : 20050415
US5632767 A	20050527	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5632767 A	20050531	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE; ASSIGNOR:SILICON VALLEY BANK; REEL/FRAME:016610/0594 EFFECTIVE DATE : 20050406
US5632767 A	20061221	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : VENTURE LENDING & LEASING IV, INC., CALIFORNIA OLDPARTY : RELEASE; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:018720/0784 EFFECTIVE DATE : 20061109

US5632767 A	20090527	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5632767 A	20090622	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US5632767 A	20090622	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US5632767 A	20090714	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20090527
US5632767 A	20150606	PEXP		Calculated Patent Term Expiry	
US5637877 A	19970610	LSGT	+	granted / extensions (spc, cpc, pte)	
US5637877 A	19950810	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : RARE EARTH MEDICAL, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:SINOFSKY, EDWARD L.; REEL/FRAME:007566/0976 EFFECTIVE DATE : 19950807
US5637877 A	20000524	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : CHANGE OF NAME; ASSIGNOR:RARE EARTH MEDICAL, INC.; REEL/FRAME:010822/0136 EFFECTIVE DATE : 19990305
US5637877 A	20000524	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:010822/0143 EFFECTIVE DATE : 19990618
US5637877 A	20001207	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5637877 A	20021030	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK DBA SILICON VALLEY EAST, CALIF OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS,INC.; REEL/FRAME:013211/0256 EFFECTIVE DATE : 20021015
US5637877 A	20050511	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : VENTURE LENDING & LEASING IV, INC., CALIFORNIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:016547/0536 EFFECTIVE DATE : 20050415
US5637877 A	20050531	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE; ASSIGNOR:SILICON VALLEY BANK; REEL/FRAME:016610/0594 EFFECTIVE DATE : 20050406
US5637877 A	20050610	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5637877 A	20050713	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US5637877 A	20050713	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US5637877 A	20050809	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20050610

US5637877 A	20061221	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : VENTURE LENDING & LEASING IV, INC., CALIFORNIA OLDPARTY : RELEASE; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:018720/0784 EFFECTIVE DATE : 20061109
US5637877 A	20150606	PEXP		Calculated Patent Term Expiry	
US5643253 A	19970701	LSGT	+	granted / extensions (spc, cpc, pte)	
US5643253 A	19950811	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : RARE EARTH MEDICAL, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BAXTER, LINCOLN S.; FARR, NORMAN; SINOFSKY, EDWARD L.; REEL/FRAME:007634/0630 EFFECTIVE DATE : 19950807
US5643253 A	20000524	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : CHANGE OF NAME; ASSIGNOR:RARE EARTH MEDICAL, INC.; REEL/FRAME:010822/0136 EFFECTIVE DATE : 19990305
US5643253 A	20000524	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:010822/0143 EFFECTIVE DATE : 19990618
US5643253 A	20001229	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5643253 A	20021030	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK DBA SILICON VALLEY EAST, CALIF OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS,INC.; REEL/FRAME:013211/0256 EFFECTIVE DATE : 20021015
US5643253 A	20041230	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5643253 A	20050511	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : VENTURE LENDING & LEASING IV, INC., CALIFORNIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:016547/0536 EFFECTIVE DATE : 20050415
US5643253 A	20050531	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE; ASSIGNOR:SILICON VALLEY BANK; REEL/FRAME:016610/0594 EFFECTIVE DATE : 20050406
US5643253 A	20061221	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : VENTURE LENDING & LEASING IV, INC., CALIFORNIA OLDPARTY : RELEASE; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:018720/0784 EFFECTIVE DATE : 20061109
US5643253 A	20080502	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : NATIONAL INSTITUTES OF HEALTH (NIH), U.S. DEPT. OF OLDPARTY : EXECUTIVE ORDER 9424, CONFIRMATORY LICENSE; ASSIGNOR:RARE EARTH MEDICAL, INC.; REEL/FRAME:020886/0647 EFFECTIVE DATE : 19971106
US5643253 A	20090701	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	

US5643253 A	20090727	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US5643253 A	20090727	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US5643253 A	20090818	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20090701
US5643253 A	20150606	PEXP		Calculated Patent Term Expiry	
US5908415 A	19990601	LSGT	+	granted / extensions (spc, cpc, pte)	
US5908415 A	19990521	LSGT	PAT1	Patented Case	
US5908415 A	19990521	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5908415 A	20000524	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : CHANGE OF NAME; ASSIGNOR:RARE EARTH MEDICAL, INC.; REEL/FRAME:010822/0136 EFFECTIVE DATE : 19990305
US5908415 A	20000524	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:010822/0143 EFFECTIVE DATE : 19990618
US5908415 A	20021030	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK DBA SILICON VALLEY EAST, CALIF OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS,INC.; REEL/FRAME:013211/0256 EFFECTIVE DATE : 20021015
US5908415 A	20021125	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5908415 A	20050511	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : VENTURE LENDING & LEASING IV, INC., CALIFORNIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:016547/0536 EFFECTIVE DATE : 20050415
US5908415 A	20050531	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE; ASSIGNOR:SILICON VALLEY BANK; REEL/FRAME:016610/0594 EFFECTIVE DATE : 20050406
US5908415 A	20061221	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : VENTURE LENDING & LEASING IV, INC., CALIFORNIA OLDPARTY : RELEASE; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:018720/0784 EFFECTIVE DATE : 20061109
US5908415 A	20070103	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5908415 A	20110601	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5908415 A	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033434/0399 EFFECTIVE DATE : 20140730
US5908415 A	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER

					OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033434/0399 EFFECTIVE DATE : 20140730
US5908415 A	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:035497/0393 EFFECTIVE DATE : 20150424
US5908415 A	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:035497/0393 EFFECTIVE DATE : 20150424
US5908415 A	20170410	PEXP		Calculated Patent Term Expiry	
US5947959 A	19990907	LSGT	+	granted / extensions (spc, cpc, pte)	
US5947959 A	19971216	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : RARE EARTH MEDICAL, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:SINOFSKY, EDWARD L.; REEL/FRAME:008941/0621 EFFECTIVE DATE : 19971212
US5947959 A	20000524	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : CHANGE OF NAME; ASSIGNOR:RARE EARTH MEDICAL, INC.; REEL/FRAME:010822/0136 EFFECTIVE DATE : 19990305
US5947959 A	20000524	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:010822/0143 EFFECTIVE DATE : 19990618
US5947959 A	20021030	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK DBA SILICON VALLEY EAST, CALIF OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS,INC.; REEL/FRAME:013211/0256 EFFECTIVE DATE : 20021015
US5947959 A	20030307	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5947959 A	20050511	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : VENTURE LENDING & LEASING IV, INC., CALIFORNIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:016547/0536 EFFECTIVE DATE : 20050415
US5947959 A	20050531	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE; ASSIGNOR:SILICON VALLEY BANK; REEL/FRAME:016610/0594 EFFECTIVE DATE : 20050406
US5947959 A	20061221	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : VENTURE LENDING & LEASING IV, INC., CALIFORNIA OLDPARTY : RELEASE; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:018720/0784 EFFECTIVE DATE : 20061109
US5947959 A	20070907	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY	

				MAINTENANCE FEES	
US5947959 A	20071008	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US5947959 A	20071008	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US5947959 A	20071030	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20070907
US5947959 A	20171216	PEXP		Calculated Patent Term Expiry	
US6102905 A	20000815	LSGT	+	granted / extensions (spc, cpc, pte)	
US6102905 A	19980318	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : RARE EARTH MEDICAL, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BAXTER, LINCOLN S.; SINOFSKY, EDWARD L.; FARR, NORMAN; REEL/FRAME:009059/0398 EFFECTIVE DATE : 19980317
US6102905 A	20000524	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : CHANGE OF NAME; ASSIGNOR:RARE EARTH MEDICAL, INC.; REEL/FRAME:010822/0136 EFFECTIVE DATE : 19990305
US6102905 A	20000524	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:010822/0143 EFFECTIVE DATE : 19990618
US6102905 A	20000728	LSGT	PAT1	Patented Case	
US6102905 A	20000728	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US6102905 A	20021030	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK DBA SILICON VALLEY EAST, CALIF OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS,INC.; REEL/FRAME:013211/0256 EFFECTIVE DATE : 20021015
US6102905 A	20040816	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6102905 A	20050511	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : VENTURE LENDING & LEASING IV, INC., CALIFORNIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:016547/0536 EFFECTIVE DATE : 20050415
US6102905 A	20050531	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE; ASSIGNOR:SILICON VALLEY BANK; REEL/FRAME:016610/0594 EFFECTIVE DATE : 20050406
US6102905 A	20061221	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : VENTURE LENDING & LEASING IV, INC., CALIFORNIA OLDPARTY : RELEASE; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:018720/0784 EFFECTIVE DATE : 20061109
US6102905 A	20080212	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8

US6102905 A	20120124	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US6102905 A	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033434/0399 EFFECTIVE DATE : 20140730
US6102905 A	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033434/0399 EFFECTIVE DATE : 20140730
US6102905 A	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:035497/0393 EFFECTIVE DATE : 20150424
US6102905 A	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:035497/0393 EFFECTIVE DATE : 20150424
US6102905 A	20180318	PEXP		Calculated Patent Term Expiry	
US6168591 BA	20010102	LSGT	+	granted / extensions (spc, cpc, pte)	
US6168591 BA	19971216	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : RARE EARTH MEDICAL, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:SINOFSKY, EDWARD L.; REEL/FRAME:009006/0359 EFFECTIVE DATE : 19971212
US6168591 BA	20000524	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : CHANGE OF NAME; ASSIGNOR:RARE EARTH MEDICAL, INC.; REEL/FRAME:010822/0136 EFFECTIVE DATE : 19990305
US6168591 BA	20000524	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:010822/0143 EFFECTIVE DATE : 19990618
US6168591 BA	20010529	LSRE	CC	CERTIFICATE OF CORRECTION	
US6168591 BA	20021030	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK DBA SILICON VALLEY EAST, CALIF OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS,INC.; REEL/FRAME:013211/0256 EFFECTIVE DATE : 20021015
US6168591 BA	20040702	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6168591 BA	20050511	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : VENTURE LENDING & LEASING IV, INC., CALIFORNIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:016547/0536 EFFECTIVE DATE : 20050415
US6168591 BA	20050531	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS

					OLDPARTY : RELEASE; ASSIGNOR:SILICON VALLEY BANK; REEL/FRAME:016610/0594 EFFECTIVE DATE : 20050406
US6168591 BA	20061221	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : VENTURE LENDING & LEASING IV, INC., CALIFORNIA OLDPARTY : RELEASE; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:018720/0784 EFFECTIVE DATE : 20061109
US6168591 BA	20090102	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US6168591 BA	20090202	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US6168591 BA	20090224	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20090102
US6168591 BA	20171216	PEXP		Calculated Patent Term Expiry	
US6270492 BA	20010807	LSGT	+	granted / extensions (spc, cpc, pte)	
US6270492 BA	19991207	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:SINOFSKY, EDWARD L.; REEL/FRAME:010438/0659 EFFECTIVE DATE : 19991129
US6270492 BA	20020312	LSRE	CC	CERTIFICATE OF CORRECTION	
US6270492 BA	20021030	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK DBA SILICON VALLEY EAST, CALIF OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS,INC.; REEL/FRAME:013211/0256 EFFECTIVE DATE : 20021015
US6270492 BA	20050207	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6270492 BA	20050511	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : VENTURE LENDING & LEASING IV, INC., CALIFORNIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:016547/0536 EFFECTIVE DATE : 20050415
US6270492 BA	20050531	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE; ASSIGNOR:SILICON VALLEY BANK; REEL/FRAME:016610/0594 EFFECTIVE DATE : 20050406
US6270492 BA	20061221	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : VENTURE LENDING & LEASING IV, INC., CALIFORNIA OLDPARTY : RELEASE; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:018720/0784 EFFECTIVE DATE : 20061109
US6270492 BA	20090807	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US6270492 BA	20090907	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US6270492 BA	20090907	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US6270492 BA	20090929	LSLE	-FP	EXPIRED DUE TO	EFFECTIVE DATE : 20090807

				FAILURE TO PAY MAINTENANCE FEE	
US6270492 BA	20190907	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
US6423055 BA	20020723	LSGT	+	granted / extensions (spc, cpc, pte)	
US6423055 BA	19991021	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:FARR, NORMAN E.; WIELER, WILLIAM E.; REEL/FRAME:010338/0771 EFFECTIVE DATE : 19991014
US6423055 BA	20000524	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : CHANGE OF NAME; ASSIGNOR:RARE EARTH MEDICAL, INC.; REEL/FRAME:010822/0136 EFFECTIVE DATE : 19990305
US6423055 BA	20000524	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:010822/0143 EFFECTIVE DATE : 19990618
US6423055 BA	20020703	LSGT	PAT1	Patented Case	
US6423055 BA	20020703	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US6423055 BA	20021030	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK DBA SILICON VALLEY EAST, CALIF OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS,INC.; REEL/FRAME:013211/0256 EFFECTIVE DATE : 20021015
US6423055 BA	20050511	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : VENTURE LENDING & LEASING IV, INC., CALIFORNIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:016547/0536 EFFECTIVE DATE : 20050415
US6423055 BA	20050531	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE; ASSIGNOR:SILICON VALLEY BANK; REEL/FRAME:016610/0594 EFFECTIVE DATE : 20050406
US6423055 BA	20060123	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6423055 BA	20061221	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : VENTURE LENDING & LEASING IV, INC., CALIFORNIA OLDPARTY : RELEASE; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:018720/0784 EFFECTIVE DATE : 20061109
US6423055 BA	20100525	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US6423055 BA	20140120	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US6423055 BA	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033434/0399 EFFECTIVE DATE : 20140730
US6423055 BA	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER

					OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033434/0399 EFFECTIVE DATE : 20140730
US6423055 BA	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:035497/0393 EFFECTIVE DATE : 20150424
US6423055 BA	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:035497/0393 EFFECTIVE DATE : 20150424
US6423055 BA	20170331	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SOLAR CAPITAL LTD., NEW YORK OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:041805/0976 EFFECTIVE DATE : 20170331
US6423055 BA	20170331	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:041805/0976 EFFECTIVE DATE : 20170331
US6423055 BA	20180409	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GPB DEBT HOLDINGS II LLC, NEW YORK OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:045478/0532 EFFECTIVE DATE : 20180404
US6423055 BA	20190509	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; OXFORD FINANCE LLC; REEL/FRAME:049133/0474 EFFECTIVE DATE : 20190509
US6423055 BA	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; OXFORD FINANCE LLC; REEL/FRAME:049138/0233 EFFECTIVE DATE : 20190509
US6423055 BA	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; SOLAR CAPITAL LTD.; REEL/FRAME:049138/0362 EFFECTIVE DATE : 20190509
US6423055 BA	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KENNEDY LEWIS INVESTMENT MANAGEMENT LLC, NEW YORK OLDPARTY : INTELLECTUAL PROPERTY SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:049149/0356 EFFECTIVE DATE : 20190510
US6423055 BA	20190516	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:GPB DEBT HOLDINGS II, LLC; REEL/FRAME:049200/0597 EFFECTIVE DATE : 20190510

US6423055 BA	20190714	PEXP		Calculated Patent Term Expiry	
US6558375 BA	20030506	LSGT	+	granted / extensions (spc, cpc, pte)	
US6558375 BA	20000906	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:SINOFSKY, EDWARD L.; FARR, NORMAN E.; BAXTER, LINCOLN S.; REEL/FRAME:011086/0102 EFFECTIVE DATE : 20000803
US6558375 BA	20021030	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK DBA SILICON VALLEY EAST, CALIF OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS,INC.; REEL/FRAME:013211/0256 EFFECTIVE DATE : 20021015
US6558375 BA	20030417	LSGT	PAT1	Patented Case	
US6558375 BA	20030417	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US6558375 BA	20050511	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : VENTURE LENDING & LEASING IV, INC., CALIFORNIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:016547/0536 EFFECTIVE DATE : 20050415
US6558375 BA	20050531	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE; ASSIGNOR:SILICON VALLEY BANK; REEL/FRAME:016610/0594 EFFECTIVE DATE : 20050406
US6558375 BA	20061221	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : VENTURE LENDING & LEASING IV, INC., CALIFORNIA OLDPARTY : RELEASE; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:018720/0784 EFFECTIVE DATE : 20061109
US6558375 BA	20070320	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6558375 BA	20101108	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US6558375 BA	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033434/0399 EFFECTIVE DATE : 20140730
US6558375 BA	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033434/0399 EFFECTIVE DATE : 20140730
US6558375 BA	20141023	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US6558375 BA	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:035497/0393 EFFECTIVE DATE : 20150424
US6558375 BA	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY AGREEMENT;

					ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:035497/0393 EFFECTIVE DATE : 20150424
US6558375 BA	20170331	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:041805/0976 EFFECTIVE DATE : 20170331
US6558375 BA	20170331	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SOLAR CAPITAL LTD., NEW YORK OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:041805/0976 EFFECTIVE DATE : 20170331
US6558375 BA	20180409	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GPB DEBT HOLDINGS II LLC, NEW YORK OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:045478/0532 EFFECTIVE DATE : 20180404
US6558375 BA	20190509	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; OXFORD FINANCE LLC; REEL/FRAME:049133/0474 EFFECTIVE DATE : 20190509
US6558375 BA	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; SOLAR CAPITAL LTD.; REEL/FRAME:049138/0362 EFFECTIVE DATE : 20190509
US6558375 BA	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; OXFORD FINANCE LLC; REEL/FRAME:049138/0233 EFFECTIVE DATE : 20190509
US6558375 BA	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KENNEDY LEWIS INVESTMENT MANAGEMENT LLC, NEW YORK OLDPARTY : INTELLECTUAL PROPERTY SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:049149/0356 EFFECTIVE DATE : 20190510
US6558375 BA	20190516	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:GPB DEBT HOLDINGS II, LLC; REEL/FRAME:049200/0597 EFFECTIVE DATE : 20190510
US6558375 BA	20200908	PEXP		Calculated Patent Term Expiry (PTA 56 days)	
US6572609 BA	20030603	LSGT	+	granted / extensions (spc, cpc, pte)	
US6572609 BA	20000925	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:FARR, NORMAN E.; WIELER, WILLIAM E.; BAXTER, LINCOLN S.; AND OTHERS; REEL/FRAME:011158/0337; SIGNING DATES FROM 20000821 TO 20000905

US6572609 BA	20021030	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK DBA SILICON VALLEY EAST, CALIF OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS,INC.; REEL/FRAME:013211/0256 EFFECTIVE DATE : 20021015
US6572609 BA	20030514	LSGT	PAT1	Patented Case	
US6572609 BA	20030514	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US6572609 BA	20030722	LSRE	CC	CERTIFICATE OF CORRECTION	
US6572609 BA	20050511	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : VENTURE LENDING & LEASING IV, INC., CALIFORNIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:016547/0536 EFFECTIVE DATE : 20050415
US6572609 BA	20050531	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE; ASSIGNOR:SILICON VALLEY BANK; REEL/FRAME:016610/0594 EFFECTIVE DATE : 20050406
US6572609 BA	20061204	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6572609 BA	20061221	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : VENTURE LENDING & LEASING IV, INC., CALIFORNIA OLDPARTY : RELEASE; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:018720/0784 EFFECTIVE DATE : 20061109
US6572609 BA	20101203	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US6572609 BA	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033434/0399 EFFECTIVE DATE : 20140730
US6572609 BA	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033434/0399 EFFECTIVE DATE : 20140730
US6572609 BA	20141027	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US6572609 BA	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:035497/0393 EFFECTIVE DATE : 20150424
US6572609 BA	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:035497/0393 EFFECTIVE DATE : 20150424
US6572609 BA	20170331	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SOLAR CAPITAL LTD., NEW YORK OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:041805/0976 EFFECTIVE DATE : 20170331
US6572609 BA	20170331	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK,

					MASSACHUSETTS OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:041805/0976 EFFECTIVE DATE : 20170331
US6572609 BA	20180409	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GPB DEBT HOLDINGS II LLC, NEW YORK OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:045478/0532 EFFECTIVE DATE : 20180404
US6572609 BA	20190509	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; OXFORD FINANCE LLC; REEL/FRAME:049133/0474 EFFECTIVE DATE : 20190509
US6572609 BA	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; OXFORD FINANCE LLC; REEL/FRAME:049138/0233 EFFECTIVE DATE : 20190509
US6572609 BA	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; SOLAR CAPITAL LTD.; REEL/FRAME:049138/0362 EFFECTIVE DATE : 20190509
US6572609 BA	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KENNEDY LEWIS INVESTMENT MANAGEMENT LLC, NEW YORK OLDPARTY : INTELLECTUAL PROPERTY SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:049149/0356 EFFECTIVE DATE : 20190510
US6572609 BA	20190516	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:GPB DEBT HOLDINGS II, LLC; REEL/FRAME:049200/0597 EFFECTIVE DATE : 20190510
US6572609 BA	20201130	PEXP		Calculated Patent Term Expiry (PTA 160 days)	
US6579285 BB	20030617	LSGT	+	granted / extensions (spc, cpc, pte)	
US6579285 BB	20011105	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:SINOFSKY, EDWARD L.; REEL/FRAME:012291/0562 EFFECTIVE DATE : 20011023
US6579285 BB	20030529	LSGT	PAT1	Patented Case	
US6579285 BB	20050511	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : VENTURE LENDING & LEASING IV, INC., CALIFORNIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:016547/0536 EFFECTIVE DATE : 20050415
US6579285 BB	20050531	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE; ASSIGNOR:SILICON VALLEY BANK; REEL/FRAME:016610/0594

					EFFECTIVE DATE : 20050406
US6579285 BB	20061218	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6579285 BB	20061221	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : VENTURE LENDING & LEASING IV, INC., CALIFORNIA OLDPARTY : RELEASE; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:018720/0784 EFFECTIVE DATE : 20061109
US6579285 BB	20110613	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US6579285 BB	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033434/0399 EFFECTIVE DATE : 20140730
US6579285 BB	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033434/0399 EFFECTIVE DATE : 20140730
US6579285 BB	20141027	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US6579285 BB	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:035497/0393 EFFECTIVE DATE : 20150424
US6579285 BB	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:035497/0393 EFFECTIVE DATE : 20150424
US6579285 BB	20210807	PEXP		Calculated Patent Term Expiry	
US6626900 BA	20030930	LSGT	+	granted / extensions (spc, cpc, pte)	
US6626900 BA	20000925	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:SINOFSKY, EDWARD L.; FARR, NORMAN E.; REEL/FRAME:011145/0707 EFFECTIVE DATE : 20000721
US6626900 BA	20021030	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK DBA SILICON VALLEY EAST, CALIF OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS,INC.; REEL/FRAME:013211/0256 EFFECTIVE DATE : 20021015
US6626900 BA	20030911	LSGT	PAT1	Patented Case	
US6626900 BA	20030911	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US6626900 BA	20050511	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : VENTURE LENDING & LEASING IV, INC., CALIFORNIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:016547/0536 EFFECTIVE DATE : 20050415
US6626900 BA	20050531	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE;

					ASSIGNOR:SILICON VALLEY BANK; REEL/FRAME:016610/0594 EFFECTIVE DATE : 20050406
US6626900 BA	20061221	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : VENTURE LENDING & LEASING IV, INC., CALIFORNIA OLDPARTY : RELEASE; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:018720/0784 EFFECTIVE DATE : 20061109
US6626900 BA	20070330	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6626900 BA	20110330	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US6626900 BA	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033434/0399 EFFECTIVE DATE : 20140730
US6626900 BA	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033434/0399 EFFECTIVE DATE : 20140730
US6626900 BA	20150330	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US6626900 BA	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:035497/0393 EFFECTIVE DATE : 20150424
US6626900 BA	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:035497/0393 EFFECTIVE DATE : 20150424
US6626900 BA	20170331	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:041805/0976 EFFECTIVE DATE : 20170331
US6626900 BA	20170331	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SOLAR CAPITAL LTD., NEW YORK OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:041805/0976 EFFECTIVE DATE : 20170331
US6626900 BA	20180409	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GPB DEBT HOLDINGS II LLC, NEW YORK OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:045478/0532 EFFECTIVE DATE : 20180404
US6626900 BA	20190509	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; OXFORD FINANCE LLC; REEL/FRAME:049133/0474 EFFECTIVE DATE : 20190509
US6626900 BA	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; OXFORD FINANCE

					LLC; REEL/FRAME:049138/0233 EFFECTIVE DATE : 20190509
US6626900 BA	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; SOLAR CAPITAL LTD.; REEL/FRAME:049138/0362 EFFECTIVE DATE : 20190509
US6626900 BA	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KENNEDY LEWIS INVESTMENT MANAGEMENT LLC, NEW YORK OLDPARTY : INTELLECTUAL PROPERTY SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:049149/0356 EFFECTIVE DATE : 20190510
US6626900 BA	20190516	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:GPB DEBT HOLDINGS II, LLC; REEL/FRAME:049200/0597 EFFECTIVE DATE : 20190510
US6626900 BA	20200714	PEXP		Calculated Patent Term Expiry	
US6676656 BB	20040113	LSGT	+	granted / extensions (spc, cpc, pte)	
US6676656 BB	20011105	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:SINOFSKY, EDWARD L.; REEL/FRAME:012291/0554 EFFECTIVE DATE : 20011023
US6676656 BB	20031223	LSGT	PAT1	Patented Case	
US6676656 BB	20050531	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE; ASSIGNOR:SILICON VALLEY BANK; REEL/FRAME:016610/0594 EFFECTIVE DATE : 20050406
US6676656 BB	20061221	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : VENTURE LENDING & LEASING IV, INC., CALIFORNIA OLDPARTY : RELEASE; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:018720/0784 EFFECTIVE DATE : 20061109
US6676656 BB	20080108	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6676656 BB	20110713	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US6676656 BB	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033434/0399 EFFECTIVE DATE : 20140730
US6676656 BB	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033434/0399 EFFECTIVE DATE : 20140730
US6676656 BB	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:035497/0393

					EFFECTIVE DATE : 20150424
US6676656 BB	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:035497/0393 EFFECTIVE DATE : 20150424
US6676656 BB	20150713	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US6676656 BB	20210807	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
US6942657 BB	20050913	LSGT	+	granted / extensions (spc, cpc, pte)	
US6942657 BB	20050824	LSGT	PAT1	Patented Case	
US6942657 BB	20090313	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6942657 BB	20130214	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US6942657 BB	20140703	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE OF SECURITY INTEREST; ASSIGNOR:VENTURE LENDING & LEASING IV, INC.; REEL/FRAME:033274/0881 EFFECTIVE DATE : 20061109
US6942657 BB	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033434/0399 EFFECTIVE DATE : 20140730
US6942657 BB	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033434/0399 EFFECTIVE DATE : 20140730
US6942657 BB	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:035497/0393 EFFECTIVE DATE : 20150424
US6942657 BB	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:035497/0393 EFFECTIVE DATE : 20150424
US6942657 BB	20161222	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US6942657 BB	20170331	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SOLAR CAPITAL LTD., NEW YORK OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:041805/0976 EFFECTIVE DATE : 20170331
US6942657 BB	20170331	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:041805/0976 EFFECTIVE DATE : 20170331
US6942657 BB	20180409	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GPB DEBT HOLDINGS II LLC, NEW YORK OLDPARTY : SECURITY INTEREST;

					ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:045478/0532 EFFECTIVE DATE : 20180404
US6942657 BB	20190509	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; OXFORD FINANCE LLC; REEL/FRAME:049133/0474 EFFECTIVE DATE : 20190509
US6942657 BB	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; SOLAR CAPITAL LTD.; REEL/FRAME:049138/0362 EFFECTIVE DATE : 20190509
US6942657 BB	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; OXFORD FINANCE LLC; REEL/FRAME:049138/0233 EFFECTIVE DATE : 20190509
US6942657 BB	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KENNEDY LEWIS INVESTMENT MANAGEMENT LLC, NEW YORK OLDPARTY : INTELLECTUAL PROPERTY SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:049149/0356 EFFECTIVE DATE : 20190510
US6942657 BB	20190516	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:GPB DEBT HOLDINGS II, LLC; REEL/FRAME:049200/0597 EFFECTIVE DATE : 20190510
US6942657 BB	20230929	PEXP		Calculated Patent Term Expiry	
US6953457 BB	20051011	LSGT	+	granted / extensions (spc, cpc, pte)	
US6953457 BB	20050921	LSGT	PAT1	Patented Case	
US6953457 BB	20090413	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6953457 BB	20130214	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US6953457 BB	20140703	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE OF SECURITY INTEREST; ASSIGNOR:VENTURE LENDING & LEASING IV, INC.; REEL/FRAME:033275/0601 EFFECTIVE DATE : 20061109
US6953457 BB	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033434/0399 EFFECTIVE DATE : 20140730
US6953457 BB	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033434/0399 EFFECTIVE DATE : 20140730
US6953457 BB	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS

					OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:035497/0393 EFFECTIVE DATE : 20150424
US6953457 BB	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:035497/0393 EFFECTIVE DATE : 20150424
US6953457 BB	20170313	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US6953457 BB	20170331	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SOLAR CAPITAL LTD., NEW YORK OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:041805/0976 EFFECTIVE DATE : 20170331
US6953457 BB	20170331	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:041805/0976 EFFECTIVE DATE : 20170331
US6953457 BB	20180409	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GPB DEBT HOLDINGS II LLC, NEW YORK OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:045478/0532 EFFECTIVE DATE : 20180404
US6953457 BB	20190509	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; OXFORD FINANCE LLC; REEL/FRAME:049133/0474 EFFECTIVE DATE : 20190509
US6953457 BB	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; SOLAR CAPITAL LTD.; REEL/FRAME:049138/0362 EFFECTIVE DATE : 20190509
US6953457 BB	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; OXFORD FINANCE LLC; REEL/FRAME:049138/0233 EFFECTIVE DATE : 20190509
US6953457 BB	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KENNEDY LEWIS INVESTMENT MANAGEMENT LLC, NEW YORK OLDPARTY : INTELLECTUAL PROPERTY SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:049149/0356 EFFECTIVE DATE : 20190510
US6953457 BB	20190516	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:GPB DEBT HOLDINGS II, LLC; REEL/FRAME:049200/0597 EFFECTIVE DATE : 20190510
US6953457 BB	20220723	PEXP		Calculated Patent Term Expiry (PTA 1 days and a terminal disclaimer has been filed)	

US7207984 BB	20070424	LSGT	+	granted / extensions (spc, cpc, pte)	
US7207984 BB	20070404	LSGT	PAT1	Patented Case	
US7207984 BB	20100910	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US7207984 BB	20140702	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:FARR, NORMAN E.; WIELER, WILLIAM E.; REEL/FRAME:033227/0964 EFFECTIVE DATE : 19991014
US7207984 BB	20140702	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : CHANGE OF ADDRESS; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033265/0696 EFFECTIVE DATE : 20080724
US7207984 BB	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033434/0399 EFFECTIVE DATE : 20140730
US7207984 BB	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033434/0399 EFFECTIVE DATE : 20140730
US7207984 BB	20141010	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US7207984 BB	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:035497/0393 EFFECTIVE DATE : 20150424
US7207984 BB	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:035497/0393 EFFECTIVE DATE : 20150424
US7207984 BB	20170331	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SOLAR CAPITAL LTD., NEW YORK OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:041805/0976 EFFECTIVE DATE : 20170331
US7207984 BB	20170331	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:041805/0976 EFFECTIVE DATE : 20170331
US7207984 BB	20180409	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GPB DEBT HOLDINGS II LLC, NEW YORK OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:045478/0532 EFFECTIVE DATE : 20180404
US7207984 BB	20180904	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US7207984 BB	20190509	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED

					PARTY; ASSIGNORS:SILICON VALLEY BANK; OXFORD FINANCE LLC; REEL/FRAME:049133/0474 EFFECTIVE DATE : 20190509
US7207984 BB	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; SOLAR CAPITAL LTD.; REEL/FRAME:049138/0362 EFFECTIVE DATE : 20190509
US7207984 BB	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; OXFORD FINANCE LLC; REEL/FRAME:049138/0233 EFFECTIVE DATE : 20190509
US7207984 BB	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KENNEDY LEWIS INVESTMENT MANAGEMENT LLC, NEW YORK OLDPARTY : INTELLECTUAL PROPERTY SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:049149/0356 EFFECTIVE DATE : 20190510
US7207984 BB	20190516	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:GPB DEBT HOLDINGS II, LLC; REEL/FRAME:049200/0597 EFFECTIVE DATE : 20190510
US7207984 BB	20250804	PEXP		Calculated Patent Term Expiry	
US7357796 BB	20080415	LSGT	+	granted / extensions (spc, cpc, pte)	
US7357796 BB	20080326	LSGT	PAT1	Patented Case	
US7357796 BB	20080916	LSRE	CC	CERTIFICATE OF CORRECTION	
US7357796 BB	20110906	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US7357796 BB	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033434/0399 EFFECTIVE DATE : 20140730
US7357796 BB	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033434/0399 EFFECTIVE DATE : 20140730
US7357796 BB	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:035497/0393 EFFECTIVE DATE : 20150424
US7357796 BB	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:035497/0393 EFFECTIVE DATE : 20150424
US7357796 BB	20151002	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US7357796 BB	20170331	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SOLAR CAPITAL LTD., NEW

					YORK OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:041805/0976 EFFECTIVE DATE : 20170331
US7357796 BB	20170331	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:041805/0976 EFFECTIVE DATE : 20170331
US7357796 BB	20180409	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GPB DEBT HOLDINGS II LLC, NEW YORK OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:045478/0532 EFFECTIVE DATE : 20180404
US7357796 BB	20190509	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; OXFORD FINANCE LLC; REEL/FRAME:049133/0474 EFFECTIVE DATE : 20190509
US7357796 BB	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; SOLAR CAPITAL LTD.; REEL/FRAME:049138/0362 EFFECTIVE DATE : 20190509
US7357796 BB	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; OXFORD FINANCE LLC; REEL/FRAME:049138/0233 EFFECTIVE DATE : 20190509
US7357796 BB	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KENNEDY LEWIS INVESTMENT MANAGEMENT LLC, NEW YORK OLDPARTY : INTELLECTUAL PROPERTY SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:049149/0356 EFFECTIVE DATE : 20190510
US7357796 BB	20190516	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:GPB DEBT HOLDINGS II, LLC; REEL/FRAME:049200/0597 EFFECTIVE DATE : 20190510
US7357796 BB	20250617	PEXP		Calculated Patent Term Expiry (PTA 121 days)	
US7935108 BB	20110503	LSGT	+	granted / extensions (spc, cpc, pte)	
US7935108 BB	20050511	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : VENTURE LENDING & LEASING IV, INC., CALIFORNIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:016547/0536 EFFECTIVE DATE : 20050415
US7935108 BB	20050622	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ARNOLD, JEFFREY M.; MELSKY, GERALD; BAXTER, LINCOLN S.; REEL/FRAME:016706/0094 EFFECTIVE DATE : 20050315

US7935108 BB	20110413	LSGT	PAT1	Patented Case	
US7935108 BB	20140703	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE OF SECURITY INTEREST; ASSIGNOR:VENTURE LENDING & LEASING IV, INC.; REEL/FRAME:033274/0881 EFFECTIVE DATE : 20061109
US7935108 BB	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033434/0399 EFFECTIVE DATE : 20140730
US7935108 BB	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033434/0399 EFFECTIVE DATE : 20140730
US7935108 BB	20141027	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US7935108 BB	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:035497/0393 EFFECTIVE DATE : 20150424
US7935108 BB	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:035497/0393 EFFECTIVE DATE : 20150424
US7935108 BB	20170331	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:041805/0976 EFFECTIVE DATE : 20170331
US7935108 BB	20170331	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SOLAR CAPITAL LTD., NEW YORK OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:041805/0976 EFFECTIVE DATE : 20170331
US7935108 BB	20180409	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GPB DEBT HOLDINGS II LLC, NEW YORK OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:045478/0532 EFFECTIVE DATE : 20180404
US7935108 BB	20180904	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US7935108 BB	20190509	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; OXFORD FINANCE LLC; REEL/FRAME:049133/0474 EFFECTIVE DATE : 20190509
US7935108 BB	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; OXFORD FINANCE LLC; REEL/FRAME:049138/0233 EFFECTIVE DATE : 20190509

US7935108 BB	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; SOLAR CAPITAL LTD.; REEL/FRAME:049138/0362 EFFECTIVE DATE : 20190509
US7935108 BB	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KENNEDY LEWIS INVESTMENT MANAGEMENT LLC, NEW YORK OLDPARTY : INTELLECTUAL PROPERTY SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:049149/0356 EFFECTIVE DATE : 20190510
US7935108 BB	20190516	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:GPB DEBT HOLDINGS II, LLC; REEL/FRAME:049200/0597 EFFECTIVE DATE : 20190510
US7935108 BB	20290522	PEXP		Calculated Patent Term Expiry (PTA 1550 days)	
US8025661 BB	20110927	LSGT	+	granted / extensions (spc, cpc, pte)	
US8025661 BB	20030723	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ARNOLD, JEFFREY M.; SINOFSKY, EDWARD L.; BAXTER, LINCOLN S.; AND OTHERS; REEL/FRAME:014302/0237; SIGNING DATES FROM 20030609 TO 20030626
US8025661 BB	20030723	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ARNOLD, JEFFREY M.; SINOFSKY, EDWARD L.; BAXTER, LINCOLN S.; AND OTHERS; SIGNING DATES FROM 20030609 TO 20030626; REEL/FRAME:014302/0237
US8025661 BB	20110907	LSGT	PAT1	Patented Case	
US8025661 BB	20140703	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE OF SECURITY INTEREST; ASSIGNOR:VENTURE LENDING & LEASING IV, INC.; REEL/FRAME:033275/0601 EFFECTIVE DATE : 20061109
US8025661 BB	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033434/0399 EFFECTIVE DATE : 20140730
US8025661 BB	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033434/0399 EFFECTIVE DATE : 20140730
US8025661 BB	20150320	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8025661 BB	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.;

					REEL/FRAME:035497/0393 EFFECTIVE DATE : 20150424
US8025661 BB	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:035497/0393 EFFECTIVE DATE : 20150424
US8025661 BB	20170331	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SOLAR CAPITAL LTD., NEW YORK OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:041805/0976 EFFECTIVE DATE : 20170331
US8025661 BB	20170331	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:041805/0976 EFFECTIVE DATE : 20170331
US8025661 BB	20180409	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GPB DEBT HOLDINGS II LLC, NEW YORK OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:045478/0532 EFFECTIVE DATE : 20180404
US8025661 BB	20181206	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US8025661 BB	20190509	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; OXFORD FINANCE LLC; REEL/FRAME:049133/0474 EFFECTIVE DATE : 20190509
US8025661 BB	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; SOLAR CAPITAL LTD.; REEL/FRAME:049138/0362 EFFECTIVE DATE : 20190509
US8025661 BB	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; OXFORD FINANCE LLC; REEL/FRAME:049138/0233 EFFECTIVE DATE : 20190509
US8025661 BB	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KENNEDY LEWIS INVESTMENT MANAGEMENT LLC, NEW YORK OLDPARTY : INTELLECTUAL PROPERTY SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:049149/0356 EFFECTIVE DATE : 20190510
US8025661 BB	20190516	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:GPB DEBT HOLDINGS II, LLC; REEL/FRAME:049200/0597 EFFECTIVE DATE : 20190510
US8025661 BB	20230810	PEXP		Calculated Patent Term Expiry (PTA 188 days)	
US8152795 BB	20120410	LSGT	+	granted / extensions (spc, cpc, pte)	
US8152795 BB	20120321	LSGT	PAT1	Patented Case	

US8152795 BB	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033434/0399 EFFECTIVE DATE : 20140730
US8152795 BB	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033434/0399 EFFECTIVE DATE : 20140730
US8152795 BB	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:035497/0393 EFFECTIVE DATE : 20150424
US8152795 BB	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:035497/0393 EFFECTIVE DATE : 20150424
US8152795 BB	20151002	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8152795 BB	20170331	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:041805/0976 EFFECTIVE DATE : 20170331
US8152795 BB	20170331	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SOLAR CAPITAL LTD., NEW YORK OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:041805/0976 EFFECTIVE DATE : 20170331
US8152795 BB	20180409	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GPB DEBT HOLDINGS II LLC, NEW YORK OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:045478/0532 EFFECTIVE DATE : 20180404
US8152795 BB	20190509	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; OXFORD FINANCE LLC; REEL/FRAME:049133/0474 EFFECTIVE DATE : 20190509
US8152795 BB	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; OXFORD FINANCE LLC; REEL/FRAME:049138/0233 EFFECTIVE DATE : 20190509
US8152795 BB	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; SOLAR CAPITAL LTD.; REEL/FRAME:049138/0362 EFFECTIVE DATE : 20190509
US8152795 BB	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KENNEDY LEWIS INVESTMENT MANAGEMENT LLC, NEW YORK

					OLDPARTY : INTELLECTUAL PROPERTY SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:049149/0356 EFFECTIVE DATE : 20190510
US8152795 BB	20190516	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:GPB DEBT HOLDINGS II, LLC; REEL/FRAME:049200/0597 EFFECTIVE DATE : 20190510
US8152795 BB	20290714	PEXP		Calculated Patent Term Expiry (PTA 456 days and a terminal disclaimer has been filed)	
US8231613 BB	20120731	LSGT	+	granted / extensions (spc, cpc, pte)	
US8231613 BB	20120711	LSGT	PAT1	Patented Case	
US8231613 BB	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033434/0399 EFFECTIVE DATE : 20140730
US8231613 BB	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033434/0399 EFFECTIVE DATE : 20140730
US8231613 BB	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:035497/0393 EFFECTIVE DATE : 20150424
US8231613 BB	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:035497/0393 EFFECTIVE DATE : 20150424
US8231613 BB	20160127	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8231613 BB	20170331	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:041805/0976 EFFECTIVE DATE : 20170331
US8231613 BB	20170331	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SOLAR CAPITAL LTD., NEW YORK OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:041805/0976 EFFECTIVE DATE : 20170331
US8231613 BB	20180409	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GPB DEBT HOLDINGS II LLC, NEW YORK OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:045478/0532 EFFECTIVE DATE : 20180404
US8231613 BB	20190509	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; OXFORD FINANCE LLC; REEL/FRAME:049133/0474 EFFECTIVE DATE : 20190509

US8231613 BB	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; SOLAR CAPITAL LTD.; REEL/FRAME:049138/0362 EFFECTIVE DATE : 20190509
US8231613 BB	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; OXFORD FINANCE LLC; REEL/FRAME:049138/0233 EFFECTIVE DATE : 20190509
US8231613 BB	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KENNEDY LEWIS INVESTMENT MANAGEMENT LLC, NEW YORK OLDPARTY : INTELLECTUAL PROPERTY SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:049149/0356 EFFECTIVE DATE : 20190510
US8231613 BB	20190516	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:GPB DEBT HOLDINGS II, LLC; REEL/FRAME:049200/0597 EFFECTIVE DATE : 20190510
US8231613 BB	20310502	PEXP		Calculated Patent Term Expiry	
US8241272 BB	20120814	LSGT	+	granted / extensions (spc, cpc, pte)	
US8241272 BB	20120725	LSGT	PAT1	Patented Case	
US8241272 BB	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033434/0399 EFFECTIVE DATE : 20140730
US8241272 BB	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033434/0399 EFFECTIVE DATE : 20140730
US8241272 BB	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:035497/0393 EFFECTIVE DATE : 20150424
US8241272 BB	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:035497/0393 EFFECTIVE DATE : 20150424
US8241272 BB	20160210	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8241272 BB	20170331	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SOLAR CAPITAL LTD., NEW YORK OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:041805/0976 EFFECTIVE DATE : 20170331
US8241272 BB	20170331	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS

					OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:041805/0976 EFFECTIVE DATE : 20170331
US8241272 BB	20180409	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GPB DEBT HOLDINGS II LLC, NEW YORK OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:045478/0532 EFFECTIVE DATE : 20180404
US8241272 BB	20190509	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; OXFORD FINANCE LLC; REEL/FRAME:049133/0474 EFFECTIVE DATE : 20190509
US8241272 BB	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; SOLAR CAPITAL LTD.; REEL/FRAME:049138/0362 EFFECTIVE DATE : 20190509
US8241272 BB	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; OXFORD FINANCE LLC; REEL/FRAME:049138/0233 EFFECTIVE DATE : 20190509
US8241272 BB	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KENNEDY LEWIS INVESTMENT MANAGEMENT LLC, NEW YORK OLDPARTY : INTELLECTUAL PROPERTY SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:049149/0356 EFFECTIVE DATE : 20190510
US8241272 BB	20190516	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:GPB DEBT HOLDINGS II, LLC; REEL/FRAME:049200/0597 EFFECTIVE DATE : 20190510
US8241272 BB	20270311	PEXP		Calculated Patent Term Expiry (PTA 249 days and a terminal disclaimer has been filed)	
US8267932 BB	20120918	LSGT	+	granted / extensions (spc, cpc, pte)	
US8267932 BB	20120829	LSGT	PAT1	Patented Case	
US8267932 BB	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033434/0399 EFFECTIVE DATE : 20140730
US8267932 BB	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033434/0399 EFFECTIVE DATE : 20140730
US8267932 BB	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:035497/0393

					EFFECTIVE DATE : 20150424
US8267932 BB	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:035497/0393 EFFECTIVE DATE : 20150424
US8267932 BB	20160314	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8267932 BB	20170331	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:041805/0976 EFFECTIVE DATE : 20170331
US8267932 BB	20170331	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SOLAR CAPITAL LTD., NEW YORK OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:041805/0976 EFFECTIVE DATE : 20170331
US8267932 BB	20180409	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GPB DEBT HOLDINGS II LLC, NEW YORK OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:045478/0532 EFFECTIVE DATE : 20180404
US8267932 BB	20190509	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; OXFORD FINANCE LLC; REEL/FRAME:049133/0474 EFFECTIVE DATE : 20190509
US8267932 BB	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; SOLAR CAPITAL LTD.; REEL/FRAME:049138/0362 EFFECTIVE DATE : 20190509
US8267932 BB	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; OXFORD FINANCE LLC; REEL/FRAME:049138/0233 EFFECTIVE DATE : 20190509
US8267932 BB	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KENNEDY LEWIS INVESTMENT MANAGEMENT LLC, NEW YORK OLDPARTY : INTELLECTUAL PROPERTY SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:049149/0356 EFFECTIVE DATE : 20190510
US8267932 BB	20190516	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:GPB DEBT HOLDINGS II, LLC; REEL/FRAME:049200/0597 EFFECTIVE DATE : 20190510
US8267932 BB	20310502	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
US8277444 BB	20121002	LSGT	+	granted / extensions (spc, cpc, pte)	

US8277444 BB	20061218	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ARNOLD, JEFFREY M.; SINOFSKY, EDWARD L.; BAXTER, LINCOLN S.; AND OTHERS; REEL/FRAME:018709/0707; SIGNING DATES FROM 20061010 TO 20061206
US8277444 BB	20061218	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ARNOLD, JEFFREY M.; SINOFSKY, EDWARD L.; BAXTER, LINCOLN S.; AND OTHERS; SIGNING DATES FROM 20061010 TO 20061206; REEL/FRAME:018709/0707
US8277444 BB	20120912	LSGT	PAT1	Patented Case	
US8277444 BB	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033434/0399 EFFECTIVE DATE : 20140730
US8277444 BB	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033434/0399 EFFECTIVE DATE : 20140730
US8277444 BB	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:035497/0393 EFFECTIVE DATE : 20150424
US8277444 BB	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:035497/0393 EFFECTIVE DATE : 20150424
US8277444 BB	20161002	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US8277444 BB	20161031	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US8277444 BB	20161031	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US8277444 BB	20161122	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20161002
US8277444 BB	20260821	PEXP		Calculated Patent Term Expiry (PTA 6 days)	
US8366705 BB	20130205	LSGT	+	granted / extensions (spc, cpc, pte)	
US8366705 BB	20130116	LSGT	PAT1	Patented Case	
US8366705 BB	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033434/0399 EFFECTIVE DATE : 20140730
US8366705 BB	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER

					OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033434/0399 EFFECTIVE DATE : 20140730
US8366705 BB	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:035497/0393 EFFECTIVE DATE : 20150424
US8366705 BB	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:035497/0393 EFFECTIVE DATE : 20150424
US8366705 BB	20160713	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8366705 BB	20170331	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:041805/0976 EFFECTIVE DATE : 20170331
US8366705 BB	20170331	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SOLAR CAPITAL LTD., NEW YORK OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:041805/0976 EFFECTIVE DATE : 20170331
US8366705 BB	20180409	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GPB DEBT HOLDINGS II LLC, NEW YORK OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:045478/0532 EFFECTIVE DATE : 20180404
US8366705 BB	20190509	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; OXFORD FINANCE LLC; REEL/FRAME:049133/0474 EFFECTIVE DATE : 20190509
US8366705 BB	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; SOLAR CAPITAL LTD.; REEL/FRAME:049138/0362 EFFECTIVE DATE : 20190509
US8366705 BB	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; OXFORD FINANCE LLC; REEL/FRAME:049138/0233 EFFECTIVE DATE : 20190509
US8366705 BB	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KENNEDY LEWIS INVESTMENT MANAGEMENT LLC, NEW YORK OLDPARTY : INTELLECTUAL PROPERTY SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:049149/0356 EFFECTIVE DATE : 20190510
US8366705 BB	20190516	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED

					PARTY; ASSIGNOR:GPB DEBT HOLDINGS II, LLC; REEL/FRAME:049200/0597 EFFECTIVE DATE : 20190510
US8366705 BB	20310608	PEXP		Calculated Patent Term Expiry (PTA 783 days)	
US8444639 BB	20130521	LSGT	+	granted / extensions (spc, cpc, pte)	
US8444639 BB	20130501	LSGT	PAT1	Patented Case	
US8444639 BB	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033434/0399 EFFECTIVE DATE : 20140730
US8444639 BB	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033434/0399 EFFECTIVE DATE : 20140730
US8444639 BB	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:035497/0393 EFFECTIVE DATE : 20150424
US8444639 BB	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:035497/0393 EFFECTIVE DATE : 20150424
US8444639 BB	20160907	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8444639 BB	20170331	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SOLAR CAPITAL LTD., NEW YORK OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:041805/0976 EFFECTIVE DATE : 20170331
US8444639 BB	20170331	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:041805/0976 EFFECTIVE DATE : 20170331
US8444639 BB	20180409	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GPB DEBT HOLDINGS II LLC, NEW YORK OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:045478/0532 EFFECTIVE DATE : 20180404
US8444639 BB	20190509	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; OXFORD FINANCE LLC; REEL/FRAME:049133/0474 EFFECTIVE DATE : 20190509
US8444639 BB	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; OXFORD FINANCE LLC; REEL/FRAME:049138/0233 EFFECTIVE DATE : 20190509
US8444639 BB	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER

					OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; SOLAR CAPITAL LTD.; REEL/FRAME:049138/0362 EFFECTIVE DATE : 20190509
US8444639 BB	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KENNEDY LEWIS INVESTMENT MANAGEMENT LLC, NEW YORK OLDPARTY : INTELLECTUAL PROPERTY SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:049149/0356 EFFECTIVE DATE : 20190510
US8444639 BB	20190516	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:GPB DEBT HOLDINGS II, LLC; REEL/FRAME:049200/0597 EFFECTIVE DATE : 20190510
US8444639 BB	20320118	PEXP		Calculated Patent Term Expiry	
US8540704 BB	20130924	LSGT	+	granted / extensions (spc, cpc, pte)	
US8540704 BB	20130904	LSGT	PAT1	Patented Case	
US8540704 BB	20140703	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE OF SECURITY INTEREST; ASSIGNOR:VENTURE LENDING & LEASING IV, INC.; REEL/FRAME:033274/0881 EFFECTIVE DATE : 20061109
US8540704 BB	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033434/0399 EFFECTIVE DATE : 20140730
US8540704 BB	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:033434/0399 EFFECTIVE DATE : 20140730
US8540704 BB	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:035497/0393 EFFECTIVE DATE : 20150424
US8540704 BB	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:035497/0393 EFFECTIVE DATE : 20150424
US8540704 BB	20161222	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8540704 BB	20170331	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SOLAR CAPITAL LTD., NEW YORK OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:041805/0976 EFFECTIVE DATE : 20170331
US8540704 BB	20170331	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:041805/0976

					EFFECTIVE DATE : 20170331
US8540704 BB	20180409	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GPB DEBT HOLDINGS II LLC, NEW YORK OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:045478/0532 EFFECTIVE DATE : 20180404
US8540704 BB	20190509	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; OXFORD FINANCE LLC; REEL/FRAME:049133/0474 EFFECTIVE DATE : 20190509
US8540704 BB	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; SOLAR CAPITAL LTD.; REEL/FRAME:049138/0362 EFFECTIVE DATE : 20190509
US8540704 BB	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KENNEDY LEWIS INVESTMENT MANAGEMENT LLC, NEW YORK OLDPARTY : INTELLECTUAL PROPERTY SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:049149/0356 EFFECTIVE DATE : 20190510
US8540704 BB	20190516	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:GPB DEBT HOLDINGS II, LLC; REEL/FRAME:049200/0597 EFFECTIVE DATE : 20190510
US8540704 BB	20280111	PEXP		Calculated Patent Term Expiry (PTA 1310 days)	
US8900219 BB	20141202	LSGT	+	granted / extensions (spc, cpc, pte)	
US8900219 BB	20090914	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:MELSKY, GERALD; SAGON, STEPHEN W.; SINOFSKY, EDWARD L.; AND OTHERS; REEL/FRAME:023227/0583; SIGNING DATES FROM 20090701 TO 20090904
US8900219 BB	20090914	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:MELSKY, GERALD; SAGON, STEPHEN W.; SINOFSKY, EDWARD L.; AND OTHERS; SIGNING DATES FROM 20090701 TO 20090904; REEL/FRAME:023227/0583
US8900219 BB	20141112	LSGT	PAT1	Patented Case	
US8900219 BB	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:035497/0393 EFFECTIVE DATE : 20150424
US8900219 BB	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.;

					REEL/FRAME:035497/0393 EFFECTIVE DATE : 20150424
US8900219 BB	20170331	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:041805/0976 EFFECTIVE DATE : 20170331
US8900219 BB	20170331	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SOLAR CAPITAL LTD., NEW YORK OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:041805/0976 EFFECTIVE DATE : 20170331
US8900219 BB	20180409	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GPB DEBT HOLDINGS II LLC, NEW YORK OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:045478/0532 EFFECTIVE DATE : 20180404
US8900219 BB	20180420	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8900219 BB	20190509	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; OXFORD FINANCE LLC; REEL/FRAME:049133/0474 EFFECTIVE DATE : 20190509
US8900219 BB	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; OXFORD FINANCE LLC; REEL/FRAME:049138/0233 EFFECTIVE DATE : 20190509
US8900219 BB	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; SOLAR CAPITAL LTD.; REEL/FRAME:049138/0362 EFFECTIVE DATE : 20190509
US8900219 BB	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KENNEDY LEWIS INVESTMENT MANAGEMENT LLC, NEW YORK OLDPARTY : INTELLECTUAL PROPERTY SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:049149/0356 EFFECTIVE DATE : 20190510
US8900219 BB	20190516	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:GPB DEBT HOLDINGS II, LLC; REEL/FRAME:049200/0597 EFFECTIVE DATE : 20190510
US8900219 BB	20330121	PEXP		Calculated Patent Term Expiry (PTA 1378 days)	
US9033961 BB	20150519	LSGT	+	granted / extensions (spc, cpc, pte)	
US9033961 BB	20090810	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:MELSKY, GERALD; SAGON, STEPHEN W.; STANCAMPIANO, ALFRED; AND OTHERS; SIGNING DATES FROM 20090701 TO 20090809;

					REEL/FRAME:023073/0045
US9033961 BB	20150429	LSGT	PAT1	Patented Case	
US9033961 BB	20170331	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:041805/0976 EFFECTIVE DATE : 20170331
US9033961 BB	20170331	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SOLAR CAPITAL LTD., NEW YORK OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:041805/0976 EFFECTIVE DATE : 20170331
US9033961 BB	20180409	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GPB DEBT HOLDINGS II LLC, NEW YORK OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:045478/0532 EFFECTIVE DATE : 20180404
US9033961 BB	20190107	LSFE	FEPP	FEE PAYMENT PROCEDURE	TEXT : MAINTENANCE FEE REMINDER MAILED (ORIGINAL EVENT CODE: REM.); ENTITY STATUS OF PATENT OWNER: SMALL ENTITY
US9033961 BB	20190118	LSFE	FEPP	FEE PAYMENT PROCEDURE	TEXT : SURCHARGE FOR LATE PAYMENT, SMALL ENTITY (ORIGINAL EVENT CODE: M2554); ENTITY STATUS OF PATENT OWNER: SMALL ENTITY
US9033961 BB	20190118	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US9033961 BB	20190509	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; OXFORD FINANCE LLC; REEL/FRAME:049133/0474 EFFECTIVE DATE : 20190509
US9033961 BB	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; OXFORD FINANCE LLC; REEL/FRAME:049138/0233 EFFECTIVE DATE : 20190509
US9033961 BB	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; SOLAR CAPITAL LTD.; REEL/FRAME:049138/0362 EFFECTIVE DATE : 20190509
US9033961 BB	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KENNEDY LEWIS INVESTMENT MANAGEMENT LLC, NEW YORK OLDPARTY : INTELLECTUAL PROPERTY SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:049149/0356 EFFECTIVE DATE : 20190510
US9033961 BB	20190516	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:GPB DEBT HOLDINGS II, LLC; REEL/FRAME:049200/0597 EFFECTIVE DATE : 20190510
US9033961 BB	20321010	PEXP		Calculated Patent Term Expiry (PTA 1275 days)	

US9421066 BB	20160823	LSGT	+	granted / extensions (spc, cpc, pte)	
US9421066 BB	20141118	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : FIRST AMENDMENT TO INTELLECTUAL PROPERTY SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:034283/0346 EFFECTIVE DATE : 20141117
US9421066 BB	20141118	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : FIRST AMENDMENT TO INTELLECTUAL PROPERTY SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:034283/0346 EFFECTIVE DATE : 20141117
US9421066 BB	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:035497/0393 EFFECTIVE DATE : 20150424
US9421066 BB	20150424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:035497/0393 EFFECTIVE DATE : 20150424
US9421066 BB	20151021	LSES	NFA1	Non Final Action Mailed	
US9421066 BB	20160803	LSGT	PAT1	Patented Case	
US9421066 BB	20170331	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:041805/0976 EFFECTIVE DATE : 20170331
US9421066 BB	20170331	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SOLAR CAPITAL LTD., NEW YORK OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:041805/0976 EFFECTIVE DATE : 20170331
US9421066 BB	20180409	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GPB DEBT HOLDINGS II LLC, NEW YORK OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:045478/0532 EFFECTIVE DATE : 20180404
US9421066 BB	20190509	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; OXFORD FINANCE LLC; REEL/FRAME:049133/0474 EFFECTIVE DATE : 20190509
US9421066 BB	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; SOLAR CAPITAL LTD.; REEL/FRAME:049138/0362 EFFECTIVE DATE : 20190509
US9421066 BB	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON

					VALLEY BANK; OXFORD FINANCE LLC; REEL/FRAME:049138/0233 EFFECTIVE DATE : 20190509
US9421066 BB	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KENNEDY LEWIS INVESTMENT MANAGEMENT LLC, NEW YORK OLDPARTY : INTELLECTUAL PROPERTY SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:049149/0356 EFFECTIVE DATE : 20190510
US9421066 BB	20190516	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:GPB DEBT HOLDINGS II, LLC; REEL/FRAME:049200/0597 EFFECTIVE DATE : 20190510
US9421066 BB	20341103	PEXP		Calculated Patent Term Expiry (PTA 3 days)	
US9861437 BB	20180109	LSGT	+	granted / extensions (spc, cpc, pte)	
US9861437 BB	20161215	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:MELSKY, GERALD; ARNOLD, JEFFREY M.; SINOFSKY, EDWARD L.; AND OTHERS; SIGNING DATES FROM 20090701 TO 20090904; REEL/FRAME:040637/0163
US9861437 BB	20170331	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SOLAR CAPITAL LTD., NEW YORK OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:041805/0976 EFFECTIVE DATE : 20170331
US9861437 BB	20170331	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, MASSACHUSETTS OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:041805/0976 EFFECTIVE DATE : 20170331
US9861437 BB	20171220	LSGT	PAT1	Patented Case	
US9861437 BB	20180409	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GPB DEBT HOLDINGS II LLC, NEW YORK OLDPARTY : SECURITY INTEREST; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:045478/0532 EFFECTIVE DATE : 20180404
US9861437 BB	20190509	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; OXFORD FINANCE LLC; REEL/FRAME:049133/0474 EFFECTIVE DATE : 20190509
US9861437 BB	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; SOLAR CAPITAL LTD.; REEL/FRAME:049138/0362 EFFECTIVE DATE : 20190509
US9861437 BB	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:SILICON VALLEY BANK; OXFORD FINANCE LLC; REEL/FRAME:049138/0233

					EFFECTIVE DATE : 20190509
US9861437 BB	20190510	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KENNEDY LEWIS INVESTMENT MANAGEMENT LLC, NEW YORK OLDPARTY : INTELLECTUAL PROPERTY SECURITY AGREEMENT; ASSIGNOR:CARDIOFOCUS, INC.; REEL/FRAME:049149/0356 EFFECTIVE DATE : 20190510
US9861437 BB	20190516	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDIOFOCUS, INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:GPB DEBT HOLDINGS II, LLC; REEL/FRAME:049200/0597 EFFECTIVE DATE : 20190510
US9861437 BB	20361215	PEXP		Calculated Patent Term Expiry	
WO0103599 A2	20010118	LSPB	+	published / reissued	
WO0103599 C2	20020214	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2000948683 COUNTRY OF REF DOCUMENT : EP
WO0103599 C2	20020502	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2000948683 COUNTRY OF REF DOCUMENT : EP
WO0103599 C2	20020508	LSWD	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : 8642
WO0103599 C2	20060412	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2000948683 COUNTRY OF REF DOCUMENT : EP
WO0113812 A1	20010301	LSPB	+	published / reissued	
WO0113812 A1	20011220	LSWD	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : 8642
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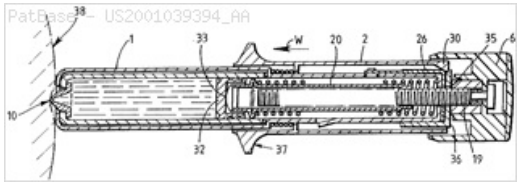
25) Family number: 28149036 (US2001039394A)

Title: NEEDLE-LESS INJECTOR

Abstract: A needle-less injector comprises a cartridge (3) prefilled with **liquid** ((9), which cartridge contains a free sliding piston (32) and an injection orifice (10). A ram (22) is urged by a pre-loaded spring (24) for striking the said piston to cause the injections. Adjusting means (6) can be provided to vary the volume injected. A trigger device (26, 30) initiates injection only when the optimum contact pressure is reached between the discharge orifice (1) and epidermis of the subject. The initial loading of the power spring (24) is sufficient to dispense all of the contents of the medicament cartridge in one dose or multiple sequential doses. Disposable and reusable embodiments are described.

FDA Data:

Application number	Active ingredient	Proprietary name	Applicant	Date of approval
022239	SUMATRIPTAN SUCCINATE	SUMAVEL DOSEPRO	ENDO VENTURES LTD	Jul 15, 2009
022239	SUMATRIPTAN SUCCINATE	SUMAVEL DOSEPRO	ENDO VENTURES LTD	Nov 26, 2013
022239	SUMATRIPTAN SUCCINATE	SUMAVEL DOSEPRO	ZOGENIX INC	Jul 15, 2009
022239	SUMATRIPTAN SUCCINATE	SUMAVEL DOSEPRO	ZOGENIX INC	Nov 26, 2013



Classifications:
International (IPC 8-9): A61M5/20 A61M5/24 A61M5/28 A61M5/30 A61M5/31 A61M5/315 (Advanced/Invention);
A61M5/20 A61M5/24 A61M5/28 A61M5/30 A61M5/31 A61M5/315 (Advanced/Non-invention);
A61M5/30 (Core/Invention);
A61M (Subclass/Invention)
International (IPC 1-7): A61J1/06 A61J1/06 A61M5/30
CPC: A61M5/2033 A61M5/2053 A61M5/2448 A61M5/288 A61M5/31513 A61M5/31551 A61M5/31561 A61M5/3158 A61M5/31593 A61M2005/2013 A61M2005/3104 A61M2205/582 A61M2205/583 A61M5/30
European: A61M5/30 K61M205/58C K61M205/58D K61M5/20A2 K61M5/20C K61M5/20F K61M5/24M K61M5/28S3 K61M5/315C1 K61M5/315E2B1A K61M5/315E2B5 K61M5/315F2A1 K61M5/315F3B K61M5/31A3C
US: 604/143 604/68 604/68P 604/68S 604/70 604/72 604/72P

Family:

Publication number	Publication date	Application number	Application date
AT197904 E	20001215	AT19940921727T	19940727
AT254939 E	20031215	AT19940203976T	19940727
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DE69433366 T2	20040909	DE19946033366T	19940727
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Priority:

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WO1994GB01608	19940727	JP20010215708	19940727	JP19950505646T	19940727
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KR19960070510	19960131	KR19967000510	19960131	KR19960700510	19960131
US19980220421	19981224	IN1999MA00969	19991004	US20040888334	20040708

Probable Assignee: ZOGENIX INC

Assignee(s): (std): ARADIGM CORP ; DUNCAN A GREENHALGH ; WESTON TERENCE E ; VESTON MEDIKAL LTD ; WESTON MEDICAL LTD

Assignee(s): WESTON MEDICAL LTD STRADBROKE EYE ; SJ2 THERAPEUTICS INC ; WESTON TERENCE EDWARD ; ZOGENIX INC ; OXFORD FINANCE LLC ; ARADIGM CORP HAYWARD

Inventor(s): (std): WESTON TERENCE EDWARD ; TERENCE EDWARD WESTON ; THORNLEA ; WESTON EDWARD ; VESTON TERENS EHDVARD

Agent(s): RICHES MCKENZIE AND HERBERT LLP; SUZUKI SATORU

Designated states: AM AT AU BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CZ DE DK ES FI FR GA GB GE GN GR HU IE IT JP KE KG KP KR KZ LI LK LT LU LV MC MD MG ML MN MR MW NE NL NO NZ PL PT RO RU SD SE SI SK SN TD TG TJ TT UA US UZ VN

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT197904 E	20001215	LSGT	+	granted / extensions (spc, cpc, pte)	
AT197904 E	20010315	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	
AT197904 E	20050415	LSLE	-REN	CEASED DUE TO NON-PAYMENT OF THE ANNUAL FEE	
AT197904 E	20140727	PEXP		Calculated Patent Term Expiry	
AT254939 E	20031215	LSGT	+	granted / extensions (spc, cpc, pte)	
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AT254939 E	20140727	PEXP		Calculated Patent Term Expiry	
AU199472331 A1	19950228	LSPB	+	published / reissued	
BRPI9407156 A	19960917	LSPB	+	published / reissued	
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BRPI9407156 A	20020813	LSGT	+FF	DECISION: INTENTION TO GRANT	
BRPI9407156 A	20021029	LSGT	+FG9A	PATENT OR CERTIFICATE OF ADDITION GRANTED	
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EP0710130 B1	20150130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF EXPIRATION OF PROTECTION LAPSED DATE : 20140728
EP0710130 B1	20140726	PEXP		Calculated Patent Term Expiry	

EP0710130 B1	20140727	PEXP		Calculated Patent Term Expiry	
EP0834330 A2	19980408	LSPB	+	published / reissued	
EP0834330 A2	19980408	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19971230
EP0834330 A3	19990721	LSLI	111Z	INFORMATION PROVIDED ON OTHER RIGHTS AND LEGAL MEANS OF EXECUTION	TEXT : 19990507 AT BE CH DE DK ES FR GB IE IT LI NL SE
EP0834330 A3	20010404	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20010214
EP0834330 B1	20031126	LSGT	+	granted / extensions (spc, cpc, pte)	
EP0834330 B1	20031126	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20031126
EP0834330 B1	20031126	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20031126
EP0834330 B1	20031126	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20031126
EP0834330 B1	20031126	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : ARADIGM CORPORATION
EP0834330 B1	20031126	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP0834330 B1	20031128	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP0834330 B1	20040114	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP0834330 B1	20040226	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20040226
EP0834330 B1	20040226	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20040226
EP0834330 B1	20040503	LSLE	-NLV1	NL: LAPSED OR ANNULLED DUE TO FAILURE TO FULFILL THE REQUIREMENTS OF ART. 29P AND 29M OF THE PATENTS ACT	REF COUNTRY CODE : EP
EP0834330 B1	20040716	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2212040 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT :

					T3 DESIGNATED STATE(S) :
EP0834330 B1	20040727	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20040727
EP0834330 B1	20040731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20040731
EP0834330 B1	20040731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20040731
EP0834330 B1	20041008	LSWD	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HK REF LEGAL EVENT CODE : WD REF DOCUMENT NUMBER : 1010154 COUNTRY OF REF DOCUMENT : HK
EP0834330 B1	20041117	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20040827
EP0834330 B1	20050315	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP0834330 B1	20050504	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP0834330 B1	20131031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20130711 YEAR OF FEE PAYMENT : 20
EP0834330 B1	20131031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20130724 YEAR OF FEE PAYMENT : 20
EP0834330 B1	20131129	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20130724 YEAR OF FEE PAYMENT : 20
EP0834330 B1	20131129	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20130724 YEAR OF FEE PAYMENT : 20
EP0834330 B1	20131231	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20130712 YEAR OF FEE PAYMENT : 20
EP0834330 B1	20140729	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R071 REF DOCUMENT NUMBER : 69433366 COUNTRY OF REF DOCUMENT : DE
EP0834330 B1	20140820	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : PE20 EXPIRY DATE : 20140726
EP0834330 B1	20141031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF EXPIRATION OF PROTECTION LAPSED DATE : 20140729
EP0834330 B1	20141120	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20141120

EP0834330 B1	20141128	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF EXPIRATION OF PROTECTION LAPSED DATE : 20140726
EP0834330 B1	20150130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF EXPIRATION OF PROTECTION LAPSED DATE : 20140728
EP0834330 B1	20140726	PEXP		Calculated Patent Term Expiry	
EP0834330 B1	20140727	PEXP		Calculated Patent Term Expiry	
EP1020200 A2	20000719	LSPB	+	published / reissued	
EP1020200 A2	20000719	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20000420
EP1020200 A3	20020828	LSFE	+AKX	DESIGNATION FEES PAID	TEXT : AT BE CH DE DK ES FR GB IE IT LI NL SE
EP1020200 A3	20040818	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20040202
EP1020200 A3	20070309	LSWD	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HK REF LEGAL EVENT CODE : WD REF DOCUMENT NUMBER : 1025920 COUNTRY OF REF DOCUMENT : HK
ES2152323 T3	20010201	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2152323 T3	20010201	LSGT	+FG2A	DEFINITIVE PROTECTION	REF DOCUMENT NUMBER : 710130 COUNTRY OF REF DOCUMENT : ES
ES2152323 T3	20140727	PEXP		Calculated Patent Term Expiry	
ES2212040 T3	20040716	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2212040 T3	20140727	PEXP		Calculated Patent Term Expiry	
HK1010697 A1	20010323	LSPB	+	published / reissued	
HK1010697 A1	20041215	LSFE	+PF	PATENT IN FORCE	
HK1010697 A1	20050304	LSLE	-PC	PATENT CEASED (I.E. PATENT HAS LAPSED DUE TO THE FAILURE TO PAY THE RENEWAL FEE)	EFFECTIVE DATE : 20040725
HK1010697 A1	20181104	PEXP		Calculated Patent Term Expiry	
IN186461 A	20010908	LSPB	+	published / reissued	
IN190419 A	20030726	LSPB	+	published / reissued	
JP11514242 T2	19991207	LSPB	+	published / reissued	
JP2002065851 A2	20020305	LSPB	+	published / reissued	
JP2002065851 A2	20040714	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20040713
JP2005052669 A2	20050303	LSPB	+	published / reissued	
JP2005052669 A2	20041213	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20041210
JP2005052669 A2	20041213	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20041210
JP2005052669 A2	20041228	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20041227

JP2005052669 A2	20060517	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20060516
JP2005052669 A2	20061117	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20061116
JP2005052669 A2	20070117	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20070116
JP2005052669 A2	20070417	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20070416
JP2005052669 A2	20070524	LSAL	A911	TRANSFER OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A911 EFFECTIVE DATE : 20070523
JP2005052669 A2	20070918	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2005052669 A2	20071003	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20071002
JP2005052669 A2	20071101	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20071026
JP2005052669 A2	20071102	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP2005052669 A2	20071102	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP3487856 B2	20040119	LSGT	+	granted / extensions (spc, cpc, pte)	
JP3487856 B2	20061107	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP3487856 B2	20071004	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 4
JP3487856 B2	20071009	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 5
JP3487856 B2	20081007	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 6
JP3487856 B2	20091029	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 6
JP3487856 B2	20091104	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 7
JP3487856 B2	20101102	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 8
JP3487856 B2	20111020	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 8
JP3487856 B2	20111025	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 9
JP3487856 B2	20121106	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF	YEAR OF FEE PAYMENT : 10

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JP3487856 B2	20131031	LSLE	-LAPS	CANCELLATION BECAUSE OF NO PAYMENT OF ANNUAL FEES	
JP3487856 B2	20140727	PEXP		Calculated Patent Term Expiry	
JP4035127 B2	20080116	LSGT	+	granted / extensions (spc, cpc, pte)	
JP4035127 B2	20101102	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 4
JP4035127 B2	20111020	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 4
JP4035127 B2	20111025	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 5
JP4035127 B2	20121101	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 5
JP4035127 B2	20121106	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 6
JP4035127 B2	20131102	LSLE	-LAPS	CANCELLATION BECAUSE OF NO PAYMENT OF ANNUAL FEES	
JP4035127 B2	20241111	PEXP		Calculated Patent Term Expiry	
KR100223616 B1	19991015	LSGT	+	granted / extensions (spc, cpc, pte)	
KR100223616 B1	20160131	PEXP		Calculated Patent Term Expiry	
KR100233672 B1	20000315	LSGT	+	granted / extensions (spc, cpc, pte)	
KR100233672 B1	19990421	LSES	A201	REQUEST FOR EXAMINATION	
KR100233672 B1	19990625	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
KR100233672 B1	19990914	LSGT	+GRNT	WRITTEN DECISION TO GRANT	
KR100233672 B1	20031002	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20031002 YEAR OF FEE PAYMENT : 5
KR100233672 B1	20040915	LSLE	-LAPS	LAPSE DUE TO UNPAID ANNUAL FEE	
KR100233672 B1	20190421	PEXP		Calculated Patent Term Expiry	
KR19960703632 A	19960831	LSPB	+	published / reissued	
KR19967003632 A	19960831	LSPB	+	published / reissued	
NO20014862 A	19960327	LSPB	+	published / reissued	
NO20014862 A0	20050502	LSRV	-FC2A	WITHDRAWAL, REJECTION OR DISMISSAL OF LAID OPEN PATENT APPLICATION	
NO312011 B1	20020304	LSGT	+	granted / extensions (spc, cpc, pte)	
NO312011 B1	20050502	LSLE	-MM1K	LAPSED BY NOT PAYING THE ANNUAL FEES	
NO312011 B1	20160130	PEXP		Calculated Patent Term Expiry	
NO960395 A	19960327	LSPB	+	published / reissued	
RU2179864 C2	20020227	LSGT	+	granted / extensions (spc, cpc, pte)	
RU2179864 C2	20060220	LSLE	-MM4A	THE PATENT IS INVALID	EFFECTIVE DATE : 20040728

				DUE TO NON-PAYMENT OF FEES	
RU2179864 C2	20140727	PEXP		Calculated Patent Term Expiry	
RU96104339 A	19981027	LSPB	+	published / reissued	
US2001039394 AA	20011108	LSPB	+	published / reissued	
US2001039394 AA	19990226	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WESTON MEDICAL LIMITED, GREAT BRITAIN OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:WESTON TERENCE EDWARD; REEL/FRAME:009804/0577 EFFECTIVE DATE : 19990209
US2001039394 AA	20030811	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ARADIGM CORPORATION, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:WESTON MEDICAL LIMITED; REEL/FRAME:013865/0092 EFFECTIVE DATE : 20030811
US2001039394 AA	20040719	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2001039394 AA	20070308	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ZOGENIX, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ARADIGM CORPORATION; REEL/FRAME:018982/0131 EFFECTIVE DATE : 20060825
US2004254526 AA	20041216	LSPB	+	published / reissued	
US2004254526 AA	20041103	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WESTON MEDICAL LIMITED, UNITED KINGDOM OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:WESTON, TERENCE EDWARD; REEL/FRAME:015324/0885 EFFECTIVE DATE : 19990209
US2004254526 AA	20041105	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ARADIGM CORPORATION, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:WESTON MEDICAL LIMITED; REEL/FRAME:015338/0038 EFFECTIVE DATE : 20030811
US2004254526 AA	20070308	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ZOGENIX, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ARADIGM CORPORATION; REEL/FRAME:018982/0131 EFFECTIVE DATE : 20060825
US2004254526 AA	20071001	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2004254526 AA	20110708	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:ZOGENIX, INC.; REEL/FRAME:026565/0778 EFFECTIVE DATE : 20110630
US2004254526 AA	20120808	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ZOGENIX, INC., CALIFORNIA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:OXFORD FINANCE LLC, SUCCESSOR-IN-INTEREST TO

					OXFORD FINANCE CORPORATION; REEL/FRAME:028752/0486 EFFECTIVE DATE : 20120807
US5891086 A	19990406	LSGT	+	granted / extensions (spc, cpc, pte)	
US5891086 A	19960116	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WESTON MEDICAL LIMITED, UNITED KINGDOM OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:WESTON, TERENCE EDWARD; REEL/FRAME:007956/0624 EFFECTIVE DATE : 19960104
US5891086 A	19990330	LSGT	PAT1	Patented Case	
US5891086 A	19990330	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5891086 A	20011204	LSRE	CC	CERTIFICATE OF CORRECTION	
US5891086 A	20020919	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5891086 A	20030811	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ARADIGM CORPORATION, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:WESTON MEDICAL LIMITED; REEL/FRAME:013865/0092 EFFECTIVE DATE : 20030811
US5891086 A	20061006	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5891086 A	20070308	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ZOGENIX, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ARADIGM CORPORATION; REEL/FRAME:018982/0131 EFFECTIVE DATE : 20060825
US5891086 A	20100916	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5891086 A	20110708	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OXFORD FINANCE LLC, VIRGINIA OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:ZOGENIX, INC.; REEL/FRAME:026565/0778 EFFECTIVE DATE : 20110630
US5891086 A	20120808	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ZOGENIX, INC., CALIFORNIA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:OXFORD FINANCE LLC, SUCCESSOR-IN-INTEREST TO OXFORD FINANCE CORPORATION; REEL/FRAME:028752/0486 EFFECTIVE DATE : 20120807
US5891086 A	20140724	LSGT	+PTEG	GRANT OF A PATENT TERM EXTENSION	TEXT : PRODUCT NAME: SUMAVEL DOSEPRO (SUMATRIPTAN INJECTION) NEEDLE-LESS DELIVERY SYSTEM - INTERIM PATENT TERM EXTENSION GRANTED FILING DATE : 20090909 EXTENSION DATE : 20150127 EXPIRY DATE : 20140727
US5891086 A	20150127	PEXP		Calculated Patent Term Expiry	
WO9503844 A1	19950209	LSPB	+	published / reissued	
WO9503844 A1	19960108	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1994921727 COUNTRY OF REF DOCUMENT : EP

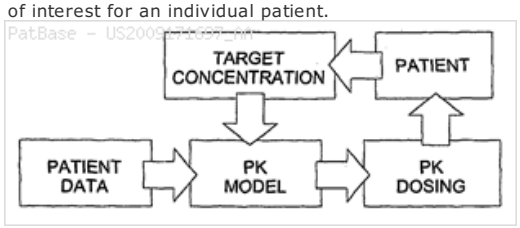
WO9503844 A1	19960116	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 08591585 COUNTRY OF REF DOCUMENT : US
WO9503844 A1	19960118	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2167586 COUNTRY OF REF DOCUMENT : CA
WO9503844 A1	19960508	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1994921727 COUNTRY OF REF DOCUMENT : EP
WO9503844 A1	19960515	LSWD	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : 8642
WO9503844 A1	20001206	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1994921727 COUNTRY OF REF DOCUMENT : EP
ZA9405641 A	19960129	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA9405641 A	20140728	PEXP		Calculated Patent Term Expiry	

26) Family number: 34546036 (US2009171697A)

Title: OPTIMIZATION AND INDIVIDUALIZATION OF MEDICATION SELECTION AND DOSING

Abstract: The invention provides population models, methods, and algorithms for targeting a dosing regimen or compound selection to an individual patient. The methods and algorithms of the invention utilize population models that incorporate genotype information for genes encoding drug metabolizing enzymes for one or more compounds of interest. The methods allow integration of genotype information for one or more genes encoding a drug metabolizing enzyme, particularly a cytochrome P450 gene with patient data. The methods allow integration of genotype information and the effect of one or more compounds on one or more drug metabolizing enzymes. The methods allow iterative feedback of drug metabolizing data obtained from a patient into the process of generating a dosage regimen recommendation for a compound of interest for an individual patient.

Classifications:
International (IPC 8-9): A61G99/00 A61J3/00 C12Q C12Q1/68 G01N33/48 G01N33/94 G06F G06F19/00 G06F19/10 G06F19/24 G06Q50/00 G06Q50/24 G16H20/10 (Advanced/Invention);
G01N33/48 (Advanced/Non-invention);
A61J3/00 G06F19/00 G06Q50/00 (Core/Invention);
C12Q (Subclass/Invention)
CPC: C12Q1/6883 C12Q2600/106 G06Q50/24 G06F19/326 G01N33/94 G06F19/3456 G16H50/50 G16B40/00
European: C12Q1/68M6 G06F19/18 G06F19/34H G06F19/34L G06Q50/24 M12Q600/106 S06F19/24
US: 600/300 705/2 705/3 705/3P



Family:

Publication number	Publication date	Application number	Application date
AU2006320633 AA	20070607	AU20060320633	20061128
AU2012203861 AA	20120719	AU20120203861	20120629
AU2012203861 BB	20150813	AU20120203861	20120629
AU2015221486 AA	20150924	AU20150221486	20150902
AU2015221486 BB	20171116	AU20150221486	20150902
AU2018201123 AA	20180308	AU20180201123	20180215
CA2630604 AA	20080522	CA20062630604	20061128
CA2630604 C	20160119	CA20062630604	20061128
CA2911569 AA	20070607	CA20062911569	20061128
DE602006043609 D1	20141218	DE200660043609T	20061128
DK2508621 T3	20150112	DK20110185491T	20061128
EP1958111 A2	20080820	EP20060838538	20061128
EP1958111 A4	20090708	EP20060838538	20061128
EP2508621 A1	20121010	EP20110185491	20061128
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ES2529211 T3	20150218	ES20110185491T	20061128
HK1176093 A1	20150904	HK20130103317	20130318
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HK1244906 A1	20180817	HK20180104016	20180322
JP2009517186 T2	20090430	JP20080543404T	20061128
JP2012123837 A2	20120628	JP20120054497	20120312
JP2013059665 A2	20130404	JP20120267276	20121206
JP2014176718 A2	20140925	JP20140082043	20140411
JP5567107 B2	20140806	JP20120267276	20121206
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US2009171697 AA	20090702	US20060085606	20061128
US2014046684 AA	20140213	US20130053220	20131014
US2015006190 A9	20150101	US20130053220	20131014
US2017147779 AA	20170525	US20160367950	20161202
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WO07064675 A2	20070607	WO2006US45631	20061128
WO07064675 A3	20081120	WO2006US45631	20061128

Priority:

US20050740430P 20051129 US20060783118P 20060316 AU20060320633 20061128
CA20062630604 20061128 US20060085606 20061128 JP20080543404 20061128
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AU20120203861 20120629 US20130053220 20131014 AU20150221486 20150902
CA20152630604 20151124 US20160367950 20161202 AU20180201123 20180215

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Assignee(s): CHILDREN'S HOSPITAL MEDICAL CENTER ; CHILDREN S HOSPITAL MEDICAL CENTER CINCINNATI

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Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AU2006320633 AA	20070607	LSPB	+	published / reissued	
AU2006320633 AA	20120726	LSLE	-MK5	APPLICATION LAPSED SECTION 142(2)(E) - PATENT REQUEST AND COMPL. SPECIFICATION NOT ACCEPTED	
AU2012203861 AA	20120719	LSPB	+	published / reissued	
AU2012203861 BB	20150813	LSGT	+	granted / extensions (spc, cpc, pte)	
AU2012203861 BB	20151210	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU2012203861 BB	20320629	PEXP		Calculated Patent Term Expiry	
AU2015221486 AA	20150924	LSPB	+	published / reissued	
AU2015221486 BB	20171116	LSGT	+	granted / extensions (spc, cpc, pte)	
AU2015221486 BB	20180315	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
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AU2018201123 AA	20180308	LSPB	+	published / reissued	
CA2630604 AA	20080522	LSPB	+	published / reissued	
CA2630604 AA	20111005	LSES	+EEER	EXAMINATION REQUEST	
CA2630604 C	20160119	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2630604 C	20261128	PEXP		Calculated Patent Term Expiry	
CA2911569 AA	20070607	LSPB	+	published / reissued	
CA2911569 AA	20151208	LSES	+EEER	EXAMINATION REQUEST	EFFECTIVE DATE : 20151109
DK2508621 T3	20150112	LSGT	+	granted / extensions (spc, cpc, pte)	
DK2508621 T3	20261128	PEXP		Calculated Patent Term Expiry	
EP1958111 A2	20080820	LSPB	+	published / reissued	
EP1958111 A2	20080820	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20080624
EP1958111 A2	20081231	LSES	R17D	DEFERRED SEARCH	EFFECTIVE DATE : 20081120

				REPORT PUBLISHED (CORRECTED)	
EP1958111 A2	20090708	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	EFFECTIVE DATE : 20090605
EP1958111 A2	20091111	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20091012
EP1958111 A2	20161019	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R003
EP1958111 A2	20170412	LSRV	-18R	APPLICATION REFUSED	EFFECTIVE DATE : 20161019
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EP2508621 A1	20140108	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20131209
EP2508621 A1	20140618	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20140522
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EP2508621 B1	20150315	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MK05 REF DOCUMENT NUMBER : 694701 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20141105
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EP2508621 B1	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20171026 YEAR OF FEE PAYMENT : 12
EP2508621 B1	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20171123 YEAR OF FEE PAYMENT : 12

EP2508621 B1	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20171013 YEAR OF FEE PAYMENT : 12
EP2508621 B1	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20171114 YEAR OF FEE PAYMENT : 12
EP2508621 B1	20181017	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 13
EP2508621 B1	20181231	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20181030 YEAR OF FEE PAYMENT : 13
EP2508621 B1	20190131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20181025 YEAR OF FEE PAYMENT : 13
EP2508621 B1	20190131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20181015 YEAR OF FEE PAYMENT : 13
EP2508621 B1	20190131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20181108 YEAR OF FEE PAYMENT : 13
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EP2508621 B1	20190228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20181119 YEAR OF FEE PAYMENT : 13
EP2508621 B1	20190228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20181119 YEAR OF FEE PAYMENT : 13
EP2508621 B1	20190228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20181030 YEAR OF FEE PAYMENT : 13
EP2508621 B1	20190228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20181017 YEAR OF FEE PAYMENT : 13
EP2508621 B1	20190228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20181025 YEAR OF FEE PAYMENT : 13
EP2508621 B1	20261128	PEXP		Calculated Patent Term Expiry	
EP3223182 A1	20170927	LSPB	+	published / reissued	
EP3223182 A1	20180502	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20180327
ES2529211 T3	20150218	LSGT	+	granted / extensions (spc,	

				cpc, pte)	
ES2529211 T3	20261128	PEXP		Calculated Patent Term Expiry	
HK1176093 A1	20130719	LSPB	+	published / reissued	
HK1176093 A1	20150904	LSPB	+	published / reissued	
HK1176093 A1	20330318	PEXP		Calculated Patent Term Expiry	
HK1176093 A1	20330318	PEXP		Calculated Patent Term Expiry	
HK1176093 B	20150904	LSGT	+	granted / extensions (spc, cpc, pte)	
HK1176093 B	20330318	PEXP		Calculated Patent Term Expiry	
HK1244906 A1	20180817	LSPB	+	published / reissued	
JP2009517186 T2	20090430	LSPB	+	published / reissued	
JP2009517186 T2	20090826	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20090825
JP2009517186 T2	20110913	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20110912
JP2009517186 T2	20120313	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20120312
JP2009517186 T2	20120410	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20120409
JP2009517186 T2	20120707	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20120706
JP2009517186 T2	20120807	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20120806
JP2009517186 T2	20121207	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20121206
JP2012123837 A2	20120628	LSPB	+	published / reissued	
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JP2012123837 A2	20130822	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20130821
JP2012123837 A2	20131121	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20131120
JP2012123837 A2	20131212	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20131211
JP2012123837 A2	20140724	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20140723
JP2013059665 A2	20130404	LSPB	+	published / reissued	
JP2013059665 A2	20131109	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20131108
JP2013059665 A2	20131115	LSES	-A131	NOTIFICATION OF	TEXT : JAPANESE INTERMEDIATE CODE:

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JP2013059665 A2	20140523	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
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JP2013059665 A2	20140627	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 5567107 COUNTRY OF REF DOCUMENT : JP
JP2014176718 A2	20140925	LSPB	+	published / reissued	
JP2014176718 A2	20150302	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20150227
JP2014176718 A2	20150826	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20150826
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JP2014176718 A2	20160204	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20160203
JP2014176718 A2	20160303	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20160225
JP2014176718 A2	20160304	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 5894213 COUNTRY OF REF DOCUMENT : JP
JP5567107 B2	20140806	LSGT	+	granted / extensions (spc, cpc, pte)	
JP5567107 B2	20121227	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20121226
JP5567107 B2	20121227	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20121226
JP5567107 B2	20140529	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP5567107 B2	20140624	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP5567107 B2	20170608	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5567107 B2	20170613	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5567107 B2	20180531	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5567107 B2	20180605	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5567107 B2	20190606	LSFE	R20	特許料納付書 (Patent	

				fee payment form)	
JP5567107 B2	20190611	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5567107 B2	20321206	PEXP		Calculated Patent Term Expiry	
JP5894213 B2	20160323	LSGT	+	granted / extensions (spc, cpc, pte)	
JP5894213 B2	20160212	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP5894213 B2	20160301	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP5894213 B2	20160304	LSGT	+R150	特許証 (Patent certificate)	
JP5894213 B2	20190228	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5894213 B2	20190305	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5894213 B2	20340411	PEXP		Calculated Patent Term Expiry	
US2009171697 AA	20090702	LSPB	+	published / reissued	
US2009171697 AA	20131030	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2014046684 AA	20140213	LSPB	+	published / reissued	
US2014046684 AA	20140731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CHILDREN'S HOSPITAL MEDICAL CENTER, OHIO OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:GLAUSER, TRACY A.; WENSTRUP, RICHARD J.; VINKS, ALEXANDER A.; AND OTHERS; SIGNING DATES FROM 20080718 TO 20090105; REEL/FRAME:033434/0645
US2014046684 AA	20151208	LSAL	NAF1	Notice of Appeal Filed	
US2014046684 AA	20161125	LSAL	EAA1	Examiner's Answer to Appeal Brief Mailed	
US2014046684 AA	20161125	LSAL	EAA1	Examiner's Answer to Appeal Brief Mailed	
US2014046684 AA	20170525	LSWD	-ABD1	Abandoned -- After Examiner's Answer or Board of Appeals Decision	
US2014046684 AA	20170525	LSAL	BDR1	Board of Appeals Decision Rendered	
US2017147779 AA	20170525	LSPB	+	published / reissued	
US2017147779 AA	20170106	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CHILDREN'S HOSPITAL MEDICAL CENTER, OHIO OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:GLAUSER, TRACY A.; WENSTRUP, RICHARD J.; VINKS, ALEXANDER A.; AND OTHERS; SIGNING DATES FROM 20080718 TO 20090105; REEL/FRAME:040872/0119
US8589175 BB	20131119	LSGT	+	granted / extensions (spc, cpc, pte)	
US8589175 BB	20090114	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CHILDREN'S HOSPITAL MEDICAL CENTER, OHIO OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:GLAUSER, TRACY A.;

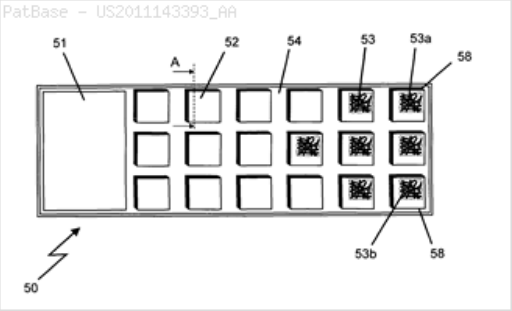
					WENSTRUP, RICHARD J.; VINKS, ALEXANDER A.; AND OTHERS; REEL/FRAME:022103/0083; SIGNING DATES FROM 20080718 TO 20090105
US8589175 BB	20090114	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CHILDREN'S HOSPITAL MEDICAL CENTER, OHIO OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:GLAUSER, TRACY A.; WENSTRUP, RICHARD J.; VINKS, ALEXANDER A.; AND OTHERS; SIGNING DATES FROM 20080718 TO 20090105; REEL/FRAME:022103/0083
US8589175 BB	20131030	LSGT	PAT1	Patented Case	
US8589175 BB	20140128	LSRE	CC	CERTIFICATE OF CORRECTION	
US8589175 BB	20141119	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CHILDREN'S HOSPITAL MEDICAL CENTER, OHIO OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:GLAUSER, TRACY A.; WENSTRUP, RICHARD J.; VINKS, ALEXANDER A.; AND OTHERS; SIGNING DATES FROM 20080718 TO 20090105; REEL/FRAME:034209/0962
US8589175 BB	20150512	LSRE	CC	CERTIFICATE OF CORRECTION	
US8589175 BB	20170519	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8589175 BB	20290108	PEXP		Calculated Patent Term Expiry (PTA 772 days)	
WO07064675 A2	20070607	LSPB	+	published / reissued	
WO07064675 A2	20080521	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2006320633 COUNTRY OF REF DOCUMENT : AU
WO07064675 A2	20080522	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2630604 COUNTRY OF REF DOCUMENT : CA
WO07064675 A2	20080529	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2008543404 COUNTRY OF REF DOCUMENT : JP
WO07064675 A2	20080530	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO07064675 A2	20080612	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2006320633 COUNTRY OF REF DOCUMENT : AU DATE OF REF DOCUMENT : 20061128 KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO07064675 A2	20080624	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2006838538 COUNTRY OF REF DOCUMENT : EP
WO07064675 A3	20090113	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 12085606 COUNTRY OF REF DOCUMENT : US

27) Family number: 43876036 (US2011143393A)

Title: AUTOMATIC DEVICE FOR CARRYING OUT DETECTION REACTIONS, AND METHOD FOR DOSING REAGENTS ONTO MICROSCOPE SLIDES

Abstract: The invention relates to an automatic device to meter reagents onto a multitude of slides comprising holding devices for a multitude of slides which contain each a multitude of separated slots which are adapted to absorb cell or tissue samples; a dosing head unit with a multitude of reservoirs which are adapted to absorb **liquid** reagents and which have a metering valve at the end/side facing the slots to dose and apply the reagents into the slots; a positioning device to position the reservoirs of the dosing head unit above the respective slots of the slides.

Classifications:
International (IPC 8-9): B01L3/02 C12M1/00 G01N1/28 G01N1/30 G01N1/31 G01N35/02 G01N35/10 (Advanced/Invention); B01L3/02 G01N1/30 G01N35/02 G01N35/10 (Core/Invention)
CPC: G01N1/312 G01N35/1002 G01N35/109 G01N2001/317
European: G01N1/31B S01N1/31D S01N35/10A S01N35/10T2
US: 435/283.1 435/283.100S 435/40.5 435/40.500P



Family:

Publication number	Publication date	Application number	Application date
DE102008018982 A1	20091105	DE200810018982	20080414
DE502009011129 D1	20150723	DE200950011129T	20090414
EP2269028 A2	20110105	EP20090732904	20090414
EP2269028 B1	20150610	EP20090732904	20090414
ES2548585 T3	20151019	ES20090732904T	20090414
US2011143393 AA	20110616	US20090937808	20090414
WO09127394 A2	20091022	WO2009EP02729	20090414
WO09127394 A3	20100107	WO2009EP02729	20090414

Priority:
DE200810018982 20080414 EP20090732904 20090414 WO2009EP02729 20090414

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Assignee(s): (std): MERZ HARTMUT ; VAN DER WOLK KAY ; WOLK KAY VAN D ; WOLK VAN DER
Assignee(s): WOLK VAN D KAY ; MERZ HARTMUT PROF DR MED
Inventor(s): (std): WOLK VAN DER ; WOLK KAY VAN D ; MERZ HARTMUT ; VAN DER WOLK KAY
Agent(s): GROSSE FELIX CHRISTOPHER; VALLEJO JUAN PEDRO; GROSSE FELIX ET AL
Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
DE102008018982 A1	20091105	LSPB	+	published / reissued	
DE102008018982 A1	20091105	LSES	+OM8	SEARCH REPORT AVAILABLE AS TO PARAGRAPH 43 LIT. 1 SENTENCE 1 PATENT LAW	
DE102008018982 A1	20150415	LSDW	-R005	APPLICATION DEEMED WITHDRAWN DUE TO FAILURE TO REQUEST EXAMINATION	
DE502009011129 D1	20181101	LSDW	-R119	APPLICATION DEEMED WITHDRAWN, OR IP RIGHT LAPSED, DUE TO NON-PAYMENT OF RENEWAL FEE	
EP2269028 A2	20110105	LSPB	+	published / reissued	
EP2269028 A2	20110105	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20101115

EP2269028 A2	20110824	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20110727
EP2269028 A2	20150121	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20141223
EP2269028 A2	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20160721 YEAR OF FEE PAYMENT : 8
EP2269028 A2	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20160714 YEAR OF FEE PAYMENT : 8
EP2269028 A2	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20160722 YEAR OF FEE PAYMENT : 8
EP2269028 A2	20161230	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20160722 YEAR OF FEE PAYMENT : 8
EP2269028 B1	20150610	LSGT	+	granted / extensions (spc, cpc, pte)	
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EP2269028 B1	20150615	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP2269028 B1	20150715	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 731109 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20150715
EP2269028 B1	20150723	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 502009011129 COUNTRY OF REF DOCUMENT : DE
EP2269028 B1	20150729	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D TEXT : LANGUAGE OF EP DOCUMENT: GERMAN
EP2269028 B1	20151019	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2548585 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) : EFFECTIVE DATE : 20151019
EP2269028 B1	20151030	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20150610
EP2269028 B1	20151030	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NO NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20150910
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EP2269028 B1	20151130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20150910
EP2269028 B1	20160129	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20150610
EP2269028 B1	20160229	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20151012
EP2269028 B1	20160229	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20150610
EP2269028 B1	20160229	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20150610
EP2269028 B1	20160229	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20150610
EP2269028 B1	20160229	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IS NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20151010
EP2269028 B1	20160229	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20150610

EP2269028 B1	20160311	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 502009011129 COUNTRY OF REF DOCUMENT : DE
EP2269028 B1	20160429	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20150610
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EP2269028 B1	20160722	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 8
EP2269028 B1	20160831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20160430
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EP2269028 B1	20161228	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20160414
EP2269028 B1	20161230	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160414
EP2269028 B1	20170125	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP2269028 B1	20170131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20160430
EP2269028 B1	20170131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20160414
EP2269028 B1	20170131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20160430
EP2269028 B1	20170424	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 9
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EP2269028 B1	20170630	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20150610
EP2269028 B1	20170630	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20150610
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EP2269028 B1	20170831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20160414
EP2269028 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20170503 YEAR OF FEE PAYMENT : 9
EP2269028 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20170420 YEAR OF FEE PAYMENT : 9
EP2269028 B1	20180531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT; INVALID AB INITIO LAPSED DATE : 20090414
EP2269028 B1	20180531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20150610
EP2269028 B1	20180629	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20150610
EP2269028 B1	20180629	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM	COUNTRY OF REF DOCUMENT : MT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE

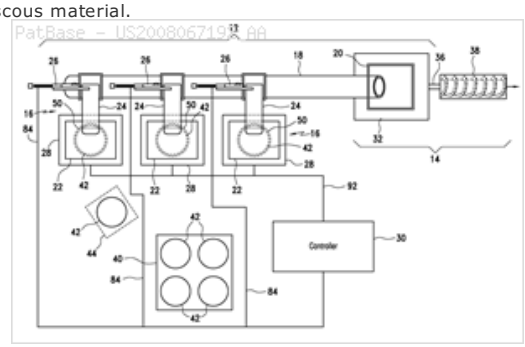
				NATIONAL OFFICE TO EPO]	WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20150610
EP2269028 B1	20180629	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20150610
EP2269028 B1	20180629	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20150610
EP2269028 B1	20180629	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20150610
EP2269028 B1	20181101	LSDW	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R119 REF DOCUMENT NUMBER : 502009011129 COUNTRY OF REF DOCUMENT : DE
EP2269028 B1	20190131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20181101
EP2269028 B1	20190430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180414
EP2269028 B1	20190430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180430
EP2269028 B1	20290414	PEXP		Calculated Patent Term Expiry	
ES2548585 T3	20151019	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2548585 T3	20290414	PEXP		Calculated Patent Term Expiry	
US2011143393 AA	20110616	LSPB	+	published / reissued	
US2011143393 AA	20151117	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
WO09127394 A2	20091022	LSPB	+	published / reissued	
WO09127394 A3	20101015	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO09127394 A3	20101115	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2009732904 COUNTRY OF REF DOCUMENT : EP
WO09127394 A3	20110301	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 12937808 COUNTRY OF REF DOCUMENT : US

28) Family number: 41619036 (US2008067192A)

Title: VISCOUS MATERIAL FEED SYSTEM AND METHOD

Abstract: A viscous material feed system comprises a container evacuator located on a loss of weight scale; a feed tube that receives material expressed from a container by the container evacuator; and a dicing apparatus that meters material from the feed tube to a processing system according to loss of weight sensed by the scale. A viscous material feed method comprises determining an initial weight of a combined feed system, container and viscous material held within the container; evacuating viscous material from the container by the feed system for charge to a viscous material compounding process; monitoring a weight of the combined feed system, container and viscous material held within the container as material is evacuated; determining an amount of viscous material charged to the compounding process according to a difference between the initial weight and a monitored weight of the combined feed system, container and viscous material held within the container as material is evacuated; controlling a rate of dicing viscous material that is evacuated from the container for feed to the viscous material compounding process according to the determined amount of charged viscous material.

Classifications:
International (IPC 8-9): B05D3/00 B05D7/24 B23Q3/08 B29C31/06 B65D45/32 B65D83/00 B65D88/54 B67D5/02 B67D5/08 B67D7/02 B67D7/08 B67D7/64 B67D7/84 F16B2/02 G01F11/00 G01G17/06 G05D11/00 (Advanced/Invention);
B29K83/00 (Advanced/Non-invention);
B05D3/00 B05D7/24 B23Q3/08 B29C31/04 B65D45/00 B65D83/00 B65D88/00 B67D7/00 B67D7/08 B67D7/58 B67D7/84 F16B2/02 G01F11/00 G01G17/00 G05D11/00 (Core/Invention)
CPC: G05D11/134 B67D7/0227
European: B67D7/02D G05D11/13B4B
US: 222/183 222/289 222/326 222/334 222/56 222/56P 248/146 269/27 269/32



Family:

Publication number	Publication date	Application number	Application date
AT537494 E	20111215	AT20070838338T	20070917
CN101535148 A	20090916	CN200780042327	20070917
CN101535148 B	20111123	CN200780042327	20070917
CN101542410 A	20090923	CN200780041977	20070917
CN101542410 B	20120718	CN200780041977	20070917
DE602007019416 D1	20120308	DE200760019416T	20070917
EP2069875 A2	20090617	EP20070838338	20070917
EP2069875 B1	20111214	EP20070838338	20070917
EP2091841 A2	20090826	EP20070838329	20070917
JP2010503559 T2	20100204	JP20090528321T	20070917
JP2010503560 T2	20100204	JP20090528322T	20070917
KR20090057019 A	20090603	KR20097005437	20090316
KR20090071554 A	20090701	KR20097005436	20070917
US2008067192 AA	20080320	US20060532334	20060915
US2008067198 AA	20080320	US20060536826	20060929
US7793802 BB	20100914	US20060536826	20060929
WO08033549 A2	20080320	WO2007US20105	20070917
WO08033549 A3	20080710	WO2007US20105	20070917
WO08033553 A2	20080320	WO2007US20115	20070917
WO08033553 A3	20080502	WO2007US20115	20070917

Priority:

US20060532334 20060915 US20060536826 20060929 EP20070838338 20070917
WO2007US20105 20070917 WO2007US20115 20070917

Probable Assignee: GENERAL ELECTRIC CO

Assignee(s): (std): KNOX ROGER ; STANTON JENNIFER L ; BAYLY HARRY A ; STATON JENNIFER L ; MOMENTIVE PERFORMANCE MAT INC ; BAYLY HAL

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Agent(s): GILLE HRABAL; GILLE HRABAL STRUCK NEIDLEIN PROP ROOS; FURUYA SATOSHI; MIZOBE TAKAHIKO; PHILIP D FREEDMAN PC, PHILIP D FREEDMAN; PHILIP D FREEDMAN PC PHILIP D FREEDMAN; PHILIP D FREEDMAN PC; PHILIP D; KENNETH S; WHEELOCK KENNETH S ET AL; WHEELOCK KENNETH S

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT537494 E	20111215	LSGT	+	granted / extensions (spc, cpc, pte)	
AT537494 E	20270917	PEXP		Calculated Patent Term Expiry	
CN101535148 A	20090916	LSPB	+	published / reissued	
CN101535148 A	20090916	LSPB	+C06	PUBLICATION	
CN101535148 B	20111123	LSGT	+	granted / extensions (spc, cpc, pte)	
CN101535148 B	20111123	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN101535148 B	20131106	LSLE	-C17	CESSATION OF PATENT RIGHT	
CN101535148 B	20270917	PEXP		Calculated Patent Term Expiry	
CN101542410 A	20090923	LSPB	+	published / reissued	
CN101542410 A	20090923	LSPB	+C06	PUBLICATION	
CN101542410 A	20120718	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN101542410 A	20161109	LSWD	-EXPY	TERMINATION OF PATENT RIGHT OR UTILITY MODEL	
CN101542410 B	20120718	LSGT	+	granted / extensions (spc, cpc, pte)	
CN101542410 B	20270917	PEXP		Calculated Patent Term Expiry	
EP2069875 A2	20090617	LSPB	+	published / reissued	
EP2069875 A2	20090617	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20090415
EP2069875 A2	20090729	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20090630
EP2069875 B1	20111214	LSGT	+	granted / extensions (spc, cpc, pte)	
EP2069875 B1	20111214	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP2069875 B1	20111215	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP2069875 B1	20120118	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP2069875 B1	20120308	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602007019416 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20120308
EP2069875 B1	20120321	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : T3
EP2069875 B1	20120430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20111214
EP2069875 B1	20120525	LSRV	-LTIE	LT: INVALIDATION OF EUROPEAN	REF COUNTRY CODE : EP EFFECTIVE DATE : 20111214

				PATENT OR PATENT EXTENSION	
EP2069875 B1	20120531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20120315
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EP2069875 B1	20120531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20111214
EP2069875 B1	20120531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20111214
EP2069875 B1	20120629	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20111214
EP2069875 B1	20120629	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20111214
EP2069875 B1	20120731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20111214
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EP2069875 B1	20120731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IS NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20120414
EP2069875 B1	20120731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20111214
EP2069875 B1	20120731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20120314

EP2069875 B1	20120831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20120416
EP2069875 B1	20120831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20111214
EP2069875 B1	20120831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20111214
EP2069875 B1	20120915	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MK05 REF DOCUMENT NUMBER : 537494 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20111214
EP2069875 B1	20121031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20111214
EP2069875 B1	20121121	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20120917
EP2069875 B1	20130110	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 602007019416 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20120917
EP2069875 B1	20130131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20111214
EP2069875 B1	20130417	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : V1 EFFECTIVE DATE : 20130401
EP2069875 B1	20130430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120930
EP2069875 B1	20130430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20120325
EP2069875 B1	20130430	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP2069875 B1	20130529	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20120917
EP2069875 B1	20130619	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP2069875 B1	20130628	LSLE	-PG25	LAPSED IN A	COUNTRY OF REF DOCUMENT : FI

				CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20111214
EP2069875 B1	20130628	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20130531
EP2069875 B1	20130731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120930
EP2069875 B1	20130731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120917
EP2069875 B1	20130731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120917
EP2069875 B1	20130731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20130403
EP2069875 B1	20130731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120930
EP2069875 B1	20130830	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20121001
EP2069875 B1	20130830	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120917
EP2069875 B1	20130830	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20130401
EP2069875 B1	20130926	LSDW	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R119 REF DOCUMENT NUMBER : 602007019416 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20130403
EP2069875 B1	20131129	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20111214
EP2069875 B1	20140430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20111214

EP2069875 B1	20140530	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120917
EP2069875 B1	20140731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20070917
EP2069875 B1	20270917	PEXP		Calculated Patent Term Expiry	
EP2091841 A2	20090826	LSPB	+	published / reissued	
EP2091841 A2	20090826	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20090415
EP2091841 A2	20091014	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20090918
EP2091841 A2	20100721	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20100129
JP2010503559 T2	20100204	LSPB	+	published / reissued	
JP2010503559 T2	20100917	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20100916
JP2010503559 T2	20120111	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20120110
JP2010503559 T2	20120711	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20120710
JP2010503559 T2	20120808	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20120807
JP2010503559 T2	20121226	LSWD	-A045	WRITTEN MEASURE OF DISMISSAL OF APPLICATION	TEXT : JAPANESE INTERMEDIATE CODE: A045 EFFECTIVE DATE : 20121225
JP2010503560 T2	20100204	LSPB	+	published / reissued	
JP2010503560 T2	20100917	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20100916
JP2010503560 T2	20120111	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20120110
JP2010503560 T2	20120711	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20120710
JP2010503560 T2	20120808	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20120807
JP2010503560 T2	20121226	LSWD	-A045	WRITTEN MEASURE OF DISMISSAL OF APPLICATION	TEXT : JAPANESE INTERMEDIATE CODE: A045 EFFECTIVE DATE : 20121225
KR20090057019 A	20090603	LSPB	+	published / reissued	
KR20090057019 A	20121018	LSDW	-WITN	WITHDRAWAL DUE	

				TO NO REQUEST FOR EXAMINATION	
KR20090071554 A	20090701	LSPB	+	published / reissued	
KR20090071554 A	20121018	LSDW	-WITN	WITHDRAWAL DUE TO NO REQUEST FOR EXAMINATION	
US2008067192 AA	20080320	LSPB	+	published / reissued	
US2008067192 AA	20060922	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GENERAL ELECTRIC COMPANY, NEW YORK OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:STANTON, JENNIFER L.; BAYLY, HARRY A.; KNOX, ROGER; REEL/FRAME:018334/0212 EFFECTIVE DATE : 20060921
US2008067192 AA	20070703	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : JPMORGAN CHASE BANK, N.A. AS ADMINISTRATIVE AGENT, OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:MOMENTIVE PERFORMANCE MATERIALS HOLDINGS INC.; MOMENTIVE PERFORMANCE MATERIALS GMBH & CO. KG; MOMENTIVE PERFORMANCE MATERIALS JAPAN HOLDINGS GK; REEL/FRAME:019511/0166 EFFECTIVE DATE : 20070228
US2008067192 AA	20090701	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A., A OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:MOMENTIVE PERFORMANCE MATERIALS, INC.; JUNIPER BOND HOLDINGS I LLC; JUNIPER BOND HOLDINGS II LLC; AND OTHERS; REEL/FRAME:022902/0461 EFFECTIVE DATE : 20090615
US2008067192 AA	20120531	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BANK OF NEW YORK MELLON TRUST COMPANY, N.A., THE, OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:MOMENTIVE PERFORMANCE MATERIALS INC; REEL/FRAME:028344/0208 EFFECTIVE DATE : 20120525
US2008067192 AA	20130403	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BANK OF NEW YORK MELLON TRUST COMPANY, N.A., THE, OLDPARTY : PATENT SECURITY AGREEMENT; ASSIGNOR:MOMENTIVE PERFORMANCE MATERIALS INC.; REEL/FRAME:030185/0001 EFFECTIVE DATE : 20121116
US2008067192 AA	20130429	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : JPMORGAN CHASE BANK, N.A., NEW YORK OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:MOMENTIVE PERFORMANCE MATERIALS INC.; REEL/FRAME:030311/0343 EFFECTIVE DATE : 20130424
US2008067192 AA	20140407	LSWD	-ABD2	Abandoned -- Failure to Pay Issue Fee	
US2008067192 AA	20141027	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A., A OLDPARTY : SECURITY INTEREST; ASSIGNOR:MOMENTIVE PERFORMANCE MATERIALS INC.; REEL/FRAME:034066/0662 EFFECTIVE DATE : 20141024
US2008067192 AA	20141027	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A., A OLDPARTY : SECURITY INTEREST; ASSIGNOR:MOMENTIVE PERFORMANCE MATERIALS INC.; REEL/FRAME:034066/0570 EFFECTIVE DATE : 20141024

US2008067192 AA	20141030	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MOMENTIVE PERFORMANCE MATERIALS INC., NEW YORK OLDPARTY : TERMINATION AND RELEASE OF SECURITY INTEREST IN PATENT RIGHTS; ASSIGNOR:THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A.; REEL/FRAME:034113/0331 EFFECTIVE DATE : 20141024
US2008067192 AA	20141030	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MOMENTIVE PERFORMANCE MATERIALS INC., NEW YORK OLDPARTY : TERMINATION AND RELEASE OF SECURITY INTEREST IN PATENT RIGHTS; ASSIGNOR:THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A.; REEL/FRAME:034113/0252 EFFECTIVE DATE : 20141024
US2008067192 AA	20150306	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BOKF, NA, AS SUCCESSOR COLLATERAL AGENT, OKLAHOMA OLDPARTY : NOTICE OF CHANGE OF COLLATERAL AGENT - ASSIGNMENT OF SECURITY INTEREST IN INTELLECTUAL PROPERTY; ASSIGNOR:THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A. AS COLLATERAL AGENT; REEL/FRAME:035136/0457 EFFECTIVE DATE : 20150302
US2008067192 AA	20150306	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BOKF, NA, AS SUCCESSOR COLLATERAL AGENT, OKLAHOMA OLDPARTY : NOTICE OF CHANGE OF COLLATERAL AGENT - ASSIGNMENT OF SECURITY INTEREST IN INTELLECTUAL PROPERTY - SECOND LIEN; ASSIGNOR:THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A. AS COLLATERAL AGENT; REEL/FRAME:035137/0263 EFFECTIVE DATE : 20150302
US2008067192 AA	20190515	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MOMENTIVE PERFORMANCE MATERIALS INC., NEW YORK OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BOKF, NA; REEL/FRAME:049194/0085 EFFECTIVE DATE : 20190515
US2008067192 AA	20190515	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MOMENTIVE PERFORMANCE MATERIALS INC., NEW YORK OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BOKF, NA; REEL/FRAME:049249/0271 EFFECTIVE DATE : 20190515
US2008067198 AA	20080320	LSPB	+	published / reissued	
US2008067198 AA	20090701	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A., A OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:MOMENTIVE PERFORMANCE MATERIALS, INC.; JUNIPER BOND HOLDINGS I LLC; JUNIPER BOND HOLDINGS II LLC; AND OTHERS; REEL/FRAME:022902/0461 EFFECTIVE DATE : 20090615
US7793802 BB	20100914	LSGT	+	granted / extensions (spc, cpc, pte)	
US7793802 BB	20061030	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GENERAL ELECTRIC COMPANY, NEW YORK OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:KNOX, ROGER; STANTON, JENNIFER L.; BAYLY, HARRY A.; REEL/FRAME:018473/0330; SIGNING DATES FROM 20061003 TO 20061024
US7793802 BB	20061030	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER

					OWNER : GENERAL ELECTRIC COMPANY, NEW YORK OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:KNOX, ROGER; STANTON, JENNIFER L.; BAYLY, HARRY A.; SIGNING DATES FROM 20061003 TO 20061024; REEL/FRAME:018473/0330
US7793802 BB	20100825	LSGT	PAT1	Patented Case	
US7793802 BB	20120531	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BANK OF NEW YORK MELLON TRUST COMPANY, N.A., THE, OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:MOMENTIVE PERFORMANCE MATERIALS INC; REEL/FRAME:028344/0208 EFFECTIVE DATE : 20120525
US7793802 BB	20130403	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BANK OF NEW YORK MELLON TRUST COMPANY, N.A., THE, OLDPARTY : PATENT SECURITY AGREEMENT; ASSIGNOR:MOMENTIVE PERFORMANCE MATERIALS INC.; REEL/FRAME:030185/0001 EFFECTIVE DATE : 20121116
US7793802 BB	20130429	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : JPMORGAN CHASE BANK, N.A., NEW YORK OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:MOMENTIVE PERFORMANCE MATERIALS INC.; REEL/FRAME:030311/0343 EFFECTIVE DATE : 20130424
US7793802 BB	20140314	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US7793802 BB	20141027	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A., A OLDPARTY : SECURITY INTEREST; ASSIGNOR:MOMENTIVE PERFORMANCE MATERIALS INC.; REEL/FRAME:034066/0570 EFFECTIVE DATE : 20141024
US7793802 BB	20141027	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A., A OLDPARTY : SECURITY INTEREST; ASSIGNOR:MOMENTIVE PERFORMANCE MATERIALS INC.; REEL/FRAME:034066/0662 EFFECTIVE DATE : 20141024
US7793802 BB	20141030	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MOMENTIVE PERFORMANCE MATERIALS INC., NEW YORK OLDPARTY : TERMINATION AND RELEASE OF SECURITY INTEREST IN PATENT RIGHTS; ASSIGNOR:THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A.; REEL/FRAME:034113/0252 EFFECTIVE DATE : 20141024
US7793802 BB	20141030	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MOMENTIVE PERFORMANCE MATERIALS INC., NEW YORK OLDPARTY : TERMINATION AND RELEASE OF SECURITY INTEREST IN PATENT RIGHTS; ASSIGNOR:THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A.; REEL/FRAME:034113/0331 EFFECTIVE DATE : 20141024
US7793802 BB	20150306	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BOKF, NA, AS SUCCESSOR COLLATERAL AGENT, OKLAHOMA OLDPARTY : NOTICE OF CHANGE OF COLLATERAL AGENT - ASSIGNMENT OF SECURITY INTEREST IN INTELLECTUAL PROPERTY; ASSIGNOR:THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A. AS COLLATERAL AGENT; REEL/FRAME:035136/0457 EFFECTIVE DATE : 20150302

US7793802 BB	20150306	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BOKF, NA, AS SUCCESSOR COLLATERAL AGENT, OKLAHOMA OLDPARTY : NOTICE OF CHANGE OF COLLATERAL AGENT - ASSIGNMENT OF SECURITY INTEREST IN INTELLECTUAL PROPERTY - SECOND LIEN; ASSIGNOR:THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A. AS COLLATERAL AGENT; REEL/FRAME:035137/0263 EFFECTIVE DATE : 20150302
US7793802 BB	20180430	LSFE	FEPP	FEE PAYMENT PROCEDURE	TEXT : MAINTENANCE FEE REMINDER MAILED (ORIGINAL EVENT CODE: REM.)
US7793802 BB	20181022	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	TEXT : PATENT EXPIRED FOR FAILURE TO PAY MAINTENANCE FEES (ORIGINAL EVENT CODE: EXP.); ENTITY STATUS OF PATENT OWNER: LARGE ENTITY
US7793802 BB	20181022	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US7793802 BB	20181022	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US7793802 BB	20181113	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20180914
US7793802 BB	20190515	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MOMENTIVE PERFORMANCE MATERIALS INC., NEW YORK OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BOKF, NA; REEL/FRAME:049194/0085 EFFECTIVE DATE : 20190515
US7793802 BB	20190515	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MOMENTIVE PERFORMANCE MATERIALS INC., NEW YORK OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BOKF, NA; REEL/FRAME:049249/0271 EFFECTIVE DATE : 20190515
US7793802 BB	20290204	PEXP		Calculated Patent Term Expiry (PTA 859 days)	
WO08033549 A2	20080320	LSPB	+	published / reissued	
WO08033549 A2	20070917	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 200780042327.3 COUNTRY OF REF DOCUMENT : CN
WO08033549 A3	20090316	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2009528321 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO08033549 A3	20090316	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1020097005437 COUNTRY OF REF DOCUMENT : KR
WO08033549 A3	20090317	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO08033549 A3	20090415	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2007838329 COUNTRY OF REF DOCUMENT : EP
WO08033553 A2	20080320	LSPB	+	published / reissued	
WO08033553 A2	20070917	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 200780041977.6 COUNTRY OF REF DOCUMENT : CN
WO08033553 A3	20090316	LSNP	ENP	ENTRY INTO THE	REF DOCUMENT NUMBER :

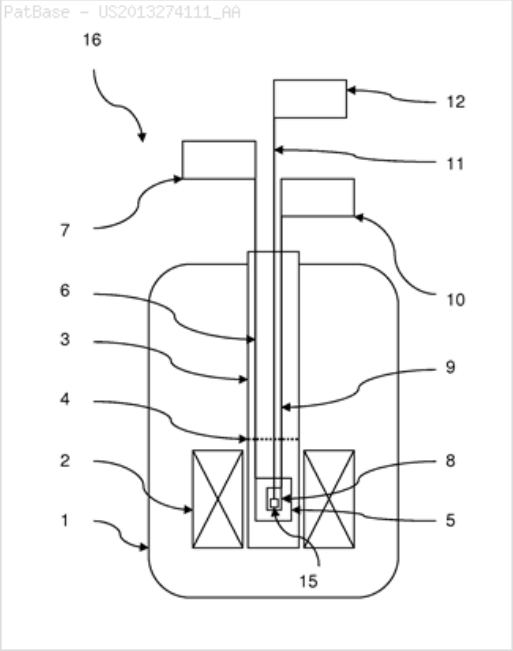
				NATIONAL PHASE IN:	2009528322 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO08033553 A3	20090316	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1020097005436 COUNTRY OF REF DOCUMENT : KR
WO08033553 A3	20090317	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO08033553 A3	20090415	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2007838338 COUNTRY OF REF DOCUMENT : EP

29) Family number: 54973037 (US2013274111A)

Title: METHOD AND DEVICE FOR RAPID DNP

Abstract: A method for producing hyperpolarized sample material for use in magnetic resonance investigations involves preparing a target material containing high gamma nuclei with a short T1, a polarizing agent with a broad EPR line, and low gamma nuclei with a long T1. The polarizing agent in the target material is irradiated with microwave radiation, wherein the target material is at a cryogenic temperature and exposed to a static magnetic field B0 greater than or equal to4.0 T, thus polarizing the high gamma nuclei by DNP, and the polarization is transferred from the high gamma nuclei to the low gamma nuclei by Cross Polarization. A dissolved sample material is prepared containing the hyperpolarized low gamma nuclei from the target material. Nuclei with a long longitudinal relaxation time T1 can thereby be quickly hyperpolarized to a high polarization level.

Classifications:
International (IPC 8-9): B01J19/12 G01R33/28 G01R33/44 G01R33/46 G01R33/56 G01R33/62 H01L39/02 (Advanced/Invention); F25B19/00 (Advanced/Non-invention)
CPC: G01R33/4608 G01R33/5605 G01R33/282 G01R33/62
US: 1/1 250/492.1 324/307 505/180 62/51.1



Family:

Publication number	Publication date	Application number	Application date
DE602013005255 D1	20160414	DE201360005255T	20130410
EP2836849 A1	20150218	EP20130715681	20130410
EP2836849 B1	20160302	EP20130715681	20130410
US2013274111 AA	20131017	US20120443903	20120411
US9329245 BB	20160503	US20120443903	20120411
WO13153101 A1	20131017	WO2013EP57467	20130410

Priority:
US20120443903 20120411 EP20130715681 20130410 WO2013EP57467 20130410

Probable Assignee: BRUKER CORP

Assignee(s): (std): BODENHAUSEN GEOFFREY ; BORNET AURELIEN ; BRUKER BIOSPIN AG ; ECOLE POLYTECHNIQUE FEDERALE DE LAUSANNE EPFL ; LOHMAN JOOST ; ENGELKE FRANK ; JANNIN SAMI ; GIANOTTI ANTONIO GIUSEPPE ; ECOLE POLYTECH ; MELZI ROBERTO

Assignee(s): BRUKER CORP ; ECOLE POLYTECHNIQUE FEDERALE DE LAUSANNE EPEL ; BRUKER BIOSPING AG

Inventor(s): (std): BORNET AURELIEN ; ENGELKE FRANK ; GIANOTTI ANTONIO GIUSEPPE ; LOHMAN JOOST ; MELZI ROBERTO ; JANNIN SAMI ; BODENHAUSEN GEOFFREY

Inventor(s): LOHMAN JOOST KENILWORTH

Agent(s): KOHLER SCHMID MOEBUS PATENTANWAELTE PARTNERSCHAFTSGESELLSCHAFT MBB; KOHLER SCHMID MOEBUS PATENTANWAELTE; PAUL; KOHLER SCHMID MOEBUS PATENTANWAELTE ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
EP2836849 A1	20150218	LSPB	+	published / reissued	
EP2836849 A1	20150218	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20141111

EP2836849 A1	20151014	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20150916
EP2836849 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20160422 YEAR OF FEE PAYMENT : 4
EP2836849 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20160428 YEAR OF FEE PAYMENT : 4
EP2836849 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20160428 YEAR OF FEE PAYMENT : 4
EP2836849 B1	20160302	LSGT	+	granted / extensions (spc, cpc, pte)	
EP2836849 B1	20160302	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP2836849 B1	20160315	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP2836849 B1	20160315	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 778412 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20160315
EP2836849 B1	20160323	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP2836849 B1	20160414	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602013005255 COUNTRY OF REF DOCUMENT : DE
EP2836849 B1	20160428	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 4
EP2836849 B1	20160711	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : LT REF LEGAL EVENT CODE : MG4D
EP2836849 B1	20160715	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MK05 REF DOCUMENT NUMBER : 778412 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20160302
EP2836849 B1	20160729	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160302
EP2836849 B1	20160729	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NO NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160602
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				OFFICE TO EPO]	
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EP2836849 B1	20160831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160302
EP2836849 B1	20160831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160302
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EP2836849 B1	20161031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160302
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EP2836849 B1	20161130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160302
EP2836849 B1	20161130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160302
EP2836849 B1	20161130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SM NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160302
EP2836849 B1	20161130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160302
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EP2836849 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170412 YEAR OF FEE PAYMENT : 5
EP2836849 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170424 YEAR OF FEE PAYMENT : 5
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EP2836849 B1	20180424	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 6
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EP2836849 B1	20180629	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20160410
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EP2836849 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180423 YEAR OF FEE PAYMENT : 6
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EP2836849 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20180424 YEAR OF FEE PAYMENT : 6
EP2836849 B1	20181031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160302
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EP2836849 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20180424 YEAR OF FEE PAYMENT : 6
EP2836849 B1	20330410	PEXP		Calculated Patent Term Expiry	
US2013274111 AA	20131017	LSPB	+	published / reissued	
US2013274111 AA	20160413	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US9329245 BB	20160503	LSGT	+	granted / extensions (spc, cpc, pte)	
US9329245 BB	20120618	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ECOLE POLYTECHNIQUE FEDERALE DE LAUSANNE (EPEL), S OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:JANNIN, SAMI; GIANOTTI, ANTONIO GIUSEPPE; LOHMAN, JOOST; AND OTHERS; SIGNING DATES FROM 20120503 TO 20120531; REEL/FRAME:028415/0722
US9329245 BB	20120618	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BRUKER BIOSPING AG, SWITZERLAND OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:JANNIN, SAMI; GIANOTTI, ANTONIO GIUSEPPE; LOHMAN, JOOST; AND OTHERS; SIGNING DATES FROM 20120503 TO 20120531; REEL/FRAME:028415/0722
US9329245 BB	20160413	LSGT	PAT1	Patented Case	
US9329245 BB	20350222	PEXP		Calculated Patent Term Expiry (PTA 1047 days)	
WO13153101 A1	20131017	LSPB	+	published /	

				reissued	
WO13153101 A1	20141013	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO13153101 A1	20141110	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2013715681 COUNTRY OF REF DOCUMENT : EP

30) Family number: 29923039 (US2004022778A)

Title: COMBINATION OF FENOFIBRATE AND COENZYME Q10 FOR THE TREATMENT OF ENDOTHELIAL DYSFUNCTION

Abstract: The present invention relates to a combination of a peroxisome proliferator activated receptor (PPAR) activator and a benzoquinone and their use in treating and/or preventing disorders characterized by endothelial dysfunction, such as cardiovascular disease, strokes and myocardial infarction. According to a preferred embodiment of the invention the benzoquinone or precursor thereof is a ubiquinone or precursor thereof, more preferably, coenzyme Q10 or a precursor thereof, and the PPAR activator is a librate or a thiazolidinedionc, more preferably fenolibrate.

Classifications:

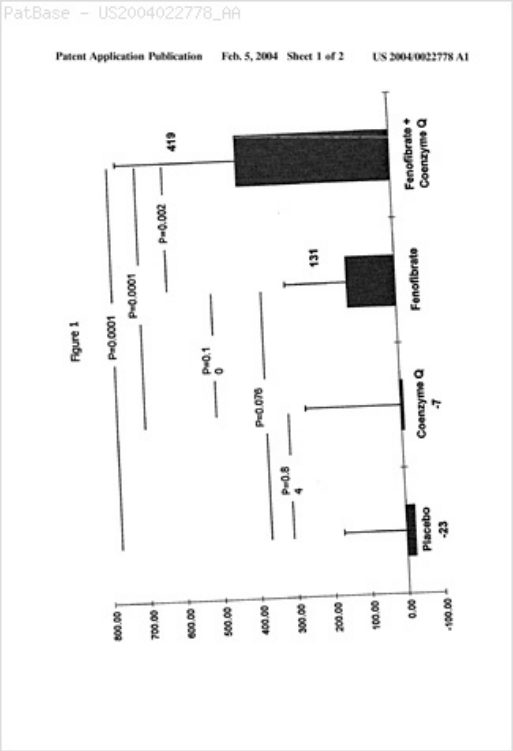
International (IPC 8-9): A61K A61K31/12 A61K31/122 A61K31/215 A61K31/216 A61K31/235 A61K31/44 A61K45/00 A61K47/20 A61P A61P3/06 A61P3/10 A61P39/06 A61P43/00 A61P7/08 A61P9/00 A61P9/04 A61P9/06 A61P9/10 A61P9/12 A61P9/14 (Advanced/Invention); A61K31/00 A61K31/12 A61K31/122 A61K31/21 A61K45/00 A61K47/20 A61P3/00 A61P39/00 A61P43/00 A61P7/00 A61P9/00 (Core/Invention); A61K A61P (Subclass/Invention)

International (IPC 1-7): A61K31/12 A61K31/122 A61K31/192 A61K31/215 A61K31/216 A61K31/426 A61K38/43 A61K45/00 A61K47/20 A61K9/00 A61P3/06 A61P3/10 A61P39/06 A61P43/00 A61P7/08 A61P9/00 A61P9/04 A61P9/10 A61P9/12 A61P9/14

CPC: A61K31/12 A61K31/215

European: A61K31/12 A61K31/215

US: 424/94.1 424/94.100P 514/342 514/369 514/369S 514/543 514/571 514/571S 514/678 514/683 514/683S



Family:

Publication number	Publication date	Application number	Application date
AR035071 AA	20040414	AR2001P105032	20011026
AT316787 E	20060215	AT20010988586T	20011023
AU103800 A0	20001116	AU2000PR01038	20001026
AU2000001038 A0	20001116	AU2000PR01038	20001026
AU2001003424 A0	20010329	AU2001PR03424	20010228
AU2002221765 AA	20020506	AU20020221765	20011023
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CN1220488 C	20050928	CN20018017972	20011023
CN1471390 A	20040128	CN20018017972	20011023
CZ301282 B6	20091230	CZ20030001148	20011023
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EE200300165 A	20030616	EE20030000165	20011023
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EP1328266 B1	20060201	EP20010988586	20011023
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HU0303566 AC	20050530	HU20030003566	20011023
IL155524 A0	20031123	IL20010155524	20011023
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IN00569DN2003 A	20090515	IN2003DN00569	20030416

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JP2004512302 T2	20040422	JP20020537311T	20011023
JP4236464 B2	20090311	JP20020537311T	20011023
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PT1328266 T	20060531	PT20010988586T	20011023
RU2003111175 A	20040910	RU20030111175	20011023
SI1328266 T1	20060630	SI20010030505T	20011023
SK200300508 A5	20031104	SK20030000508	20011023
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US2004022778 AA	20040205	US20030399639	20030417
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ZA200303126 A	20040423	ZA20030003126	20030423

Priority:

AU20000001038 20001026 AU2000PR01038 20001026 AU20010003424 20010228
AU2001PR03424 20010228 AU20020221765 20011023 WO2001EP12425 20011023
EP20010988586 20011023

Probable Assignee: FOURNIER LABORATORIES IRELAND LTD

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Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PH PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AR035071 AA	20040414	LSPB	+	published / reissued	
AR035071 AA	20041115	LSWD	-FB	SUSPENSION OF GRANTING PROCEDURE	
AT316787 E	20060215	LSGT	+	granted / extensions (spc, cpc, pte)	
AT316787 E	20061215	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	REF DOCUMENT NUMBER : 1328266 COUNTRY OF REF DOCUMENT : EP
AT316787 E	20211023	PEXP		Calculated Patent Term Expiry	
AU2002221765 AA	20020506	LSPB	+	published / reissued	
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AU2002221765 BB	20070524	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
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BRPI0114701 A	20031118	LSPB	+	published / reissued	
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DK1328266 T3	20211023	PEXP		Calculated Patent Term Expiry	
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DZ3442 A1	20211023	PEXP		Calculated Patent Term Expiry	
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EP1328266 A1	20031203	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : FOURNIER LABORATORIES IRELAND LIMITED
EP1328266 B1	20060201	LSGT	+	granted / extensions (spc, cpc, pte)	
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					CO. CORK (IE) -TRANSFER TO- FOURNIER LABORATORIES IRELAND LIMITED#ANNGROVE#CARRIGTWOHILL, CO. CORK (IE)
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ES2257457 T3	20211023	PEXP		Calculated Patent Term Expiry	
HK1057340 A1	20060331	LSPB	+	published / reissued	
HK1057340 A1	20140516	LSLE	-PC	PATENT CEASED (I.E. PATENT HAS LAPSED DUE TO THE FAILURE TO PAY THE RENEWAL FEE)	EFFECTIVE DATE : 20131023

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HK1057340 B	20240114	PEXP		Calculated Patent Term Expiry	
HU0303566 AB	20040301	LSPB	+	published / reissued	
HU0303566 AC	20140728	LSLE	-FD9A	LAPSE OF PROVISIONAL PROTECTION DUE TO NON-PAYMENT OF FEES	
IL155524 A0	20090615	LSGT	+FF	PATENT GRANTED	
IL155524 A0	20090615	LSFE	+KB	PATENT RENEWED	
IL155524 A1	20080807	LSPB	+	published / reissued	
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IL155524 A1	20160531	LSLE	-MM9K	PATENT NOT IN FORCE DUE TO NON-PAYMENT OF RENEWAL FEES	
IN00569DN2003 A	20090515	LSPB	+	published / reissued	
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JP2004512302 T2	20040422	LSPB	+	published / reissued	
JP2004512302 T2	20041012	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20041008
JP2004512302 T2	20080806	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20080805
JP2004512302 T2	20081028	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20081027
JP2004512302 T2	20081114	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2004512302 T2	20081119	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20081118
JP2004512302 T2	20081120	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01
JP2004512302 T2	20081225	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20081216
JP2004512302 T2	20081226	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP2004512302 T2	20090105	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP4236464 B2	20090311	LSGT	+	granted / extensions (spc, cpc, pte)	
JP4236464 B2	20111213	LSFE	+FPAY	RENEWAL FEE	YEAR OF FEE PAYMENT : 4

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JP4236464 B2	20121127	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 5
JP4236464 B2	20131226	LSLE	-LAPS	CANCELLATION BECAUSE OF NO PAYMENT OF ANNUAL FEES	
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KR100862129 B1	20110819	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20110819 YEAR OF FEE PAYMENT : 4
KR100862129 B1	20120720	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20120720 YEAR OF FEE PAYMENT : 5
KR100862129 B1	20131001	LSLE	-LAPS	LAPSE DUE TO UNPAID ANNUAL FEE	
KR100862129 B1	20230403	PEXP		Calculated Patent Term Expiry	
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KR20030055276 A	20070626	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR20030055276 A	20070817	LSRE	AMND	AMENDMENT	
KR20030055276 A	20071130	LSRV	-E601	DECISION TO REFUSE APPLICATION	
KR20030055276 A	20071227	LSRE	AMND	AMENDMENT	
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KR20030055276 A	20080930	LSGT	+GRNT	WRITTEN DECISION TO GRANT	
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NO20031851 A	20030624	LSPB	+	published / reissued	
NO332260 B1	20120813	LSGT	+	granted / extensions (spc, cpc, pte)	
NO332260 B1	20140526	LSLE	-MM1K	LAPSED BY NOT PAYING THE ANNUAL FEES	
NO332260 B1	20230424	PEXP		Calculated Patent Term Expiry	
PL212952 B1	20121231	LSGT	+	granted / extensions (spc, cpc, pte)	
PL212952 B1	20150130	LSLE	-LAPS	DECISIONS ON THE LAPSE OF THE PROTECTION RIGHTS	EFFECTIVE DATE : 20131023

PL361635 A1	20041004	LSPB	+	published / reissued	
PT1328266 T	20060531	LSGT	+	granted / extensions (spc, cpc, pte)	
PT1328266 T	20211023	PEXP		Calculated Patent Term Expiry	
RU2003111175 A	20040910	LSPB	+	published / reissued	
RU2003111175 A	20050327	LSWD	-FA93	ACKNOWLEDGEMENT OF APPLICATION WITHDRAWN (NO REQUEST FOR EXAMINATION)	EFFECTIVE DATE : 20050111
SI1328266 T1	20060630	LSGT	+	granted / extensions (spc, cpc, pte)	
SI1328266 T1	20211023	PEXP		Calculated Patent Term Expiry	
SK200300508 A5	20031104	LSPB	+	published / reissued	
SK287992 B6	20120903	LSGT	+	granted / extensions (spc, cpc, pte)	
SK287992 B6	20211023	PEXP		Calculated Patent Term Expiry	
TNSN01151 A1	20030403	LSPB	+	published / reissued	
TNSN01151 A1	20051110	LSPB	+	published / reissued	
US2004022778 AA	20040205	LSPB	+	published / reissued	
US7410983 BB	20080812	LSGT	+	granted / extensions (spc, cpc, pte)	
US7410983 BB	20030417	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : FOURNIER LABORATORIES IRELAND LIMITED, IRELAND OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:WATTS, GERALD F.; PLAYFORD, DAVID; REEL/FRAME:014404/0613 EFFECTIVE DATE : 20030318
US7410983 BB	20080723	LSGT	PAT1	Patented Case	
US7410983 BB	20120118	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US7410983 BB	20160812	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US7410983 BB	20160912	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US7410983 BB	20160912	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US7410983 BB	20161004	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20160812
US7410983 BB	20211023	PEXP		Calculated Patent Term Expiry	
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WO0234259 A1	20030416	LSNP	+WWE	WIPO INFORMATION:	REF DOCUMENT NUMBER : 569/DELNP/2003

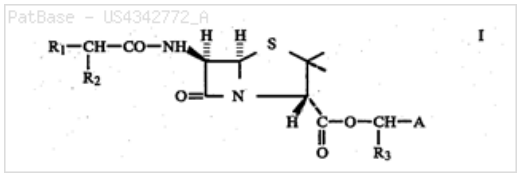
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WO0234259 A1	20030424	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : PV2003-1148 COUNTRY OF REF DOCUMENT : CZ
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WO0234259 A1	20030425	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1-2003-500293 COUNTRY OF REF DOCUMENT : PH
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WO0234259 A1	20030723	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2001988586 COUNTRY OF REF DOCUMENT : EP
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WO0234259 A1	20060201	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL	REF DOCUMENT NUMBER : 2001988586 COUNTRY OF REF DOCUMENT : EP

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ZA200303126 A	20230422	PEXP		Calculated Patent Term Expiry

31) Family number: 2041044 (US4342772A)

Title: BETA -LACTAM COMPOUNDS, ANTIBACTERIAL COMPOSITIONS THEREOF AND METHOD OF USE

Abstract: The present invention relates to hitherto unknown compounds of the general formula I: I in which R1 stands for a phenyl, 4-hydroxyphenyl, 1,4-cyclohexadienyl or a 3-thienyl group; R2 represents a primary amino or a carboxy group; R3 is a hydrogen atom, or a lower alkyl, aryl or aralkyl radical, and A stands for a radical of a beta -lactamase inhibitor containing a beta -lactam ring as well as a carboxy group, A being connected via the carboxy group. The present invention provides new compounds useful in the treatment of bacterial infections. The new compounds are in particular strongly active against beta -lactamase producing bacteria.



Classifications:
International (IPC 8-9): A61K31/43 A61K31/431 A61P31/04 B26D1/42 C07D498/04 C07D499/00 C07D499/08 C07D499/21 C07D499/32 C07D499/42 C07D499/46 C07D499/64 C07D499/66 C07D499/68 C07D499/70 C07D499/72 C07D499/74 C07D499/86 C07D499/87 C07D499/893 C07D499/897 C07D503/00 C07D513/04 C07D519/00 C07D519/06 (Advanced/Invention);
A61K31/43 (Advanced/Non-invention);
A61K31/429 A61P31/00 B26D1/01 C07D498/00 C07D499/00 C07D503/00 C07D513/00 C07D519/00 (Core/Invention);
A61K31/429 (Core/Non-invention);
C07D (Subclass/Invention)
International (IPC 1-7): A61K31/41 A61K31/43 B26D1/42 C07D417/12 C07D498/04 C07D499/00 C07D499/04 C07D499/08 C07D499/26 C07D499/32 C07D499/42 C07D499/44 C07D499/46 C07D499/48 C07D499/58 C07D499/64 C07D499/66 C07D499/68 C07D499/70 C07D499/72 C07D499/74 C07D499/78 C07D499/80 C07D499/86 C07D513/04 C07D519/00
CPC: C07D499/00 C07D503/00 B26D1/425
European: B26D1/42B C07D499/00 C07D503/00
US: 260/239.1 260/245.2R 260/245.3 424/271 514/193 514/195 540/306 540/315 540/318 540/331 540/336 540/337 540/338

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Priority:

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GB19790027761 19790809 GB19790039473 19791114 GB19790039475 19791114
IE19830002654 19800121 GB19800002682 19800125 CA19800345227 19800207
FI19800000411 19800211 AU19800055462 19800212 SU19802882797 19800212
AU19830017365 19830727

Probable Assignee: LEO PHARM PROD LTD

Assignee(s): (std): LEO PHARMACEUT PROD LTD AS ; LEO PHARM PROD LTD ; RECH APPLICATIONS THERAP ; SARATH ; LOEWY ROBERTSON ENG CO LTD

Assignee(s): LEO PHARMACEUTICAL PRODUCTS LTD AS LOVENS KEMISKE FABRIK PRODUKTIONSAKTIESELSKAB DK ; SA DE RECHERCHES POUR APPLICATIONS THERAPEUTIQUES SARATH ; REO PHARM PURODAKUTSU LTD AS REEBENSU KEMISUKE FUABURITSUKU PURODEYUKUCHIONSU AS ; VON DAEHNE WELF ; REO PHARM PURODAKUTSU LTD REEBENSU KEMISUKE FUABURITSUKU PURODEYUKUCHIONSU AS ; LEO PHARMACEUTICAL PRODUCTS LTDA S ; LEO PHARMACEUTICAL PRODUCTS LTD LOVENS KEMISKE FABRIK PRODUKTIONSAKTIESELSKAB AS ; LEO PHARMACEUTICAL PRODUCTS LTD LO VENS KEMISKE FABRIK PRODUKTIONSAKTIESELSKAB DK AS ; PRODUKTIONSAKTIESELSKAB ; A S LOVENS KEMISKE FABRIK PRODUKTIONSAKTIESELSKAB ; ANONYME DE RECHERCHES POUR APPLICATIONS THERAPEUTIQUES SARATH SOC ; DE RECHERCHES POUR APPLICATIONS THERAPEUTIQUES SARATH SA ; GODTFREDSEN WAGN O ; IK PRODUKTIONS AS ; LEO PHARMACEUTICAL PRODUCTS LTD ; LEO PHARMA PRODUCTS LTD ; LEO PHARM PRODUCTS LTD AS LOEVENS KEMISKE FABRIK ; LEO PHARMACEUTICAL PRODUCTS ; LEO PHARM PRODUCTS LTD LOEVENS KEMISKE FABRIK AS ; LEO PHARMACEUTICAL PRODUCTS LTD A S ; LEO PHARMACEUTICAL PRODUCTS LTD A S DK ; LEO PHARMACEUTICAL PRODUCTS LTD A S LKFP ; LEO PHARMACEUTICAL PRODUCTS LTD AS ; LEO PHARMACEUTICAL PRODUCTS LTD A S LOVENS KEMISKE FABRIK PRODUKTIONSAKTIESELSKAB ; LEO PHARMACEUTICAL PRODUCTS LTD A S LOVENS KEMISKE FABRI ; LEO PHARMACEUTICAL PRODUCTS LTD A S LOVENS KEMISKE FABRIKPRODUKTIONS A B ; LEO PHARMACEUTICAL PRODUCTS LTD A S L VENS KEMISKE FABRIK PRO ; LEO PHARMACEUTICAL PRODUCTS LTD A S LOEVENS KEMISKE FABRIK PRODUKTIONSAKTIESELSKAB BALLERUP DK ; LEO PHARMACEUTICAL PRODUCTS LTD A S LOEVENS KEMISKE FABRIK PRODUKTIONSAKTIESELSKAB ; LEO PHARMACEUTICAL PRODUCTS LTD AS LO VENS KEMISKE FABRIK PRODUKTIONSAKTIESELSKAB DK ; LEO PHARMACEUTICAL PRODUCTS LTD A S LOVENSKEMISKE FABRIK PRODUKTION SAKTIESELSKAB ; LEO PHARMACEUTICAL PRODUCTS LTD A S LOVENS KEMISKE FABRIK PRODUKTION AKTIESELSKAB ; LEO PHARMACEUTICAL PRODUCTS LTD A S LOEVENS KEMISKE FABRIK PRODUKTIONSAKTIESELSKAB TE BALLERUP DENEMARKEN ; LEO PHARMACEUTICAL PRODUCTS LTD AS LOEVENS KEMISKE FABRI ; LEO PHARMACEUTICAL PRODUCTS LTD A S LOVENS KEMISKE FABRIK PRODUKTIONSA KTIESELSKAB ; LEO PHARMACEUTICAL PRODUCTS LTD AS LOVENS KEMISKE FABRIK PRODUKTIONSAKTIESELSKAB ; LEO PHARMACEUTICAL PRODUCTS LTD AS LOVENS KEMISKE FABR

Inventor(s): (std): BAGUN ORE GOTSUTOFURETSUDOSEN ; BERUFU FUON DAEENE ; DAEHNE W V ; DAEHNE WELF VON DR RER NAT ; DAENE VELF FON ; DAHENE WELF VON ; GODTEREDSEN W O ; GODTFREDSEN VAGN OLE ; GODTFREDSEN W ; GODTFREDSEN W O ; GODTFREDSEN WAGN O ; GODTFREDSEN WAGN OLE DR PHIL ; GODTFREDSEN WANG O ; GODTFREDSON WAGN OLE ; GODTFRESEN W ; VON DAEHNE WOLF ; VON DAEHNE W ; VON DAEHNE WELF GODTFREDSEN WA ; VON DAEHNE WELF ; WELF VON DAEHNE ; WAGN OLE GODTFREDSEN ; DAEHNE WELF VON ; GODTFREDSEN WAGN OLE

Inventor(s): VON DAEHNE WELF GODTFREDSEN WAGN OLE ; VON DAEHNE WELF DK ; VON DAEHNE WOLF DK ; VON DR RER NAT DAEHNE WELF ; W O GODTFREDSEN ; W VON DAEHNE ; WAGN OLE GODTFREDSON ; WELF VON DAHENE ; VON DRRERNAT DAEHNE WELF ; OLE DRPHIL GODTFREDSEN WAGN ; GODTFREDSEN WAGN OLE DRPHIL ; DAEHNE WELF VON DRRERNAT ; OLE DR PHIL GODTFREDSEN WAGN ; VAGN OLE GODTFREDSEN DK ; VELF FON DAENE DE ; GODTEREDSEN WO

Agent(s): CALLINANS; FISHER ADAMS KELLY CALLINANS; SPRUSON AND FERGUSON; BORDEN LADNER GERVAIS LLP; REINHOLD COHN AND PARTNERS

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
AR230286 A1	19840301	LSGT	+	granted / extensions (spc, cpc, pte)	
AR230286 A1	20000131	PEXP		Calculated Patent Term Expiry	
AT368507 B	19821025	LSGT	+	granted / extensions (spc, cpc, pte)	
AT368507 B	19950115	LSGT	+SZA	APPLICATION FILED FOR A CERTIFICATE OF PROTECTION	TEXT : SZ33/94, 941109
AT368507 B	19960515	LSLE	-REN	CEASED DUE TO NON-PAYMENT OF THE ANNUAL FEE	
AT368507 B	20000215	LSGT	+EZF	GRANT OF A CERTIFICATE OF PROTECTION	TEXT : SZ 33/1994, 19941109, EXPIRES:20020419
AT368507 B	20001015	LSLE	-ELA	EXPIRED DUE TO LAPSE OF TIME	
AT368507 B	20000205	PEXP		Calculated Patent Term Expiry	
AT61580 A	19820215	LSPB	+	published / reissued	
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AU198317365 A1	19831208	LSPB	+	published / reissued	
AU532531 B2	19831006	LSGT	+	granted / extensions (spc, cpc, pte)	
AU532531 B2	20000212	PEXP		Calculated Patent Term Expiry	
AU542288 B2	19850214	LSGT	+	granted / extensions (spc, cpc, pte)	
AU542288 B2	20030727	PEXP		Calculated Patent Term Expiry	
BE881675 A	19800812	LSPB	+	published / reissued	
BE881675 A	19930617	LSGT	CCPA	APPLICATION FOR A SUPPLEMENTARY PROTECTION CERTIFICATE	TEXT : 093C0069
BE881675 A	19931116	LSGT	+CCPV	GRANT OF A SUPPLEMENTARY PROTECTION CERTIFICATE	TEXT : 093C0069, EXPIRES 20020409
BE881675 A	20000101	LSLE	-RE20	PATENT EXPIRED	PARTYTYPE : OWNER OWNER : LEO PHARMACEUTICAL PRODUCTS LTD A/S (LOVENS KEMIS EFFECTIVE DATE : 20000212
CH645902 A	19841031	LSGT	+	granted / extensions (spc, cpc, pte)	
CH645902 A	20000229	LSLE	-PL	PATENT CEASED	
CH645902 A	20031111	PEXP		Calculated Patent Term Expiry	
CH646436 A	19841130	LSGT	+	granted / extensions (spc, cpc, pte)	
CH646436 A	19960229	LSGT	SPCF	SUPPLEMENTARY PROTECTION CERTIFICATE FILED	TEXT : IKS 48366/871120, 951201
CH646436 A	19960614	LSGT	SPCF	SUPPLEMENTARY PROTECTION CERTIFICATE FILED	TEXT : IKS 48366/871120, 951201

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CH646436 A	20000229	LSLE	-PL	PATENT CEASED	
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CY1205 A	20000125	PEXP		Calculated Patent Term Expiry	
DD149529 A5	19810715	LSGT	+	granted / extensions (spc, cpc, pte)	
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DE3005164 A1	19800821	LSPB	+	published / reissued	
DE3005164 A1	19830324	LSES	+8110	REQUEST FOR EXAMINATION PARAGRAPH 44	
DE3005164 C2	19860626	LSGT	+	granted / extensions (spc, cpc, pte)	
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DE3050895 C2	19890503	LSGT	+	granted / extensions (spc, cpc, pte)	
DE3050895 C2	19840927	LSES	+8110	REQUEST FOR EXAMINATION PARAGRAPH 44	
DE3050895 C2	19851128	LSWD	-8176	PROCEEDINGS SUSPENDED BECAUSE OF APPLICATION NO:	REF DOCUMENT NUMBER : 3005164 COUNTRY OF REF DOCUMENT : DE
DE3050895 C2	19870102	LSRE	+8178	SUSPENSION CANCELLED	
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DE3050895 C2	19891026	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
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DE3051044 C2	19860612	LSES	+8110	REQUEST FOR EXAMINATION PARAGRAPH 44	
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ES8101596 A1	20071201	LSLE	-FD1A	PATENT LAPSED	EFFECTIVE DATE : 20001218
ES8101596 A1	20001216	PEXP		Calculated Patent Term Expiry	
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FI800411 A	19800814	LSPB	+	published / reissued	
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FR2449089 B1	19850419	LSAS	TP	TRANSMISSION OF PROPERTY	
FR2449089 B1	19920904	LSGT	CC	SUPPLEMENTARY CERTIFICATE OF PROTECTION LAID OPEN TO THE PUBLIC (LAW OF 25 JUNE 1990)	TEXT : 92C0385, 920603
FR2449089 B1	19921224	LSGT	CB	SUPPLEMENTARY CERTIFICATE OF PROTECTION GRANTED (LAW OF 25 JUNE 1990)	TEXT : 92C0385, 800212
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FR2449089 B1	20000212	PEXP		Calculated Patent Term Expiry	
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GB2044255 B2	20000216	LSGT	CTFE	SUPPLEMENTARY PROTECTION CERTIFICATE ENTERED INTO FORCE	TEXT : SPC/GB93/043, 20000125, EXPIRES: 20020408
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GB2044255 B2	20020501	LSLE	-SPCE	SUPPLEMENTARY PROTECTION CERTIFICATE EXPIRED	TEXT : SPC/GB93/043, 20020408
GB2044255 B2	20000125	PEXP		Calculated Patent Term Expiry	
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HK5684 A	19840120	LSGT	+	granted / extensions (spc, cpc, pte)	
HK5684 A	20041215	LSLE	-PE	PATENT EXPIRED	
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HU182604 B	19840228	LSGT	+	granted / extensions (spc, cpc, pte)	
HU182604 B	20000212	PEXP		Calculated Patent Term Expiry	
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IE49881 B	20000121	PEXP		Calculated Patent Term Expiry	
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IL59203 A1	19980615	LSFE	+KB	PATENT RENEWED	
IT1147306 A	19861119	LSGT	+	granted / extensions (spc, cpc, pte)	
IT1147306 A	19920417	LSGT	ITCP	COMPLEMENTARY PROTECTION CERTIFICATE	TEXT : CCP 123
IT1147306 A	19921113	LSGT	+MEDD	SUPPLEMENTARY PROTECTION CERTIFICATE FOR PHARMACEUTICAL PRODUCTS: GRANTED	TEXT : CCP 123, 19920417; LEO PHARMACEUTICAL PRODUCTS LTD. A/ S
IT1147306 A	19991027	LSFE	TA	FEE PAYMENT DATE (SITUATION AS OF EVENT DATE), DATA COLLECTED SINCE 19931001	EFFECTIVE DATE : 19990226
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JP1781967 C3	19930813	LSGT	+	granted / extensions (spc, cpc, pte)	
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JP4070315 B4	19921110	LSPB	+	published / reissued	
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KE3309 A	19830819	LSGT	+	granted / extensions (spc, cpc, pte)	
KE3309 A	20030721	PEXP		Calculated Patent Term Expiry	
KR830001903 A	19830919	LSPB	+	published / reissued	
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NL8000775 A	19850201	LSLE	-BV	THE PATENT APPLICATION HAS LAPSED	
NL8000775 A	19870202	LSES	+BA	A REQUEST FOR SEARCH OR AN INTERNATIONAL-TYPE SEARCH HAS BEEN FILED	
NL8000775 A	19870202	LSES	BB	A SEARCH REPORT HAS BEEN DRAWN UP	
NL8000775 A	19870601	LSES	+BC	A REQUEST FOR EXAMINATION HAS BEEN FILED	
NL8000775 A	20001101	LSLE	-BV	THE PATENT APPLICATION HAS LAPSED	
NZ192762 A	19841019	LSPB	+	published / reissued	
PH16326 A	19830905	LSGT	+	granted / extensions (spc, cpc, pte)	
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PH16326 A	20000905	PEXP		Calculated Patent Term Expiry	
PH20161 A	19861009	LSGT	+	granted / extensions (spc, cpc, pte)	
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PL125079 B1	19830331	LSGT	+	granted / extensions (spc, cpc, pte)	
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PT70805 A	19800301	LSPB	+	published / reissued	
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SE446186 B	19860818	LSPB	+	published / reissued	
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SE446186 C	20000212	PEXP		Calculated Patent Term Expiry	
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SE461913 B	19950131	LSFE	+NAL	PATENT IN FORCE	TEXT : 8404462-7
SE461913 C	19900802	LSGT	+	granted / extensions (spc, cpc, pte)	
SE461913 C	20040905	PEXP		Calculated Patent Term Expiry	
SE8001099 A	19800814	LSPB	+	published / reissued	
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SU976852 A3	19821123	LSGT	+	granted / extensions (spc, cpc, pte)	
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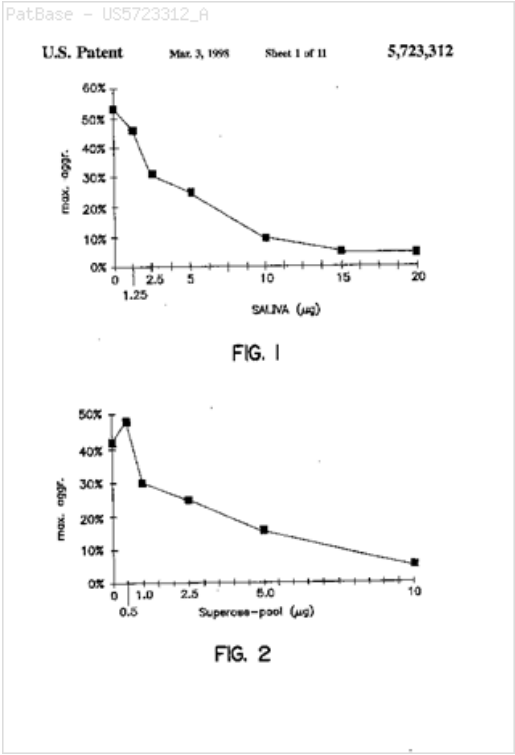
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US4342772 A	19821203	LSGT	PAT1	Patented Case	
US4342772 A	19821203	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US4342772 A	20001204	PEXP		Calculated Patent Term Expiry	
US4407751 A	19831004	LSGT	+	granted / extensions (spc, cpc, pte)	
US4407751 A	19850806	LSGT	PAT1	Patented Case	
US4407751 A	19851015	LSRE	CC	CERTIFICATE OF CORRECTION	
US4407751 A	19870402	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US4407751 A	19910207	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
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US4407751 A	19951212	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 19951004
US4407751 A	20180122	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US4407751 A	20180122	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US4407751 A	20010807	PEXP		Calculated Patent Term Expiry	
US4840944 A	19890620	LSGT	+	granted / extensions (spc, cpc, pte)	
US4840944 A	19890424	LSGT	PAT1	Patented Case	
US4840944 A	19890424	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
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YU24480 A	19830430	LSPB	+	published / reissued	
YU42659 B	19881031	LSPB	+	published / reissued	
ZA8000796 A	19810225	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA8000796 A	20000211	PEXP		Calculated Patent Term Expiry	

32) Family number: 29375046 (US5723312A)

Title: Collagen-induced platelet aggregation inhibitor

Abstract: The invention provides a protein which inhibits collagen-induced platelet aggregation, derived from Triatoma pallidipennis, and derivatives thereof. The protein is useful for inhibition of collagen-induced human platelet aggregation or of cancer with metastatic tumor cells.

Classifications:
International (IPC 8-9): A61K38/00 A61K38/10 A61K38/16 A61K38/17 A61P35/00 A61P7/02 C07H21/04 C07K14/435 C07K14/81 C07K7/08 C12N1/21 C12N15/09 C12N15/12 C12N15/63 C12N5/10 C12P21/00 C12P21/02 (Advanced/Invention);
A61K38/00 A61P35/00 C07K14/00 C12N15/09 (Advanced/Non-invention);
A61K38/00 A61K38/10 A61K38/16 A61K38/17 A61P35/00 A61P7/00 C07H21/00 C07K14/435 C07K14/81 C07K7/00 C12N15/09 C12N15/12 C12N15/63 C12N5/10 C12P21/02 (Core/Invention);
A61K C07K C12N C12P (Subclass/Invention)
International (IPC 1-7): A23J1/00 A61K A61K35/64 A61K37/02 A61K37/64 A61K38/00 A61K38/10 A61K38/16 A61K38/17 A61K38/55 A61P7/02 C07H21/04 C07K C07K1/00 C07K13/00 C07K14/00 C07K14/435 C07K14/47 C07K14/81 C07K15/08 C07K7/08 C12N15/00 C12N15/09 C12N15/11 C12N15/12 C12N15/15 C12N15/63 C12N15/74 C12N15/79 C12N5/00 C12N5/10 C12P C12P21/02 C12P21/02 C12P21/06
CPC: C07K14/43563 A61K38/00
European: C07K14/435A4 K61K38/00 M07K207/00
US: 435/252.3 435/320.1 435/325 435/69.1 514/1.9 514/12 514/13.7 514/13.8 514/14.9 514/16.4 514/17.2 514/19.3 530/350 530/412 536/23.5



Family:

Publication number	Publication date	Application number	Application date
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Priority:

US19910756211 19910905 US19910814884 19911231 US19920924383 19920717
US19920914383 19920717 IL19920103065 19920904 JP19930500350 19920904
JP19930500350T 19920904 WO1992EP02052 19920904 US19930116889 19930907
US19940206185 19940307 US19950462894 19950605 IL19960103065 19961025

Probable Assignee: SCHERING AG

Assignee(s): (std): SCHERING AG ; PAION GMBH ; SHERING AG ; SCHERING AKTIENGESELLSCHAFT ; SCHERING BERLIN U BERGKAMEN AG

Assignee(s): SCHERING AG 13353 BERLIN DE ; SCHERING AG BERLIN UND BERGKAMEN ; SCHLEUNING WOLF DIETER ; POSSANI LOURIVAL D ; ALAGON ALEJANDRO ; BAYER PHARMA AG ; CUEVAS AGUIRRE DELIA A ; HAENDLER BERNARD ; KRATZSCHMAR JORN ; NOESKE JUNGBLUT CHRISTIANE

Inventor(s): (std): ALAGON ALEJADRO ; ALAGON ALEJANDRO ; ALEJANDRO ALAGON ; ALEKHANDRO ALAGON ; BERNARD HAENDLER ; BERNHARD HAENDLER ; BERNKHARD KHEHNDLER ; CHRISTIANE NOESEK JUNGBLUT ; CHRISTIANE NOESKE JUNGBLUT ; CUEVAS AGUIRRE DELIA ; CUEVAS AGUIRRE DELIA ANATOLIA ; DELIA ANATOLIA CUEVAS AGUIRRE ; DELIA ANATOLIA KEVAS AGIRRE ; HAENDLER BERNARD ; HAENDLER BERNARD JACQUES ; HAENDLER BERNHARD ; HAENDLER BERNHARD JACQUES ; JERN KREHTTSSHMAR ; JOERN KRAETSCHMAR ; JORN KRATZSCHMAR ; KRAETSCHMAR JOERN ; KRAETZSCHMAR JOERN ; KRAETZSCHMAR JOERN REINER ; KRATZSCHMAR JORN ; KRATZSCHMAR JORN REINER ; KRISTIANE NESKE JUNGBLUT ; KROTZSCHMAR JOERN ; LOURIVAL DOMINGOS POSSANI ; LURIVAL DOMINGOS POSSANI ; NOESKE JUNGBLUT CHRISTIANE ; POSSANI LOURIVAL ; POSSANI LOURIVAL DOMINGOS ; SCHLEUNING WOLF DIETER ; VOL F DITER SHLOJNING ; WOLF DIETER SCHLEUNING ; POSSANI LOURIVAL D ; KRATZSCHMAR JOERN ; CEUVAS AGUIRRE DELIA A

Inventor(s): ALAGON ALEJANDRO CUERNAVACA MORELOS 62271 MX ; VOL'F-DITER SHLOJNING ; LURIVAL' DOMINGOS POSSANI ; KRISTIANE NESKE-JUNGBLUT ; KRAETZSCHMAR JOERN W 1000 BERLIN 30 DE ; DELIA ANATOLIA KEVAS-AGIRRE ; HAENDLER BERNHARD W 1000 BERLIN 12 DE ; CUEVAS AGUIRRE DELIA CUERNAVACA MORELOS 62271 MX ; CUEVAS AGUIRRE DELIA A ; POSSANI LOURIVAL CUERNAVACA MORELOS 62271 MX ; NOESKE JUNGBLUT CHRISTIANE W 1000 BERLIN 39 DE ; SCHLEUNING WOLF DIETER W 1000 BERLIN 20 DE

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; MARKS AND CLERK; DANIEL FREIMANN AND CO; WOLFF BREGMAN AND GOLLER

Designated states: AT AU BE BR CA CH DE DK ES FI FR GB GR HU IE IT JP KR LI LU NL NO PT RU SE

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT169674 E	19980815	LSGT	+	granted / extensions (spc, cpc, pte)	
AT169674 E	20060615	LSLE	-REN	CEASED DUE TO NON-PAYMENT OF THE ANNUAL FEE	
AT169674 E	20120904	PEXP		Calculated Patent Term Expiry	
AU199225022 A1	19930405	LSPB	+	published / reissued	
AU672584 B2	19961010	LSGT	+	granted / extensions (spc, cpc, pte)	
AU672584 B2	20120904	PEXP		Calculated Patent Term Expiry	
CA2117174 AA	19940307	LSPB	+	published / reissued	
CA2117174 AA	19990714	LSES	+EEER	EXAMINATION REQUEST	
CA2117174 AA	20070904	LSLE	-FZDE	DEAD	
DE69226580 D1	19990909	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE69226580 D1	20020321	LSAS	8327	CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER	PARTYTYPE : OWNER OWNER : PAION GMBH, 52222 STOLBERG, DE
DE69226580 D1	20080717	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
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DE69226580 T2	20120904	PEXP		Calculated Patent Term Expiry	
DK0530937 T3	19990510	LSGT	+	granted / extensions (spc, cpc, pte)	
DK0530937 T3	20120904	PEXP		Calculated Patent Term Expiry	

EP0530937 A1	19930310	LSPB	+	published / reissued	
EP0530937 A1	19930310	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19920904
EP0530937 A1	19970129	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 19961212
EP0530937 A1	19980814	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP0530937 A1	19981118	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP0530937 A1	19981216	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2121817 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP0530937 A1	19990804	LSGT	+26N	NO OPPOSITION FILED	
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EP0530937 A1	20040923	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20040923 YEAR OF FEE PAYMENT : 13
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EP0530937 A1	20050930	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20050930
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EP0530937 A1	20050930	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20050930
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EP0530937 A1	20060515	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP0530937 A1	20060523	LSLE	-EUG	SE: EUROPEAN PATENT HAS LAPSED	REF COUNTRY CODE : EP
EP0530937 A1	20060524	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20050904
EP0530937 A1	20060531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20060531
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EP0530937 A1	20061121	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20061121 YEAR OF FEE PAYMENT : 15
EP0530937 A1	20061216	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20050905
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EP0530937 A1	20080430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 19980812
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EP0530937 B1	20120904	PEXP		Calculated Patent Term Expiry	
ES2121817 T3	19981216	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2121817 T3	19981216	LSGT	+FG2A	DEFINITIVE PROTECTION	REF DOCUMENT NUMBER : 530937 COUNTRY OF REF DOCUMENT : ES
ES2121817 T3	20120904	PEXP		Calculated Patent Term Expiry	
FI112801 B	20040115	LSPB	+	published / reissued	
FI112801 B	20060331	LSLE	-MA	PATENT EXPIRED	
FI112801 B	20140304	PEXP		Calculated Patent Term Expiry	

FI941052 A	19940304	LSPB	+	published / reissued	
HU218830 B	20001228	LSGT	+	granted / extensions (spc, cpc, pte)	
HU218830 B	20060628	LSLE	-MM4A	LAPSE OF DEFINITIVE PATENT PROTECTION DUE TO NON-PAYMENT OF FEES	
HU218830 B	20120904	PEXP		Calculated Patent Term Expiry	
HU70271 A2	19950928	LSPB	+	published / reissued	
IL103065 A1	20011125	LSPB	+	published / reissued	
IL103065 A1	20020630	LSFE	+KB	PATENT RENEWED	
IL103065 A1	20021110	LSFE	+KB	PATENT RENEWED	
IL103065 A1	20070724	LSLE	-MM9K	PATENT NOT IN FORCE DUE TO NON-PAYMENT OF RENEWAL FEES	
IL119491 A1	20001121	LSPB	+	published / reissued	
IL119491 A1	20010430	LSGT	+FF	PATENT GRANTED	
IL119491 A1	20010724	LSFE	+KB	PATENT RENEWED	
IL119491 A1	20021110	LSFE	+KB	PATENT RENEWED	
IL119491 A1	20070724	LSLE	-MM9K	PATENT NOT IN FORCE DUE TO NON-PAYMENT OF RENEWAL FEES	
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IL119492 A0	20030312	LSFE	+KB	PATENT RENEWED	
IL119492 A0	20070724	LSLE	-MM9K	PATENT NOT IN FORCE DUE TO NON-PAYMENT OF RENEWAL FEES	
IL119492 A1	20020630	LSPB	+	published / reissued	
JP2003313199 A2	20031106	LSPB	+	published / reissued	
JP2003313199 A2	20040406	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20040405
JP2003313199 A2	20040804	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20040803
JP2003313199 A2	20040819	LSAL	A911	TRANSFER OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A911 EFFECTIVE DATE : 20040818
JP2003313199 A2	20050408	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20050407
JP2003313199 A2	20051007	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20051006
JP2003313199 A2	20070109	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20070105
JP2003313199 A2	20070113	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20070112
JP2003313199 A2	20070202	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20070201
JP2003313199 A2	20070625	LSWD	-A045	WRITTEN MEASURE OF DISMISSAL OF APPLICATION	TEXT : JAPANESE INTERMEDIATE CODE: A045 EFFECTIVE DATE : 20070622
JP7506959 T2	19950803	LSPB	+	published / reissued	
JP7506959 T2	20060210	LSWD	-A761	WRITTEN WITHDRAWAL OF APPLICATION	TEXT : JAPANESE INTERMEDIATE CODE: A761 EFFECTIVE DATE : 20060209

KR100232683 B1	19991201	LSGT	+	granted / extensions (spc, cpc, pte)	
KR100232683 B1	20141201	PEXP		Calculated Patent Term Expiry	
KR19940702543 A	19940820	LSPB	+	published / reissued	
KR19947002543 A	19940820	LSPB	+	published / reissued	
NO314848 B1	20030602	LSGT	+	granted / extensions (spc, cpc, pte)	
NO314848 B1	20140304	PEXP		Calculated Patent Term Expiry	
NO940771 A	19940304	LSPB	+	published / reissued	
NZ244246 A	19940325	LSPB	+	published / reissued	
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RU2128705 C1	20120904	PEXP		Calculated Patent Term Expiry	
RU94045930 A	19960720	LSPB	+	published / reissued	
US5723312 A	19980303	LSGT	+	granted / extensions (spc, cpc, pte)	
US5723312 A	20010829	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5723312 A	20060303	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5723312 A	20060405	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US5723312 A	20060405	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US5723312 A	20060502	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20060303
US5723312 A	20150605	PEXP		Calculated Patent Term Expiry	
US5756454 A	19980526	LSGT	+	granted / extensions (spc, cpc, pte)	
US5756454 A	19940706	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SCHERING AKTIENGESELLSCHAFT, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:NOESKE-JUNGBLUT, CHRISTIANE; HAENDLER, BERNARD; KRAETZSCHMAR, JOERN; AND OTHERS; REEL/FRAME:007058/0520; SIGNING DATES FROM 19940530 TO 19940608
US5756454 A	20011011	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5756454 A	20060526	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5756454 A	20060628	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
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US5756454 A	20150526	PEXP		Calculated Patent Term Expiry	

WO9305150 A1	19930318	LSPB	+	published / reissued	
WO9305150 A1	19940304	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 941052 COUNTRY OF REF DOCUMENT : FI
WO9305150 A1	19940307	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2117174 COUNTRY OF REF DOCUMENT : CA
WO9305150 A1	20040115	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 941052 COUNTRY OF REF DOCUMENT : FI
ZA9206737 A	19930901	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA9206737 A	20110903	PEXP		Calculated Patent Term Expiry	

33) Family number: 45902046 (WO10074578A1)

Title: DEVICE FOR COOLING A PART OF THE BODY, IN PARTICULAR THE ORAL CAVITY

Abstract: The present invention relates to a device for cooling and/or healing a part of the human or animal body, comprising a container for containing a cooling element, which container is adapted for placing on or in the body, wherein the device is provided with a medicine which is suitable for administering to the part of the body for cooling and/or healing. The invention is particularly suitable for treatment of the oral cavity, including the tongue, the throat, the jaw, the gums and the cheeks.

Classifications:
International (IPC 8-9): A23G9/36 A23G9/50 A61F7/10 A61J7/00 (Advanced/Invention);
A23G9/32 A23G9/44 A61F7/00 A61J7/00 (Core/Invention)
CPC: A61F7/10 A61F7/12 A61F2007/0017 A61F2007/0098 A61J7/003
European: A61F7/12 A61J7/00D4 K61F7/00A2M K61F7/00W K61F7/10

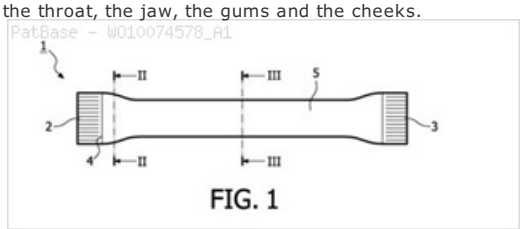


FIG. 1

Family:

Publication number	Publication date	Application number	Application date
NL2002376 C	20100628	NL20082002376	20081224
NL2002376 C2	20100628	NL20082002376	20081224
WO10074578 A1	20100701	WO2009NL50804	20091224

Priority:

NL20082002376 20081224

Probable Assignee: MAHAYANA HOLDING B V

Assignee(s): (std): MAHAYANA HOLDING B V ; MAHAYANA HOLDING BV ; SIPS MART FRANS PIETER

Inventor(s): (std): SIPS MART FRANS PIETER

Agent(s): EVELEENS MAARSE PIETER

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
NL2002376 C	20100628	LSGT	+	granted / extensions (spc, cpc, pte)	
NL2002376 C	20120711	LSLE	-V1	LAPSED BECAUSE OF NON-PAYMENT OF THE ANNUAL FEE	EFFECTIVE DATE : 20120701
NL2002376 C	20281224	PEXP		Calculated Patent Term Expiry	
NL2002376 C2	20100628	LSGT	+	granted / extensions (spc, cpc, pte)	
NL2002376 C2	20281224	PEXP		Calculated Patent Term Expiry	
WO10074578 A1	20100701	LSPB	+	published / reissued	
WO10074578 A1	20110624	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO10074578 A1	20120509	LSNE	-122	EP: PCT APPLICATION NON-ENTRY IN EUROPEAN PHASE	REF DOCUMENT NUMBER : 09775366 COUNTRY OF REF DOCUMENT : EP KIND CODE OF REF DOCUMENT : A1 DESIGNATED STATE(S) :

34) Family number: 30401051 (US2006134313A)

Title: METHODS FOR PRODUCING AN ANTI-MICROBIAL PLASTIC PRODUCT

Abstract: The invention relates to methods of producing metal-containing antimicrobial plastics or plastic products and also to plastic products obtainable by the method, especially plastic products for **medical** requirements.

Classifications:
International (IPC 8-9): A01N59/16 A01P1/00 A61L29/06 A61L29/16 A61L33/00 B05D3/00 C08J3/20 C08K3/08 C08K3/24 C08L101/00 (Advanced/Invention);
A61L29/00 (Advanced/Non-invention);
A01N59/16 A01P1/00 A61L29/00 A61L33/00 B05D3/00 C08J3/20 C08K3/00 C08L101/00 (Core/Invention)
International (IPC 1-7): A61L29/06 A61L29/14 A61L29/16 A61L33/00 C08J7/12 C09D5/16
CPC: A61L29/06 A61L29/16 A61L2300/102 A61L2300/104 A61L2300/404 A61L2300/624
European: A61L29/06 A61L29/16 K61L300/102 K61L300/104 K61L300/404 K61L300/624
US: 424/618 424/618P 427/2.1 427/2.100P

PatBase – US2006134313_AA

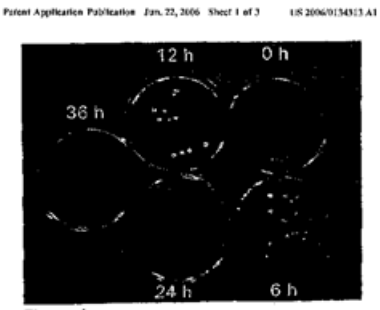


Figure 1

Family:

Publication number	Publication date	Application number	Application date
AT378078 E	20071115	AT20030750507T	20030910
AU2003270163 AA	20040430	AU20030270163	20030910
BRPI0314210 A	20050628	BR2003PI14210	20030910
CN100342925 C	20071017	CN20038023332	20030910
CN1684724 A	20051019	CN20038023332	20030910
DE10331324 A1	20040325	DE20031031324	20030710
DE50308613 D1	20071227	DE20035008613	20030910
DK1536848 T3	20080317	DK20030750507T	20030910
EP1536848 A1	20050608	EP20030750507	20030910
EP1536848 B1	20071114	EP20030750507	20030910
ES2297196 T3	20080501	ES20030750507T	20030910
IN00345CN2005 A	20070810	IN2005CN00345	20050308
IN01391CN2007 A	20071116	IN2007CN01391	20070404
IN220047 B	20080725	IN2005CN00345	20050308
JP2006509054 T2	20060316	JP20040535474T	20030910
JP5128757 B2	20130123	JP20040535474T	20030910
US2006134313 AA	20060622	US20050527157	20050308
US2010068296 AA	20100318	US20090569423	20090929
WO04024205 A1	20040325	WO2003EP10049	20030910

Priority:

DE20021041962 20020910 DE20031031324 20030710 WO2003EP10049 20030910
US20050527157 20050308 US20090569423 20090929

Probable Assignee: PROF DR JOSEF GUGGENBICHLER DR CHRISTOPH CICHOS GBR ANTIMICROBIAL ARGENTUM TECHNOLOGIES

Assignee(s): (std): ANTIMICROBIAL ARGENTUM TECHNOL ; CHRISTOPH CICHOS GBR ANTIMICRO ; CICHOS CHRISTOPH ; GUGGENBICHLER JOSEF PETER ; JOSEF PETER GUGGENBICHLER DR C ; JOSEF PETER GUGGENBICHLER PROF

Assignee(s): PROF DR JOSEF GUGGENBICHLER DR CHRISTOPH CICHOS GB ; PROF DR JOSEF PETER GUGGENBICHLER DR CHRISTOPH CICHOS GBR ; DR CHRISTOPH CICHOS GBR ANTIMICROBIAL ARGENTUM TECHNOLOGIES ; PROF DR JOSEF PETER GUGGENBICHLER DR CHRISTOPH CICHOS GBR ANTIMICROBIAL ARGENTUM TECHNOLOGIES ; PROF DR JOSEF GUGGENBICHLER DR CHRISTOPH CICHOS GBR ANTIMICROBIAL ARGENTUM TECHNOLOGIES ; PROF DR JOSEF PETER GUGGENBICHLER DR CHRISTOPHCICH ; PROF DR JOSEF PETER GUGGENBICHLER DR CHRISTOPHCICHOS GBR ANTIMICROBIAL ARGENTUM TECHNOLOGIES ; PROF DR JOSEF PETER GUGGENBICHLER DR CHRISTOPHCICHOS GBR ; PROF DR JOSEF PETER GUGGENBICHLER DR CHRISTOPH CIC ; PROF DR JOSEF PETER GUGGENBICHLER ; DR CHRISTOPH CICHOS GBR ANTIMICROBIAL ARGENTUM TEC ; ANTIMICROBIAL ARGENTUM TECHNOLOGIES

Inventor(s): (std): GUGGENBICHLER JOSEF PETER ; CICHOS CHRISTOPH ; PETER GUGGENBICHLER JOSEF ; CHRISTOPH CICHOS ; CHRISTOPH GUGGENBICHLER JOSEF

Inventor(s): DR CHRISTOPH CICHOS ; PROF DR JOSEF PETER GUGGENBICHLER ; GUGGENBICHLER JOSEF PETER CICHOS CHRISTOPH ; JOSEF PETER GUGGENBICHLER

Agent(s): KAGAN BINDER PLLC

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
AT378078 E	20071115	LSGT	+	granted / extensions (spc, cpc, pte)	
AT378078 E	20230910	PEXP		Calculated Patent Term Expiry	
AU2003270163 AA	20040430	LSPB	+	published / reissued	
AU2003270163 AA	20050623	LSLE	-MK6	APPLICATION LAPSED SECTION 142(2)(F)/REG. 8.3(3) - PCT APPLIC. NOT ENTERING NATIONAL PHASE	
BRPI0314210 A	20050628	LSPB	+	published / reissued	
BRPI0314210 A	20141014	LSES	B07D	TECHNICAL EXAMINATION (OPINION) RELATED TO ARTICLE 229 OF INDUSTRIAL PROPERTY LAW	
BRPI0314210 A	20150519	LSES	B07A	TECHNICAL EXAMINATION (OPINION): PUBLICATION OF TECHNICAL EXAMINATION (OPINION)	
BRPI0314210 A	20151006	LSRV	B09B	DECISION: REFUSAL	TEXT : INDEFIRO O PEDIDO DE ACORDO COM O(S) ARTIGO(S) 8O C/C 13 E 25 DA LPI.
BRPI0314210 A	20160210	LSRV	B09B	DECISION: REFUSAL	TEXT : MANTIDO O INDEFERIMENTO UMA VEZ QUE NAO FOI APRESENTADO RECURSO DENTRO DO PRAZO LEGAL.
CN100342925 C	20071017	LSGT	+	granted / extensions (spc, cpc, pte)	
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CN100342925 C	20171103	LSLE	-CF01	TERMINATION OF PATENT RIGHT DUE TO NON-PAYMENT OF ANNUAL FEE	
CN100342925 C	20230910	PEXP		Calculated Patent Term Expiry	
CN1684724 A	20051019	LSPB	+	published / reissued	
CN1684724 A	20051019	LSPB	+C06	PUBLICATION	
DE10331324 A1	20040325	LSPB	+	published / reissued	
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DK1536848 T3	20080317	LSGT	+	granted / extensions (spc, cpc, pte)	
DK1536848 T3	20230910	PEXP		Calculated Patent Term Expiry	
EP1536848 A1	20050608	LSPB	+	published /	

				reissued	
EP1536848 A1	20050608	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20050406
EP1536848 A1	20050803	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20050620
EP1536848 A1	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20140910 YEAR OF FEE PAYMENT : 12
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EP1536848 B1	20080501	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2297196 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
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EP1536848 B1	20081031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20071114
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EP1536848 B1	20090430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20071114
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EP1536848 B1	20230910	PEXP		Calculated Patent Term Expiry	
ES2297196 T3	20080501	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2297196 T3	20230910	PEXP		Calculated Patent Term Expiry	
IN00345CN2005 A	20070810	LSPB	+	published / reissued	
IN01391CN2007 A	20071116	LSPB	+	published / reissued	
IN220047 B	20080725	LSGT	+	granted / extensions (spc, cpc, pte)	
IN220047 B	20250308	PEXP		Calculated Patent Term Expiry	
JP2006509054 T2	20060316	LSPB	+	published /	

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JP2006509054 T2	20081008	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20081007
JP2006509054 T2	20090401	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A821 EFFECTIVE DATE : 20090306
JP2006509054 T2	20090408	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20090407
JP2006509054 T2	20090408	LSRE	A524	WRITTEN SUBMISSION OF COPY OF AMENDMENT UNDER SECTION 19 (PCT)	TEXT : JAPANESE INTERMEDIATE CODE: A524 EFFECTIVE DATE : 20090407
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JP2006509054 T2	20110303	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20110302
JP2006509054 T2	20110420	LSAL	A911	TRANSFER OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A911 EFFECTIVE DATE : 20110419
JP2006509054 T2	20110525	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20110524
JP2006509054 T2	20110624	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20110623
JP2006509054 T2	20110914	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20110913
JP2006509054 T2	20120314	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20120313
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JP2006509054 T2	20120915	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20120914
JP2006509054 T2	20121003	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2006509054 T2	20121010	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20121009
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JP2006509054 T2	20121108	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20121101
JP2006509054 T2	20121109	LSGT	+R150	CERTIFICATE OF	TEXT : JAPANESE INTERMEDIATE

				PATENT OR REGISTRATION OF UTILITY MODEL	CODE: R150
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JP5128757 B2	20130123	LSGT	+	granted / extensions (spc, cpc, pte)	
JP5128757 B2	20121106	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP5128757 B2	20151105	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5128757 B2	20151110	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
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US2006134313 AA	20091007	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2010068296 AA	20100318	LSPB	+	published / reissued	
US2010068296 AA	20090930	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROF. DR. JOSEF GUGGENBICHLER, DR. CHRISTOPH CICHO OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:GUGGENBICHLER, JOSEF-PETER; CICHOS, CHRISTOPH; SIGNING DATES FROM 20050410 TO 20050420; REEL/FRAME:023302/0633
US2010068296 AA	20120929	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
WO04024205 A1	20040325	LSPB	+	published / reissued	
WO04024205 A1	20050308	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2006134313 COUNTRY OF REF DOCUMENT : US KIND CODE OF REF DOCUMENT : A1 DESIGNATED STATE(S) :
WO04024205 A1	20050308	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 10527157 COUNTRY OF REF DOCUMENT : US
WO04024205 A1	20050308	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 345/CHENP/2005 COUNTRY OF REF DOCUMENT : IN
WO04024205 A1	20050310	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2004535474 COUNTRY OF REF DOCUMENT : JP
WO04024205 A1	20050330	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 20038233320 COUNTRY OF REF DOCUMENT : CN
WO04024205 A1	20050406	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2003750507 COUNTRY OF REF DOCUMENT : EP
WO04024205 A1	20050608	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2003750507 COUNTRY OF REF DOCUMENT : EP
WO04024205 A1	20060622	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 10527157 COUNTRY OF REF DOCUMENT : US

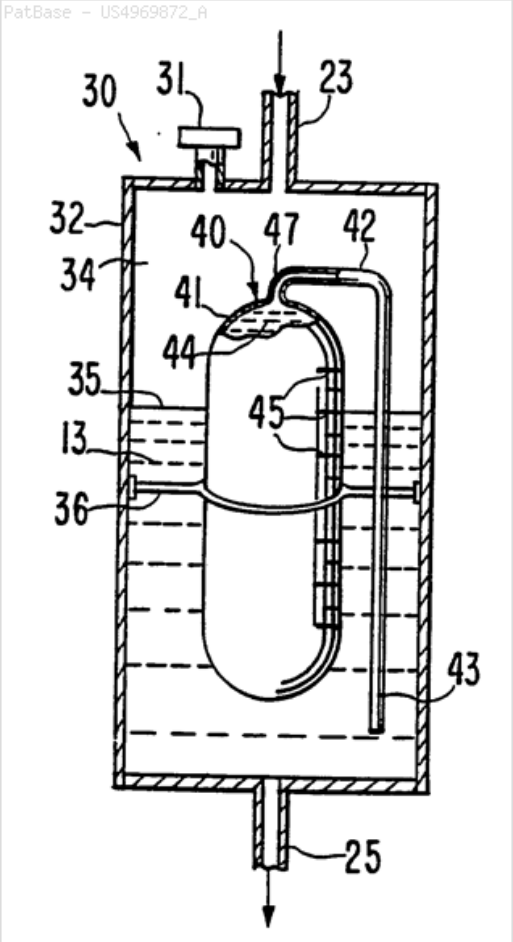
WO04024205 A1	20071114	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2003750507 COUNTRY OF REF DOCUMENT : EP

35) Family number: 3043054 (US4969872A)

Title: Intravenous system for delivering a beneficial agent with delivery rate control via permeable surface area variance

Abstract: A drug formulation chamber for an intravenous administration set is provided. The intravenous administration set includes a container of an IV fluid, a drip chamber, a drug formulation chamber, and an adapter-needle assembly. The drug formulation chamber houses a diffusional or an osmotically driven drug delivery device. The osmotically driven delivery device has a semipermeable, microporous or diffusional wall which surrounds a compartment containing the drug. Drug is delivered through an orifice in the semipermeable/microporous wall or through the diffusional wall itself, into the IV fluid. The device delivers drug into the IV fluid at a rate that is independent of the flow rate of IV fluid through the formulation chamber. The rate of drug delivery is controlled by variably adjusting the surface area of the semipermeable/microporous/diffusional wall that is exposed to the IV fluid flowing through the drug formulation chamber.

Classifications:
International (IPC 8-9): A61M39/00 A61M5/14
A61M5/168 (Advanced/Invention);
A61M39/00 (Advanced/Non-invention);
A61M39/00 A61M5/14 (Core/Invention)
International (IPC 1-7): A61M37/00 A61M39/00 A61M5/14 A61M5/168
CPC: A61M5/1409
European: A61M5/14B2
US: 604/251 604/85 604/892.1



Family:

Publication number	Publication date	Application number	Application date
AT88361 E	19930515	AT19900905134T	19900308
AU199053346 A1	19901009	AU19900053346	19900308
AU629926 B2	19921015	AU19900053346	19900308
CA2011629 AA	19900908	CA19902011629	19900307
DE69001432 D1	19930527	DE19906001432	19900308
DE69001432 T2	19930729	DE19906001432T	19900308
DK0462213 T3	19930517	DK19900905134T	19900308
EP0462213 A1	19911227	EP19900905134	19900308
EP0462213 B1	19930421	EP19900905134	19900308
ES2040117 T3	19931001	ES19900905134T	19900308
GR1000434 B	19920730	GR19900100162	19900308
GR900100162 A	19900731	GR19900100162	19900308
JP4504970 T2	19920903	JP19900505077T	19900308
PT93376 A	19901107	PT19900093376	19900308
US4969872 A	19901113	US19890320732	19890308
WO9010467 A1	19900920	WO1990US01297	19900308

Priority:

US19890320732 19890308 CA19902011629 19900307 EP19900905134 19900308
EP19900905134 19900308 WO1990US01297 19900308 EP19900905134 19900308

Probable Assignee: ALZA CORP

Assignee(s): (std): ALZA CORP

Assignee(s): ALZA CORP PALO ALTO CALIF US ; THEEUWES FELIX ; URQUHART JOHN

Inventor(s): (std): THEEUWES FELIX ; URQUHART JOHN

Inventor(s): URQUHART JOHN PALO ALTO CA 94301 US ; THEEUWES FELIX LOS ALTOS CA 94022 US ; FELIX THEEUWES ; JOHN URQUHART

Agent(s): SHELSTON IP; SHELSTON IP PTY LTD; SMART AND BIGGAR

Designated states: AT AU BE CH DE DK ES FR GB IT JP LI LU NL SE

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
AT88361 E	19930515	LSGT	+	granted / extensions (spc, cpc, pte)	
AT88361 E	19931015	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	
AT88361 E	19981215	LSLE	-REN	CEASED DUE TO NON-PAYMENT OF THE ANNUAL FEE	
AT88361 E	20100308	PEXP		Calculated Patent Term Expiry	
AU199053346 A1	19901009	LSPB	+	published / reissued	
AU629926 B2	19921015	LSGT	+	granted / extensions (spc, cpc, pte)	
AU629926 B2	20100308	PEXP		Calculated Patent Term Expiry	
CA2011629 AA	19900908	LSPB	+	published / reissued	
CA2011629 AA	19980309	LSLE	-FZDE	DEAD	
DE69001432 D1	19940519	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
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DE69001432 T2	19930729	LSGT	+	granted / extensions (spc, cpc, pte)	
DK0462213 T3	19930517	LSGT	+	granted / extensions (spc, cpc, pte)	
DK0462213 T3	20100308	PEXP		Calculated Patent Term Expiry	
EP0462213 A1	19911227	LSPB	+	published / reissued	
EP0462213 A1	19911227	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19910830
EP0462213 A1	19920401	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 19920217
EP0462213 B1	19930421	LSGT	+	granted / extensions (spc, cpc, pte)	
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EP0462213 B1	19940307	LSFE	+EPTA	LU: LAST PAID ANNUAL FEE	REF COUNTRY CODE : EP
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EP0462213 B1	19950131	LSGT	+EAL	SE: EUROPEAN PATENT IN FORCE IN SWEDEN	REF COUNTRY CODE : EP TEXT : 90905134.4
EP0462213 B1	19970213	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 19970213 YEAR OF FEE PAYMENT : 8
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EP0462213 B1	19970225	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 19970225 YEAR OF FEE PAYMENT : 8
EP0462213 B1	19970226	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 19970226 YEAR OF FEE PAYMENT : 8
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EP0462213 B1	19980308	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 19980308
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EP0462213 B1	19980331	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 19980331

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EP0462213 B1	19980331	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR NOTIFICATIONOFLAPSE : THE PATENT HAS BEEN ANNULLED BY A DECISION OF A NATIONAL AUTHORITY LAPSED DATE : 19980331
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EP0462213 B1	19980930	LSLE	-BERE	BE: LAPSED	PARTYTYPE : OWNER REF COUNTRY CODE : EP OWNER : ALZA CORP. EFFECTIVE DATE : 19980331
EP0462213 B1	19981001	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 19981001
EP0462213 B1	19981028	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 19980308
EP0462213 B1	19981113	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP0462213 B1	19981201	LSLE	-NLV4	NL: LAPSED OR ANULLED DUE TO NON-PAYMENT OF THE ANNUAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 19981001
EP0462213 B1	19981201	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 19981201
EP0462213 B1	19981207	LSLE	-EUG	SE: EUROPEAN PATENT HAS LAPSED	REF COUNTRY CODE : EP TEXT : 90905134.4
EP0462213 B1	19981231	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST
EP0462213 B1	20000306	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DK REF LEGAL EVENT CODE : EBP
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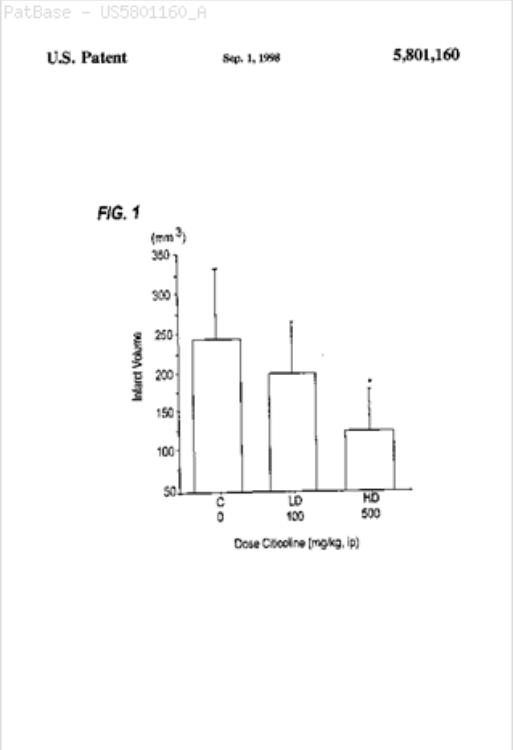
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GR1000434 B	20100308	PEXP		Calculated Patent Term Expiry	
GR900100162 A	19900731	LSPB	+	published / reissued	
JP4504970 T2	19920903	LSPB	+	published / reissued	
PT93376 A	19901107	LSPB	+	published / reissued	
PT93376 A	19960229	LSRV	-FC3A	REFUSAL	EFFECTIVE DATE : 19951124
US4969872 A	19901113	LSGT	+	granted / extensions (spc, cpc, pte)	
US4969872 A	19890308	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ALZA CORPORATION, A CORP. OF DE OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNORS:URQUHART, JOHN; THEEUWES, FELIX; REEL/FRAME:005076/0152 EFFECTIVE DATE : 19890301
US4969872 A	19900912	LSGT	PAT1	Patented Case	
US4969872 A	19940427	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US4969872 A	19981115	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US4969872 A	19990126	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 19981113
US4969872 A	20180129	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US4969872 A	20180129	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US4969872 A	20090308	PEXP		Calculated Patent Term Expiry	
WO9010467 A1	19900920	LSPB	+	published / reissued	
WO9010467 A1	19901004	LSRE	CR1	CORRECTION OF ENTRY IN SECTION I	TEXT : IN PAT.BUL.22/90,UNDER PUBLISHED ADD AND STATEMENT AFTER "WITH AMENDED CLAIMS"
WO9010467 A1	19910830	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1990905134 COUNTRY OF REF DOCUMENT : EP
WO9010467 A1	19911227	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1990905134 COUNTRY OF REF DOCUMENT : EP
WO9010467 A1	19930421	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1990905134 COUNTRY OF REF DOCUMENT : EP

36) Family number: 11528054 (US5801160A)

Title: Method of protecting brain tissue from cerebral infarction subsequent to ischemia

Abstract: Methods and pharmaceutical compositions for reducing the extent of infarction, particularly cerebral infarction subsequent to cerebral ischemia.

Classifications:
International (IPC 8-9): A61K31/00 A61K31/505 A61K31/519 A61K31/529 A61K31/60 A61K31/612 A61K31/616 A61K31/66 A61K31/70 A61K31/7042 A61K31/7052 A61K31/706 A61K31/7064 A61K31/7068 A61K38/02 A61K38/16 A61K38/43 A61K38/48 A61K38/49 A61K45/00 A61P25/00 A61P39/00 A61P43/00 A61P7/06 A61P9/10 C07H19/00 C07H19/10 (Advanced/Invention);
A61K31/519 A61K31/529 A61K31/66 A61K31/7042 A61K38/16 A61P25/00 A61P39/00 C07H19/10 (Advanced/Non-invention);
A61K31/00 A61K31/505 A61K31/519 A61K31/529 A61K31/60 A61K31/66 A61K31/70 A61K31/7042 A61K38/02 A61K38/16 A61K38/43 A61K45/00 A61P25/00 A61P39/00 A61P43/00 A61P7/00 A61P9/00 C07H19/00 (Core/Invention);
C07H19/00 (Core/Non-invention);
A61K C07H (Subclass/Invention)
International (IPC 1-7): A61K031/7068 A61K31/00 A61K31/5 A61K31/505 A61K31/60 A61K31/616 A61K31/66 A61K31/70 A61K31/7068 A61P9/10
CPC: A61K31/7068
European: A61K31/7068
US: 424/94.64 514/161 514/49



Family:

Publication number	Publication date	Application number	Application date
AT296103 E	20050615	AT19960909616T	19960306
AU199653047 A1	19960923	AU19960053047	19960306
AU200016404 A1	20000420	AU20000016404	20000211
AU200016404 A5	20000420	AU20000016404D	20000211
AU2002300446 AA	20030213	AU20020300446	20020806
AU2002300446 BB	20041223	AU20020300446	20020806
AU2005201251 AA	20050414	AU20050201251	20050323
AU2005201251 BB	20060427	AU20050201251	20050323
BRPI9607206 A	19971111	BR1996PI07206	19960306
CA2213000 AA	19970904	CA19962213000	19960306
CN1126546 C	20031105	CN19961093176	19960306
CN1181015 A	19980506	CN19961093176	19960306
CN1488353 A	20040414	CN20021045801	19960306
DE69634773 D1	20050630	DE19966034773	19960306
DE69634773 T2	20060504	DE19966034773T	19960306
EP0813416 A1	19971229	EP19960909616	19960306
EP0813416 A4	20001115	EP19960909616	19960306
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ES2244968 T3	20051216	ES19960909616T	19960306
IL117420 A0	19970814	IL19960117420	19960305
IL117420 A1	20070211	IL19960117420	19960305
IL147477 A0	20020814	IL20020147477	20020103
IL147477 A1	20100217	IL19960147477	19960305
IN01290KO2007 A	20090410	IN2007KO01290	20070914
IN182555 A	19990501	IN1996MA00347	19960306
JP11511732 T2	19991012	JP19960527057T	19960306
JP2006342184 A2	20061221	JP20060243503	20060908
KR19980702724 A	19980805	KR19970706131	19960306
MX9706808 A1	19980830	MX19970006808	19970905
NO313538 B1	20021021	NO19970004076	19970904
NO974076 A	19971028	NO19970004076	19970904
NO974076 A0	19970904	NO19970004076	19970904
NO974076 L	19971028	NO19970004076	19970904
NZ337305 A	20010427	NZ19960337305	19960306
PL185124 B1	20030228	PL19960322061	19960306

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PT813416 T	20051031	PT19960909616T	19960306
US5801160 A	19980901	US19970820244	19970318
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US5872108 A	19990216	US19960603102	19960220
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WO9627380 A1	19960912	WO1996US03159	19960306
ZA9601791 A	19960910	ZA19960001791	19960305

Priority:

AU20000016404 19950306 US19950399262 19950306 US19960310296P 19960220
US19960603102 19960220 US19960944896P 19960301 US19960609448 19960301
IL19960117420 19960305 AU19960053047 19960306 NZ19960305114 19960306
JP19960527057 19960306 WO1996US03159 19960306 US19970820244 19970318
AU20000016404 20000211 IL20020147477 20020103 AU20020300446 20020806
AU20050201251 20050323

Probable Assignee: INTERNEURON PHARMA

Assignee(s): (std): FERRER INT ; INTERNEURON PHARMA ; INTERNEURON PHARMACEUTICALS INC ; INDEVUS PHARMACEUTICALS INC ; FERRER INTERNATL SA ; FERRER INTERNAC S A ; FERRER INTERNAC SA ; FISHER MARC ; INTERNEURON PHARMACEUTIC CO ; INTERNEURON PHARMACEUTICAL INC ; INTERNEURON PHARMACEUTICALS ; JR BOBBY W SANDAGE ; LOCKE KENNETH W

Assignee(s): TAKEDA CHEMICAL IND ; SANDAGE BOBBY WINSTON JR ; KENNETH W LOCKE ; MARC FISHER ; INTERNEURON PHARMWCEUTICALS INC ; FERRER INTERNACIONAL S A ; FERRER INTERNACIONAL SA ; FERRER INT SA ; BOBBY W SANDAGE JR ; ENDO PHARMACEUTICALS SOLUTIONS INC

Inventor(s): (std): BOBBY WINSTON SANDAGE ; JR BOBBY W SANDAGE ; SANDAGE BOBBY W JR ; WINSTON SANDAGE BOBBY ; SANDAGE B W ; LOCKE KENNETH WALTER ; LOCKE KENNETH W ; LOCKE K W ; FISHER M ; SANDAGE WINSTON ; SANDAGE ROBBY WINSTON ; SANDAGE BOBBY WINSTON ; LOCKE KENNETH ; FISHER MARC ; MARC FISHER ; LOCKE W ; LOCKE LAWRENCE KENNETH ; FISCHER MARC ; SANDAGE JR BOBBY W ; SANDAGE BOBBY W ; MARC FISCHER ; M FISHER ; KW LOCKE ; KENNETH W LOCKE ; K W LOCKE ; BW SANDAGE ; BOBBY W SANDAGE JR ; B W SANDAGE ; SANDAGE BOBBY WINSTONE

Inventor(s): BOBBY WINSTONE SANDAGE ; SANDAGE BOBBY WINSTON JR ; LAWRENCE KENNETH LOCKE ; KENNETH LOCKE ; ROBBY WINSTON SANDAGE

Agent(s): GRIFFITH HACK; SHELSTON IP PTY LTD; SHELSTON IP; ROBIC; DR CYNTHIA WEBB; DR SHLOMO COHEN AND CO; DR MARK FRIEDMAN LTD

Designated states: AL AM AT AU AZ BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CZ DE DK EE ES FI FR GA GB GE GN GR HU IE IS IT JP KE KG KP KR KZ LI LK LR LS LT LU LV MC MD MG MK ML MN MW MX NL NO NZ PL PT RO RU SD SE SG SI SK SZ TJ TM TR TT UA UG UZ VN

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT296103 E	20050615	LSGT	+	granted / extensions (spc, cpc, pte)	
AT296103 E	20051115	LSLE	-RER	CEASED AS TO PARAGRAPH 5 LIT. 3 LAW INTRODUCING PATENT TREATIES	
AT296103 E	20160306	PEXP		Calculated Patent Term Expiry	
AU199653047 A1	19960923	LSPB	+	published / reissued	
AU199653047 A1	20000316	LSLE	-MK5	APPLICATION LAPSED SECTION 142(2)(E) - PATENT REQUEST AND COMPL. SPECIFICATION NOT ACCEPTED	
AU200016404 A1	20000420	LSPB	+	published / reissued	
AU200016404 A5	20020912	LSLE	-MK5	APPLICATION LAPSED SECTION 142(2)(E) - PATENT REQUEST AND COMPL. SPECIFICATION NOT ACCEPTED	
AU2002300446 AA	20030213	LSPB	+	published / reissued	
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AU2002300446 BB	20060608	LSAS	PC	ASSIGNMENT REGISTERED	PARTYTYPE : OWNER OWNER : FERRER INTERNATIONAL, S.A. OLDPARTY : FORMER OWNER WAS: INTERNEURON PHARMACEUTICALS, INC.
AU2002300446 BB	20151001	LSLE	-MK14	PATENT CEASED SECTION 143(A) (ANNUAL FEES NOT PAID) OR EXPIRED	
AU2002300446 BB	20220806	PEXP		Calculated Patent Term	

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AU2005201251 BB	20060427	LSGT	+	granted / extensions (spc, cpc, pte)	
AU2005201251 BB	20060824	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU2005201251 BB	20160324	LSLE	-MK14	PATENT CEASED SECTION 143(A) (ANNUAL FEES NOT PAID) OR EXPIRED	
AU2005201251 BB	20250323	PEXP		Calculated Patent Term Expiry	
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BRPI9607206 A	20070130	LSES	B07A	TECHNICAL EXAMINATION (OPINION): PUBLICATION OF TECHNICAL EXAMINATION (OPINION)	
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BRPI9607206 A	20081125	LSAL	B12B	APPEAL: APPEAL AGAINST REFUSAL	
CA2213000 AA	19970904	LSPB	+	published / reissued	
CA2213000 AA	20030224	LSES	+EEER	EXAMINATION REQUEST	
CA2213000 AA	20080117	LSLE	-FZDE	DEAD	
CN1126546 C	20031105	LSGT	+	granted / extensions (spc, cpc, pte)	
CN1126546 C	20031105	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN1126546 C	20101222	LSAS	ASS	SUCCESSION OR ASSIGNMENT OF PATENT RIGHT	PARTYTYPE : OWNER OWNER : FERRER INTERNAC S. A. OLDPARTY : FORMER OWNER: YINGDEWUSI PHARMACEUTICAL CO., LTD. EFFECTIVE DATE : 20101112
CN1126546 C	20101222	LSAS	C41	TRANSFER OF PATENT APPLICATION OR PATENT RIGHT OR UTILITY MODEL	
CN1126546 C	20101222	LSAS	C56	CHANGE IN THE NAME OR ADDRESS OF THE PATENTEE	
CN1126546 C	20101222	LSAS	C56	CHANGE IN THE NAME OR ADDRESS OF THE PATENTEE	PARTYTYPE : OWNER OWNER : YINGDEWUSI PHARMACEUTICAL CO., LTD. OLDPARTY : FORMER NAME: INTERNEURON PHARMACEUTIC CO.
CN1126546 C	20101222	LSRE	COR	CHANGE OF BIBLIOGRAPHIC DATA	TEXT : CORRECT: ADDRESS; FROM: MASSACHUSETTS, USA TO: BARCELONA, SPAIN
CN1126546 C	20160427	LSWD	-EXPY	TERMINATION OF PATENT RIGHT OR UTILITY MODEL	

CN1126546 C	20160306	PEXP		Calculated Patent Term Expiry	
CN1181015 A	19980506	LSPB	+	published / reissued	
CN1181015 A	19980506	LSPB	+C06	PUBLICATION	
CN1488353 A	20040414	LSPB	+	published / reissued	
CN1488353 A	20040414	LSPB	+C06	PUBLICATION	
CN1488353 A	20081126	LSRV	-C12	REJECTION OF A PATENT APPLICATION AFTER ITS PUBLICATION	
DE69634773 D1	20060622	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
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DE69634773 D1	20160306	LSLE	-R071	EXPIRY OF RIGHT	
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EP0813416 A4	20030604	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20030423
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ES2244968 T3	20160306	PEXP		Calculated Patent Term Expiry	
IL117420 A1	20070211	LSPB	+	published / reissued	
IL117420 A1	20070724	LSGT	+FF	PATENT GRANTED	
IL117420 A1	20070920	LSFE	+KB	PATENT RENEWED	
IL117420 A1	20100630	LSFE	+KB	PATENT RENEWED	
IL117420 A1	20140227	LSFE	+KB	PATENT RENEWED	
IL117420 A1	20161031	LSLE	-EXP	PATENT EXPIRED	
IL147477 A1	20100217	LSPB	+	published / reissued	
IL147477 A1	20101130	LSGT	+FF	PATENT GRANTED	
IL147477 A1	20161031	LSLE	-EXP	PATENT EXPIRED	
IN01290KO2007 A	20090410	LSPB	+	published / reissued	
IN182555 A	19990501	LSPB	+	published / reissued	
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JP11511732 T2	20060404	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20060404
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JP11511732 T2	20090401	LSAL	A911	TRANSFER OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A911 EFFECTIVE DATE : 20090402
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KR19980702724 A	20000613	LSRV	-E601	DECISION TO REFUSE APPLICATION	
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PT813416 T	20160306	PEXP		Calculated Patent Term Expiry	
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US5801160 A	20020110	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INTERNEURON PHARMACEUTICALS, INC., MASSACHUSETTS OLDPARTY : TERMINATION OF SECURITY AGREEMENT; ASSIGNOR:TAKEDA CHEMICAL INDUSTRIES, LTD.; REEL/FRAME:012435/0518 EFFECTIVE DATE : 20011220

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US5801160 A	20020628	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INDEVUS PHARMACEUTICALS, INC., MASSACHUSETTS OLDPARTY : CHANGE OF NAME; ASSIGNOR:INTERNEURON PHARMACEUTICALS, INC.; REEL/FRAME:013045/0293 EFFECTIVE DATE : 20011217
US5801160 A	20021210	LSRE	CC	CERTIFICATE OF CORRECTION	
US5801160 A	20051213	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5801160 A	20080429	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : FERRER INTERNACIONAL SA, SPAIN OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:INDEVUS PHARMACEUTICALS; REEL/FRAME:020866/0207 EFFECTIVE DATE : 20080425
US5801160 A	20100901	LSRE	+REIN	REINSTATEMENT AFTER MAINTENANCE FEE PAYMENT CONFIRMED	
US5801160 A	20101019	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20100901
US5801160 A	20101029	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5801160 A	20101213	LSRE	+PRDP	PATENT REINSTATED DUE TO THE ACCEPTANCE OF A LATE MAINTENANCE FEE	EFFECTIVE DATE : 20101217
US5801160 A	20101217	LSGT	PAT1	Patented Case	
US5801160 A	20101217	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5801160 A	20170318	PEXP		Calculated Patent Term Expiry	
US5827832 A	19981027	LSGT	+	granted / extensions (spc, cpc, pte)	
US5827832 A	19960531	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INTERNEURON PHARMWCEUTICALS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:SANDAGE, BOBBY W., JR.; FISHER, MARCH; LOCKE, KENNETH W.; REEL/FRAME:007970/0676 EFFECTIVE DATE : 19960522
US5827832 A	19981022	LSGT	PAT1	Patented Case	
US5827832 A	19981022	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5827832 A	19991220	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : TAKEDA CHEMICAL INDUSTRIES, LTD., JAPAN OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:INTERNEURON PHARMACEUTICALS, INC.; REEL/FRAME:010461/0573 EFFECTIVE DATE : 19991202
US5827832 A	20020110	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INTERNEURON PHARMACEUTICALS, INC., MASSACHUSETTS OLDPARTY : TERMINATION OF SECURITY AGREEMENT; ASSIGNOR:TAKEDA CHEMICAL INDUSTRIES, LTD.; REEL/FRAME:012435/0518 EFFECTIVE DATE : 20011220
US5827832 A	20020426	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4

US5827832 A	20020628	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INDEVUS PHARMACEUTICALS, INC., MASSACHUSETTS OLDPARTY : CHANGE OF NAME; ASSIGNOR:INTERNEURON PHARMACEUTICALS, INC.; REEL/FRAME:013045/0293 EFFECTIVE DATE : 20011217
US5827832 A	20060426	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5827832 A	20080429	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : FERRER INTERNACIONAL SA, SPAIN OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:INDEVUS PHARMACEUTICALS; REEL/FRAME:020866/0207 EFFECTIVE DATE : 20080425
US5827832 A	20100421	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5827832 A	20160301	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
US5872108 A	19990216	LSGT	+	granted / extensions (spc, cpc, pte)	
US5872108 A	19960503	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INTERNEURON PHARMACEUTICALS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:SANDAGE, BOBBY W., JR.; FISHER, MARC; LOCKE, KENNETH WALTER; REEL/FRAME:007914/0648; SIGNING DATES FROM 19960423 TO 19960425
US5872108 A	19990115	LSGT	PAT1	Patented Case	
US5872108 A	19990115	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5872108 A	19991220	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : TAKEDA CHEMICAL INDUSTRIES, LTD., JAPAN OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:INTERNEURON PHARMACEUTICALS, INC.; REEL/FRAME:010461/0573 EFFECTIVE DATE : 19991202
US5872108 A	20020110	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INTERNEURON PHARMACEUTICALS, INC., MASSACHUSETTS OLDPARTY : TERMINATION OF SECURITY AGREEMENT; ASSIGNOR:TAKEDA CHEMICAL INDUSTRIES, LTD.; REEL/FRAME:012435/0518 EFFECTIVE DATE : 20011220
US5872108 A	20020628	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INDEVUS PHARMACEUTICALS, INC., MASSACHUSETTS OLDPARTY : CHANGE OF NAME; ASSIGNOR:INTERNEURON PHARMACEUTICALS, INC.; REEL/FRAME:013045/0293 EFFECTIVE DATE : 20011217
US5872108 A	20020816	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5872108 A	20060811	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5872108 A	20080429	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : FERRER INTERNACIONAL SA, SPAIN OLDPARTY : ASSIGNMENT OF

					ASSIGNORS INTEREST; ASSIGNOR:INDEVUS PHARMACEUTICALS; REEL/FRAME:020866/0207 EFFECTIVE DATE : 20080425
US5872108 A	20101019	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5872108 A	20160220	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
VN3157 A1	20021225	LSPB	+	published / reissued	
WO9627380 A1	19960912	LSPB	+	published / reissued	
WO9627380 A1	19960306	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 96193176.0 COUNTRY OF REF DOCUMENT : CN
WO9627380 A1	19970828	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 305114 COUNTRY OF REF DOCUMENT : NZ
WO9627380 A1	19970830	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1019970706131 COUNTRY OF REF DOCUMENT : KR
WO9627380 A1	19970904	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2213000 COUNTRY OF REF DOCUMENT : CA
WO9627380 A1	19970904	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2213000 COUNTRY OF REF DOCUMENT : CA KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO9627380 A1	19970905	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 1996 527057 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO9627380 A1	19971006	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1996909616 COUNTRY OF REF DOCUMENT : EP
WO9627380 A1	19971006	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1199700903 COUNTRY OF REF DOCUMENT : VN
WO9627380 A1	19971229	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1996909616 COUNTRY OF REF DOCUMENT : EP
WO9627380 A1	19980115	LSWD	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : 8642
WO9627380 A1	19980805	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1019970706131 COUNTRY OF REF DOCUMENT : KR
WO9627380 A1	20000613	LSRV	-WWR	WIPO INFORMATION: REFUSED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1019970706131 COUNTRY OF REF DOCUMENT : KR
WO9627380 A1	20050525	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1996909616 COUNTRY OF REF DOCUMENT : EP
ZA9601791 A	19960910	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA9601791 A	20160304	PEXP		Calculated Patent Term	

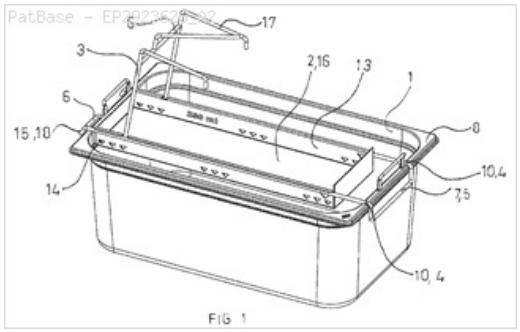
Expiry

37) Family number: 60450054 (EP2923626B1)

Title: DOSING DEVICE FOR DETERGENTS DISPOSITIF DE DOSAGE POUR UN PRODUIT DE N

Abstract: Source: EP2923626A3 [DE] Die vorliegende Erfindung betrifft eine Dosiervorrichtung fuer Reinigungsmittel aufweisend ein Behaeltnis (1) fuer Reinigungsfluessigkeit und ein an diesem loesbar angeordnetes Dosiervolumen (2), die um eine konstruktiv einfache und den Anforderungen der gewerblichen Reinraumreinigung genuegende Vorrichtung anzugeben, die Merkmale aufweist, dass das Dosiervolumen (2) fuer den Eingriff durch einen Mophalter dimensionierte Eingreifmittel (3) aufweist und es um eine zu den Eingreifmitteln (3) beabstandete Schwenkachse (4) aus einer horizontalen Ausgangslage heraus schwenkbar ausgebildet ist. Sie betrifft ebenfalls ein Verfahren zum Dosieren von Reinigungsmittel auf auf Mophalter aufgezogene Moptuecher unter Verwendung eines Reinigungsfluessigkeit enthaltenden Behaeltnisses und einem an diesem Behaeltnis angeordneten, in Ausgangslage horizontal orientierten Dosiervolumen mit einer Fuellbegrenzung und mit einem Eingriff fuer einen Mophalter.

Classifications:
International (IPC 8-9): A47L13/50 A47L13/58 (Advanced/Invention)
CPC: A47L13/50



Family:

Publication number	Publication date	Application number	Application date
DE102014104079 A1	20151001	DE201410104079	20140325
DE502015000217 D1	20161124	DE201550000217T	20150114
EP2923626 A2	20150930	EP20150151124	20150114
EP2923626 A3	20151021	EP20150151124	20150114
EP2923626 B1	20161012	EP20150151124	20150114

Priority:

DE201410104079 20140325 EP20150151124 20150114

Probable Assignee: PFENNIG REINIGUNGSTECHNIK GMBH

Assignee(s): (std): PFENNIG REINIGUNGSTECHNIK GMBH

Inventor(s): (std): PFENNIG DIETMAR

Agent(s): VKK PATENTANWAELTE; HOPPE LARS

Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
DE102014104079 A1	20151001	LSPB	+	published / reissued	
DE102014104079 A1	20181002	LSDW	-R119	APPLICATION DEEMED WITHDRAWN, OR IP RIGHT LAPSED, DUE TO NON-PAYMENT OF RENEWAL FEE	
EP2923626 A2	20150930	LSPB	+	published / reissued	
EP2923626 A2	20150930	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20150114
EP2923626 A3	20151118	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20151015
EP2923626 A3	20160803	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20160706
EP2923626 B1	20161012	LSGT	+	granted / extensions (spc, cpc, pte)	
EP2923626 B1	20161012	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D TEXT : NOT ENGLISH
EP2923626 B1	20161014	LSNP	REG	REFERENCE TO A	REF COUNTRY CODE : CH

				NATIONAL CODE	REF LEGAL EVENT CODE : EP
EP2923626 B1	20161015	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 835686 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20161015
EP2923626 B1	20161102	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D TEXT : LANGUAGE OF EP DOCUMENT: GERMAN
EP2923626 B1	20161124	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 502015000217 COUNTRY OF REF DOCUMENT : DE
EP2923626 B1	20170210	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : LT REF LEGAL EVENT CODE : MG4D
EP2923626 B1	20170228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LV NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20161012
EP2923626 B1	20170428	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170113
EP2923626 B1	20170428	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NO NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170112
EP2923626 B1	20170428	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20161012
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EP2923626 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170327 YEAR OF FEE PAYMENT : 3
EP2923626 B1	20170531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20161012
EP2923626 B1	20170531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT

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EP2923626 B1	20170531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IS NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170212
EP2923626 B1	20170531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20161012
EP2923626 B1	20170531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20161012
EP2923626 B1	20170531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RS NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20161012
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EP2923626 B1	20170531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20161012
EP2923626 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20170124 YEAR OF FEE PAYMENT : 3
EP2923626 B1	20170630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20170131 YEAR OF FEE PAYMENT : 3
EP2923626 B1	20170713	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 502015000217 COUNTRY OF REF DOCUMENT : DE
EP2923626 B1	20170731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20161012
EP2923626 B1	20170731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20161012

EP2923626 B1	20170731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20161012
EP2923626 B1	20170731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20161012
EP2923626 B1	20170731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20161012
EP2923626 B1	20170831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SM NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20161012
EP2923626 B1	20170831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170112
EP2923626 B1	20170920	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20170713
EP2923626 B1	20170929	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20161012
EP2923626 B1	20171027	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20170929
EP2923626 B1	20171031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20170131
EP2923626 B1	20171101	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP2923626 B1	20171130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20170114
EP2923626 B1	20171130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20161012
EP2923626 B1	20180228	LSLE	-PG25	LAPSED IN A CONTRACTING	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONOFLAPSE : LAPSE

				STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20170114
EP2923626 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20180125 YEAR OF FEE PAYMENT : 4
EP2923626 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180322 YEAR OF FEE PAYMENT : 4
EP2923626 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20180124 YEAR OF FEE PAYMENT : 4
EP2923626 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20180131 YEAR OF FEE PAYMENT : 4
EP2923626 B1	20180928	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20161012
EP2923626 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20190124 YEAR OF FEE PAYMENT : 5
EP2923626 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20190121 YEAR OF FEE PAYMENT : 5
EP2923626 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20190124 YEAR OF FEE PAYMENT : 5
EP2923626 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20190124 YEAR OF FEE PAYMENT : 5
EP2923626 B1	20190531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20190122 YEAR OF FEE PAYMENT : 5
EP2923626 B1	20190628	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT; INVALID AB INITIO LAPSED DATE : 20150114
EP2923626 B1	20350114	PEXP		Calculated Patent Term Expiry	

38) Family number: 31414056 (US2007059766A)

Title: MIXTURE OF BINDING PROTEINS

Abstract: Described are methods for producing libraries of cells expressing at least two separate single polypeptide chain binding proteins, in which the binding proteins have different target epitopes. Such libraries are made by integration of the nucleic acid sequences encoding the polypeptide chains into the genome of the host cell, and selecting for cells that have successfully integrated these nucleic acids. The selected cells are preferably subjected to a cloning step. Mixtures of binding proteins are produced without having to individually produce each of the components of the mixture. A library of cells wherein essentially each cell encodes at least two single polypeptide chain binding proteins having different target epitopes is also herewith provided, as well as methods for producing a composition comprising at least two separate single polypeptide chain binding proteins having different target epitopes.

Classifications:

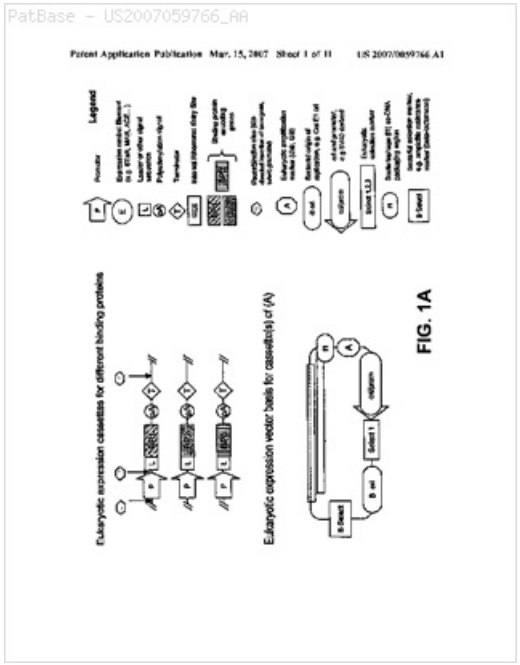
International (IPC 8-9): A01K67/027 C07K1/00 C07K14/00 C07K16/00 C07K16/10 C07K16/20 C07K16/40 C12N1/15 C12N1/19 C12N1/21 C12N15/09 C12N15/10 C12N15/63 C12N15/80 C12N15/81 C12N15/85 C12N5/10 C12N9/14 C12P21/02 C12P21/08 C12Q1/00 C12Q1/04 C12Q1/37 C40B30/00 C40B30/04 C40B30/06 C40B40/02 C40B40/06 C40B50/06 G01N27/62 G01N30/72 G01N30/88 G01N33/00 G01N33/68 (Advanced/Invention);
C07H21/04 C07K19/00 (Advanced/Non-invention);
A01K67/027 C07K1/00 C07K14/00 C12N9/14 C12Q1/00 G01N33/00 (Core/Invention)

International (IPC 1-7): C07K16/00 C12N15/00 C12N5/10 C12P21/02 C12P21/08 G01N33/00 G01N33/68

CPC: C07K14/47 G01N33/6803 G01N33/6806 G01N2333/726 G01N2800/52 C12N15/1086 C07K16/10 C07K16/20 C07K16/40 C07K2317/22 C07K2317/569 C07K2318/20 C12N15/1082

European: C07K14/47 C12N15/10C14 C12N15/10C15 G01N33/68A G01N33/68A2 S01N333/72B S01N800/52

US: 435/195 435/195S 435/325 435/325S 435/4 435/455 435/455S 435/471 435/471S 435/4P 435/7.1 435/7.100 435/7.100P 436/86 436/86P 436/86S 506/13 506/14 506/14S 506/23 506/26 506/9 506/9P 530/345 530/345S 530/350 530/350S 800/14 800/14S



Family:

Publication number	Publication date	Application number	Application date
AU2005205412 AA	20050728	AU20050205412	20050119
AU2005205412 BB	20110811	AU20050205412	20050119
CA2529863 AA	20051216	CA20042529863	20040617
CA2554054 AA	20060719	CA20052554054	20050119
CA2554054 C	20130604	CA20052554054	20050119
DK1737971 T3	20171113	DK20050704566T	20050119
EP1634083 A2	20060315	EP20040741829	20040617
EP1737971 A2	20070103	EP20050704566	20050119
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ES2646560 T3	20171214	ES20050704566T	20050119
JP2007520218 T2	20070726	JP20060550975T	20050119
JP2007527503 T2	20070927	JP20060516163T	20040617
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JP5685274 B2	20150318	JP20130004215	20130115
JP5912211 B2	20160427	JP20060550975T	20050119
NZ548828 A	20090731	NZ20050548828	20050119
US2007059766 AA	20070315	US20060490545	20060720
US2007254371 AA	20071101	US20050305737	20051216
US2010021881 AA	20100128	US20090459278	20090629
US2012058907 AA	20120308	US20110200972	20111005
US8268756 BB	20120918	US20060490545	20060720
US9012371 BB	20150421	US20110200972	20111005
WO04111636 A2	20041223	WO2004EP51158	20040617
WO04111636 A3	20050331	WO2004EP51158	20040617
WO05068622 A2	20050728	WO2005NL00036	20050119
WO05068622 A3	20060302	WO2005NL00036	20050119

Priority:

EP20030101775 20030617
EP20040741829 20040617
JP20060550975 20050119
US20050305737 20051216
US20110200972 20111005
US20030479061P 20030617
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EP20040075170 20040120
EP20050704566 20050119
WO2005NL00036 20050119
US20090459278 20090629

Probable Assignee: MERUS NV

Assignee(s): (std): HOOGENBOOM HENDRICUS RENERUS J ; HOOGENBOOM HENDRICUS RENERUS JACOBUS MATTHEUS ; KAS

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Inventor(s):	HOOGENBOOM HENDRICUS RENERUS JM ; HOOGENBOOM HENDRICUS RENERUS J M ; HOOGENBOOM HENDRICUS RENERUS ; VANDEKERCKHOVE JOEEL
Agent(s):	FPA PATENT ATTORNEYS PTY LTD; FREEHILLS PATENT AND TRADE MARK ATTORNEYS; FREEHILLS PATENT ATTORNEYS; HERBERT SMITH FREEHILLS; FETHERSTONHAUGH AND CO; BORDEN LADNER GERVAIS LLP; VO; SHIMIZU HATSUSHI; KAWAMOTO KAZUYA; OSAKABE SUGURU; TRASK BRITT; TRASKBRITT PC; TRASKBRITT
Designated states:	AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AU2005205412 AA	20050728	LSPB	+	published / reissued	
AU2005205412 BB	20110811	LSGT	+	granted / extensions (spc, cpc, pte)	
AU2005205412 BB	20111208	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU2005205412 BB	20250119	PEXP		Calculated Patent Term Expiry	
CA2529863 AA	20051216	LSPB	+	published / reissued	
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CA2554054 AA	20060719	LSPB	+	published / reissued	
CA2554054 AA	20080626	LSES	+EEER	EXAMINATION REQUEST	
CA2554054 C	20130604	LSGT	+	granted / extensions (spc, cpc, pte)	
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DK1737971 T3	20171113	LSGT	+	granted / extensions (spc, cpc, pte)	
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EP1634083 A2	20061025	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : PEAKADILLY N.V.
EP1634083 A2	20070117	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : PRONOTA NV
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EP1737971 A2	20070103	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20061103
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EP1737971 A2	20160706	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : MERUS N.V.
EP1737971 A2	20170208	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : MERUS N.V.
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EP1737971 B1	20170831	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
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EP1737971 B1	20250119	PEXP		Calculated Patent Term Expiry	
ES2646560 T3	20171214	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2646560 T3	20250119	PEXP		Calculated Patent Term Expiry	
JP2007520218 T2	20070726	LSPB	+	published / reissued	
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JP2007520218 T2	20111108	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20111107

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JP2007520218 T2	20120913	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20120912
JP2007520218 T2	20130116	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20130115
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JP2007520218 T2	20130321	LSAL	A911	TRANSFER OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A911 EFFECTIVE DATE : 20130319
JP2007520218 T2	20130422	LSAL	-A912	REMOVAL OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A912 EFFECTIVE DATE : 20130419
JP2007520218 T2	20150204	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20150204
JP2007520218 T2	20151026	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20151026
JP2007520218 T2	20160118	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20160118
JP2007520218 T2	20160407	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20160401
JP2007520218 T2	20160408	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 5912211 COUNTRY OF REF DOCUMENT : JP
JP2007527503 T2	20070927	LSPB	+	published / reissued	
JP2007527503 T2	20100310	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20100309
JP2007527503 T2	20101104	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20101102
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JP2013143939 A2	20140204	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20140203
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JP2013143939 A2	20150123	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 5685274 COUNTRY OF REF DOCUMENT : JP
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JP5685274 B2	20150120	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP5685274 B2	20150123	LSGT	+R150	特許証 (Patent certificate)	
JP5685274 B2	20160825	LSAS	S533	WRITTEN REQUEST FOR REGISTRATION OF CHANGE OF NAME	TEXT : JAPANESE INTERMEDIATE CODE: R313533
JP5685274 B2	20160902	LSAS	R350	WRITTEN NOTIFICATION OF REGISTRATION OF TRANSFER	TEXT : JAPANESE INTERMEDIATE CODE: R350
JP5685274 B2	20170130	LSAS	R350	WRITTEN NOTIFICATION OF REGISTRATION OF TRANSFER	TEXT : JAPANESE INTERMEDIATE CODE: R350
JP5685274 B2	20180118	LSFE	R20	特許料納付書 (Patent fee payment form)	
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JP5912211 B2	20160331	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP5912211 B2	20160405	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP5912211 B2	20160408	LSGT	+R150	特許証 (Patent certificate)	
JP5912211 B2	20160825	LSAS	S533	WRITTEN REQUEST FOR REGISTRATION OF CHANGE OF NAME	TEXT : JAPANESE INTERMEDIATE CODE: R313533
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NZ548828 A	20100326	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	
NZ548828 A	20120224	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	
NZ548828 A	20141224	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	TEXT : PATENT RENEWED FOR 1 YEAR UNTIL 19 JAN 2016 BY DENNEMEYER + CO EFFECTIVE DATE : 20141219
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US2007059766 AA	20120829	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2007254371 AA	20071101	LSPB	+	published / reissued	
US2007254371 AA	20060418	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : VLAAMS INTERUNIVERSITAIR INSTITUUT VOOR BIOTECHNOL OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:KAS, KOEN; VANDEKERCKHOVE, JOEL; KROLS, LUC; REEL/FRAME:017792/0218 EFFECTIVE DATE : 20060315
US2007254371 AA	20060726	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : VLAAMS INTERUNIVERSITAIR INSTITUUT VOOR BIOTECHNOL OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:KAS, KOEN; VANDEKERCKHOVE, JOEL; KROLS, LUC; REEL/FRAME:017999/0642 EFFECTIVE DATE : 20060315
US2007254371 AA	20060726	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : UNIVERSITEIT GENT, BELGIUM OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:KAS, KOEN; VANDEKERCKHOVE, JOEL; KROLS, LUC; REEL/FRAME:017999/0642 EFFECTIVE DATE : 20060315
US2007254371 AA	20060905	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PEAKADILLY N.V., BELGIUM OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:VLAAMS INTERUNIVERSITAIR INSTITUUT VOOR BIOTECHNOLOGIE VZW; UNIVERSITEIT GENT; REEL/FRAME:018202/0561; SIGNING DATES FROM 20060722 TO

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US2010021881 AA	20100128	LSPB	+	published / reissued	
US2010021881 AA	20100629	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2012058907 AA	20120308	LSPB	+	published / reissued	
US2012058907 AA	20150320	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MERUS B.V., NETHERLANDS OLDPARTY : CHANGE OF ADDRESS; ASSIGNOR:MERUS B.V.; REEL/FRAME:035236/0714 EFFECTIVE DATE : 20150320
US2012058907 AA	20150401	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US8268756 BB	20120918	LSGT	+	granted / extensions (spc, cpc, pte)	
US8268756 BB	20061107	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MERUS B.V., NETHERLANDS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:LOGTENBERG, TON; HOOGENBOOM, HENDRICUS R. J. M.; REEL/FRAME:018503/0333 EFFECTIVE DATE : 20060803
US8268756 BB	20120829	LSGT	PAT1	Patented Case	
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US8268756 BB	20170210	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MERUS N.V., NETHERLANDS OLDPARTY : CHANGE OF ADDRESS; ASSIGNOR:MERUS N.V.; REEL/FRAME:041675/0842 EFFECTIVE DATE : 20170210
US8268756 BB	20170404	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MERUS N.V., NETHERLANDS OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE ASSIGNEE ADDRESS PREVIOUSLY RECORDED AT REEL: 041675 FRAME: 0842. ASSIGNOR(S) HEREBY CONFIRMS THE CHANGE ADDRESS; ASSIGNOR:MERUS N.V.; REEL/FRAME:042322/0304 EFFECTIVE DATE : 20170210
US8268756 BB	20180719	LSFE	FEPP	FEE PAYMENT PROCEDURE	TEXT : ENTITY STATUS SET TO UNDISCOUNTED (ORIGINAL EVENT CODE: BIG.)
US8268756 BB	20261020	PEXP		Calculated Patent Term Expiry (PTA 92 days)	
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US9012371 BB	20111005	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MERUS B.V., NETHERLANDS

					OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:LOGTENBERG, TON; HOOGENBOOM, HENDRICUS RENERUS JACOBUS MATTHEUS; REEL/FRAME:027180/0509 EFFECTIVE DATE : 20060803
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WO04111636 A3	20051216	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 11305737 COUNTRY OF REF DOCUMENT : US
WO04111636 A3	20051216	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2004741829 COUNTRY OF REF DOCUMENT : EP
WO04111636 A3	20051216	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2529863 COUNTRY OF REF DOCUMENT : CA
WO04111636 A3	20051219	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2006516163 COUNTRY OF REF DOCUMENT : JP
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WO04111636 A3	20071101	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 11305737 COUNTRY OF REF DOCUMENT : US
WO05068622 A2	20050728	LSPB	+	published / reissued	
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WO05068622 A2	20060720	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2006550975 COUNTRY OF REF DOCUMENT : JP
WO05068622 A2	20060720	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 11490545 COUNTRY OF REF DOCUMENT : US
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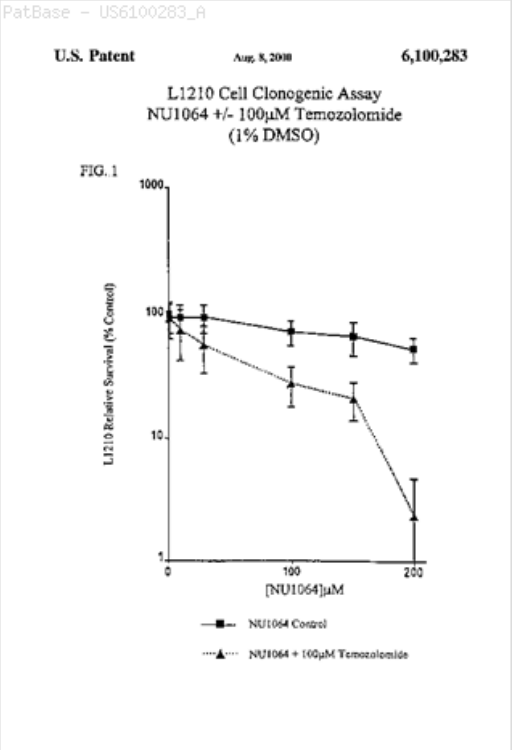
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WO05068622 A2	20070103	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2005704566 COUNTRY OF REF DOCUMENT : EP
WO05068622 A2	20070315	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 11490545 COUNTRY OF REF DOCUMENT : US

39) Family number: 20412057 (US6100283A)

Title: Benzimidazole compounds

Abstract: Benzimidazole-4-carboxamide compounds (I) which can act as potent inhibitors of the DNA repair enzyme poly(ADP-ribose) polymerase or PARP enzyme (EC 2.4.2.30), and which thereby can provide useful therapeutic compounds for use in conjunction with DNA-damaging cytotoxic drugs or radiotherapy to potentiate the effects of the latter. In formula (I), R and R' may each be selected independently from hydrogen, alkyl, hydroxyalkyl (e.g. CH2CH2OH), acyl (e.g. acetyl or benzoyl) or an optionally substituted aryl (e.g. phenyl) or aralkyl (e.g. benzyl or carboxybenzyl) group. R is generally a substituted phenyl group in the most preferred compounds. The compounds may also be used in the form of pharmaceutically acceptable salts or pro-drugs.

Classifications:
International (IPC 8-9): A61K31/00 A61K31/41 A61K31/415 A61K31/4164 A61K31/4184 A61K31/675 A61P35/00 A61P43/00 C07D235/06 C07D235/08 C07D235/10 C07D235/12 C07D235/14 C07D235/16 C07D235/18 C07D403/10 C07F9/6506 (Advanced/Invention);
A61K31/00 A61K31/415 A61K31/4164 A61P35/00 A61P43/00 C07D235/06 (Advanced/Non-invention);
A61K31/00 A61K31/41 A61K31/415 A61K31/4164 A61K31/675 A61P35/00 A61P43/00 C07D235/00 (Core/Invention)
International (IPC 1-7): A61K031/415 A61K31/00 A61K31/415 A61K31/4184 A61K31/675 A61P35/00 C07D235/06 C07D235/08 C07D235/10 C07D235/12 C07D235/18 C07D403/10 C07F9/6506
CPC: A61K31/4184 A61K31/675 C07D235/06 C07D235/08 C07D235/10 C07D235/12 C07D235/14 C07D235/16 C07D235/18
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AP866 A	20000817	AP19980001183	19960730
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VN1680 A1	20010226	VN19980000168	19980218
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Priority:

GB19950015843 19950802 GB19960011245 19960530 WO1996GB01832 19960730
US19980017314 19980202 US20000594776 20000616

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Agent(s): CALLINANS; FISHER ADAMS KELLY CALLINANS; SPRUSON AND FERGUSON; BORDEN LADNER GERVAIS LLP; LUZZATTO AND LUZZATTO

Designated states: AL AM AT AU AZ BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CZ DE DK EE ES FI FR GA GB GE GR HU IE IL IS IT JP KE KG KP KR KZ LI LK LR LS LT LU LV MC MD MG MK MN MW MX NL NO NZ PL PT RO RU SD SE SG SI SK SZ TJ TM TR TT UA UG US UZ VN

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AP866 A	20000817	LSGT	+	granted / extensions (spc, cpc, pte)	
AP866 A	20160730	PEXP		Calculated Patent Term Expiry	
AT225173 E	20021015	LSGT	+	granted / extensions (spc, cpc, pte)	
AT225173 E	20030615	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	REF DOCUMENT NUMBER : 0841924 COUNTRY OF REF DOCUMENT : EP
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AU714873 B2	20000113	LSGT	+	granted / extensions (spc, cpc, pte)	
AU714873 B2	20000518	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU714873 B2	20160730	PEXP		Calculated Patent Term Expiry	
BRPI9610051 A	19991221	LSPB	+	published / reissued	
BRPI9610051 A	20060523	LSRV	-B11B	DISMISSAL ACC. ART. 36, PAR 1 OF IPL - NO REPLY WITHIN 90 DAYS TO FULLFIL THE NECESSARY REQUIREMENTS	
CA2225465 AA	19980202	LSPB	+	published / reissued	
CA2225465 AA	19980925	LSES	+EEER	EXAMINATION REQUEST	
CA2225465 AA	20070605	LSLE	-FZDE	DEAD	

CN1159007 C	20040728	LSGT	+	granted / extensions (spc, cpc, pte)	
CN1159007 C	20040728	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN1159007 C	20041020	LSRE	COR	CHANGE OF BIBLIOGRAPHIC DATA	TEXT : CORRECT: INTERNATIONAL APPLICATION DATE; FROM: 1996.7.31 TO: 1996.7.30
CN1159007 C	20060310	LSWD	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HK REF LEGAL EVENT CODE : WD REF DOCUMENT NUMBER : 1016085 COUNTRY OF REF DOCUMENT : HK
CN1159007 C	20060927	LSLE	-C19	LAPSE OF PATENT RIGHT DUE TO NON-PAYMENT OF THE ANNUAL FEE	
CN1159007 C	20160730	PEXP		Calculated Patent Term Expiry	
CN1195985 A	19981014	LSPB	+	published / reissued	
CN1195985 A	19981014	LSPB	+C06	PUBLICATION	
CZ9800303 A3	19980617	LSPB	+	published / reissued	
DE69624115 D1	20031030	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE69624115 D1	20070516	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
DE69624115 T2	20030618	LSGT	+	granted / extensions (spc, cpc, pte)	
DE69624115 T2	20160730	PEXP		Calculated Patent Term Expiry	
DK0841924 T3	20030210	LSGT	+	granted / extensions (spc, cpc, pte)	
DK0841924 T3	20160730	PEXP		Calculated Patent Term Expiry	
EA000999 B1	20000828	LSGT	+	granted / extensions (spc, cpc, pte)	
EA000999 B1	20060428	LSLE	-MM4A	LAPSE OF A EURASIAN PATENT DUE TO NON-PAYMENT OF RENEWAL FEES WITHIN THE TIME LIMIT IN THE FOLLOWING DESIGNATED STATE(S)	COUNTRY OF REF DOCUMENT : AM COUNTRY OF REF DOCUMENT : AZ COUNTRY OF REF DOCUMENT : BY COUNTRY OF REF DOCUMENT : KG COUNTRY OF REF DOCUMENT : KZ COUNTRY OF REF DOCUMENT : MD COUNTRY OF REF DOCUMENT : RU COUNTRY OF REF DOCUMENT : TJ COUNTRY OF REF DOCUMENT : TM
EA000999 B1	20160730	PEXP		Calculated Patent Term Expiry	
EA199800184 A1	19981029	LSPB	+	published / reissued	
EA980184 A1	19981029	LSPB	+	published / reissued	
EP0841924 A1	19980520	LSPB	+	published / reissued	
EP0841924 A1	19980520	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19980221
EP0841924 A1	20011212	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20011026
EP0841924 A1	20021002	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20021002
EP0841924 A1	20021002	LSGT	REG	REFERENCE TO A	REF COUNTRY CODE : GB

				NATIONAL CODE	REF LEGAL EVENT CODE : FG4D
EP0841924 A1	20021015	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP0841924 A1	20021030	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP0841924 A1	20030204	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : EP REF DOCUMENT NUMBER : 20020404327 COUNTRY OF REF DOCUMENT : GR
EP0841924 A1	20030316	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2183004 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP0841924 A1	20030730	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20030730
EP0841924 A1	20030731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20030731
EP0841924 A1	20030924	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20030703
EP0841924 A1	20050426	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20050426 YEAR OF FEE PAYMENT : 10
EP0841924 A1	20050428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20050428 YEAR OF FEE PAYMENT : 10
EP0841924 A1	20050429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20050429 YEAR OF FEE PAYMENT : 10
EP0841924 A1	20050512	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20050512 YEAR OF FEE PAYMENT : 10
EP0841924 A1	20050603	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20050603 YEAR OF FEE PAYMENT : 10
EP0841924 A1	20050627	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20050627 YEAR OF FEE PAYMENT : 10
EP0841924 A1	20050704	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20050704 YEAR OF FEE PAYMENT : 10
EP0841924 A1	20050706	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20050706 YEAR OF FEE PAYMENT : 10
EP0841924 A1	20050711	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20050711 YEAR OF FEE PAYMENT : 10

EP0841924 A1	20050715	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20050715 YEAR OF FEE PAYMENT : 10
EP0841924 A1	20050719	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20050719 YEAR OF FEE PAYMENT : 10
EP0841924 A1	20050728	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20050728 YEAR OF FEE PAYMENT : 10
EP0841924 A1	20050930	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20050930 YEAR OF FEE PAYMENT : 10
EP0841924 A1	20060730	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20060730
EP0841924 A1	20060730	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20060730
EP0841924 A1	20060731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20060731
EP0841924 A1	20060731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20060731
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EP0841924 A1	20060731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20060731
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EP0841924 A1	20060731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20060731
EP0841924 A1	20060731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20060731 YEAR OF FEE PAYMENT : 11
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EP0841924 A1	20070201	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20070201
EP0841924 A1	20070201	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20070201
EP0841924 A1	20070228	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : PT REF LEGAL EVENT CODE : MM4A TEXT : LAPSE DUE TO NON-PAYMENT OF FEES EFFECTIVE DATE : 20070130
EP0841924 A1	20070312	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DK REF LEGAL EVENT CODE : EBP
EP0841924 A1	20070315	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP0841924 A1	20070320	LSLE	-EUG	SE: EUROPEAN PATENT HAS LAPSED	REF COUNTRY CODE : EP
EP0841924 A1	20070328	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20060730
EP0841924 A1	20070402	LSLE	-NLV4	NL: LAPSED OR ANULLED DUE TO NON-PAYMENT OF THE ANNUAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20070201
EP0841924 A1	20070502	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP0841924 A1	20070504	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20070330
EP0841924 A1	20071016	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20060731
EP0841924 A1	20071231	LSLE	-BERE	BE: LAPSED	PARTYTYPE : OWNER REF COUNTRY CODE : EP OWNER : NEWCASTLE *UNIVERSITY VENTURES LTD EFFECTIVE DATE : 20060731
EP0841924 A1	20080131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20060731
EP0841924 A1	20080430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20060731
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EP0841924 A1	20090930	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20070730
EP0841924 B1	20021002	LSGT	+	granted / extensions (spc, cpc, pte)	
EP0841924 B1	20160730	PEXP		Calculated Patent Term Expiry	

ES2183004 T3	20030316	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2183004 T3	20160730	PEXP		Calculated Patent Term Expiry	
HU9901092 AB	19990728	LSPB	+	published / reissued	
HU9901092 AC	20060428	LSRV	-FC4A	LAPSE OF PROVISIONAL APPLICATION DUE TO REFUSAL	
IL123147 A1	20040219	LSPB	+	published / reissued	
IL123147 A1	20040725	LSGT	+FF	PATENT GRANTED	
IL123147 A1	20070724	LSLE	-MM9K	PATENT NOT IN FORCE DUE TO NON-PAYMENT OF RENEWAL FEES	
JP11510154 T2	19990907	LSPB	+	published / reissued	
JP11510154 T2	20040219	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20040129
JP11510154 T2	20041019	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20041019
JP11510154 T2	20050331	LSRV	-A313	FINAL DECISION OF REJECTION WITHOUT A DISSENTING RESPONSE FROM THE APPLICANT	TEXT : JAPANESE INTERMEDIATE CODE: A313 EFFECTIVE DATE : 20050314
JP11510154 T2	20050419	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20050419
JP11510154 T2	20060926	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20060926
KR100447539 B1	20041110	LSGT	+	granted / extensions (spc, cpc, pte)	
KR100447539 B1	20070828	LSLE	-LAPS	LAPSE DUE TO UNPAID ANNUAL FEE	
KR100447539 B1	20180202	PEXP		Calculated Patent Term Expiry	
KR19990036086 A	19990525	LSPB	+	published / reissued	
KR19990036086 A	20010313	LSES	A201	REQUEST FOR EXAMINATION	
KR19990036086 A	20030430	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR19990036086 A	20040529	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
KR19990036086 A	20040827	LSGT	+GRNT	WRITTEN DECISION TO GRANT	
MX9800927 A1	19981031	LSPB	+	published / reissued	
MX9800927 A1	20030725	LSGT	+FG	GRANT OR REGISTRATION	
MX9800927 A1	20160930	LSLE	-MM	ANNULMENT OR LAPSE DUE TO NON-PAYMENT OF FEES	
NO317033 B1	20040726	LSGT	+	granted / extensions (spc, cpc, pte)	
NO317033 B1	20050502	LSLE	-MM1K	LAPSED BY NOT PAYING THE ANNUAL FEES	
NO317033 B1	20180130	PEXP		Calculated Patent Term Expiry	
NO980414 A	19980402	LSPB	+	published / reissued	
NZ313713 A	20010330	LSPB	+	published / reissued	
NZ313713 A	20010727	LSGT	+PSEA	PATENT SEALED	
NZ313713 A	20011221	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	
NZ313713 A	20030829	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	

OA10661 A	20021125	LSGT	+	granted / extensions (spc, cpc, pte)	
OA10661 A	20180130	PEXP		Calculated Patent Term Expiry	
PL324869 A1	19980622	LSPB	+	published / reissued	
PT841924 T	20030228	LSGT	+	granted / extensions (spc, cpc, pte)	
PT841924 T	20160730	PEXP		Calculated Patent Term Expiry	
SK13598 A3	19980603	LSPB	+	published / reissued	
TR9800127 T1	19980421	LSPB	+	published / reissued	
US6100283 A	20000808	LSGT	+	granted / extensions (spc, cpc, pte)	
US6100283 A	19980202	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : NEWCASTLE UNIVERSITY VENTURES LIMITED, ENGLAND OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:GRIFIN, ROGER JOHN; CALVERT, ALAN HILARY; CURTIN, NICOLA JANE; AND OTHERS; REEL/FRAME:008978/0790 EFFECTIVE DATE : 19980126
US6100283 A	20040128	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6100283 A	20080808	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US6100283 A	20080908	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US6100283 A	20080908	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US6100283 A	20080930	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20080808
US6100283 A	20180202	PEXP		Calculated Patent Term Expiry	
US6310082 BA	20011030	LSGT	+	granted / extensions (spc, cpc, pte)	
US6310082 BA	20000616	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : NEWCASTLE UNIVERSITY VENTURES LIMITED, ENGLAND OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:GRIFFIN, ROGER JOHN; CALVERT, ALAN HILARY; CURTIN, NICOLA JANE; AND OTHERS; REEL/FRAME:010880/0764 EFFECTIVE DATE : 19980126
US6310082 BA	20050426	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6310082 BA	20091030	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US6310082 BA	20091130	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US6310082 BA	20091130	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US6310082 BA	20091222	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20091030
US6310082 BA	20200616	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
VN1680 A1	20010226	LSPB	+	published / reissued	

WO9704771 A1	19970213	LSPB	+	published / reissued	
WO9704771 A1	19960731	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 96196881.8 COUNTRY OF REF DOCUMENT : CN
WO9704771 A1	19980127	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1998/00127 COUNTRY OF REF DOCUMENT : TR
WO9704771 A1	19980129	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 313713 COUNTRY OF REF DOCUMENT : NZ
WO9704771 A1	19980130	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 13598 COUNTRY OF REF DOCUMENT : SK
WO9704771 A1	19980202	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2225465 COUNTRY OF REF DOCUMENT : CA
WO9704771 A1	19980202	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2225465 COUNTRY OF REF DOCUMENT : CA KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO9704771 A1	19980202	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 1997 507360 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO9704771 A1	19980202	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1019980700752 COUNTRY OF REF DOCUMENT : KR
WO9704771 A1	19980202	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : PV1998-303 COUNTRY OF REF DOCUMENT : CZ
WO9704771 A1	19980202	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : PA/A/1998/000927 COUNTRY OF REF DOCUMENT : MX
WO9704771 A1	19980217	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1996925875 COUNTRY OF REF DOCUMENT : EP
WO9704771 A1	19980218	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1199800168 COUNTRY OF REF DOCUMENT : VN
WO9704771 A1	19980302	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 199800184 COUNTRY OF REF DOCUMENT : EA
WO9704771 A1	19980520	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1996925875 COUNTRY OF REF DOCUMENT : EP
WO9704771 A1	19980604	LSWD	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : 8642
WO9704771 A1	19980617	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : PV1998-303 COUNTRY OF REF DOCUMENT : CZ

WO9704771 A1	19990525	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1019980700752 COUNTRY OF REF DOCUMENT : KR
WO9704771 A1	20021002	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1996925875 COUNTRY OF REF DOCUMENT : EP
WO9704771 A1	20040529	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1019980700752 COUNTRY OF REF DOCUMENT : KR
WO9704771 A1	20050205	LSRV	-WWR	WIPO INFORMATION: REFUSED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : PV1998-303 COUNTRY OF REF DOCUMENT : CZ

40) Family number: 28690058 (US2003118712A)

Title: MATRIX-FORMING COMPOSITION CONTAINING PECTIN

Abstract: One aspect of the present invention relates to a **liquid** edible composition with a pH of more than 6, a viscosity below 600 mPas at a shear rate of 100s-1 and 20 degrees centigrade, and a viscosity of at least 125 percent of the aforementioned viscosity at a pH below 5 and a temperature of 37 degrees centigrade, the composition comprising at least 0.05 weight percent of pectin having a degree of methoxylation between 2 and 50 and/or of alginate; at least 5 mg calcium per 100 ml; and at least 0.1 weight percent indigestible oligosaccharide having a degree of polymerisation between 2 and 60. Another aspect of the invention relates to a method for the treatment or prevention of overweight or obesity in mammals, said method comprising the enteral administration to a mammal of an effective amount of the aforementioned composition.

Classifications:

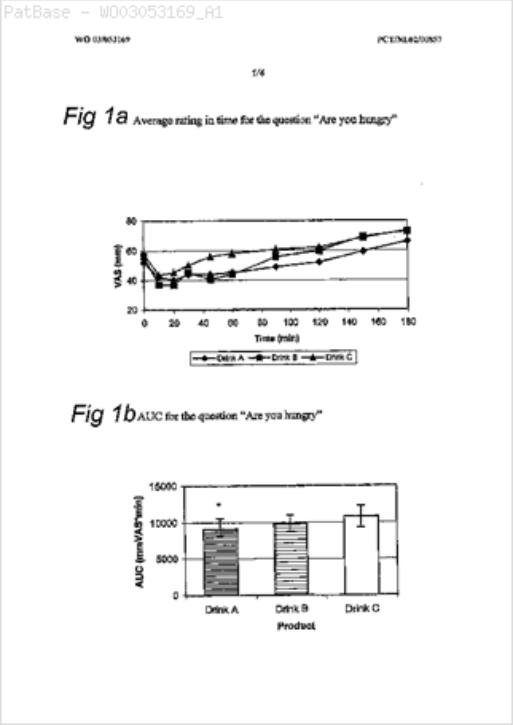
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A23L1/052 A23L1/09 A23L1/29 A23L1/30 A23L1/304 A23L1/305 A23L1/308 A23L2/52 A61K31/715 (Core/Invention)

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European: A23L1/0524 A23L1/0528 A23L1/0532 A23L1/09D A23L1/29D A23L1/29F A23L1/304 A23L1/305C A23L1/308 A23L1/30B A23L2/52 A23L2/62 A61K31/715 A61K31/732 K23V2/00

US: 424/439 424/439P 426/2 426/575 426/576 426/577 426/578 426/590 426/590P 426/72 514/54 514/54S 514/909 514/910 514/911



Family:

Publication number	Publication date	Application number	Application date
AT294510 E	20050515	AT20020793590T	20021220
AT362331 E	20070615	AT20020792105T	20021220
AT431705 E	20090615	AT20020103294T	20021220
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Priority:

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US20040871001 20040621
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Agent(s): RIDOUT AND MAYBEE LLP; VAN WESTENBRUGGE ANDRIES; YOUNG AND THOMPSON

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PL PT RO RU SC SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT294510 E	20050515	LSGT	+	granted / extensions (spc, cpc, pte)	
AT294510 E	20060115	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	REF DOCUMENT NUMBER : 1465504 COUNTRY OF REF DOCUMENT : EP
AT294510 E	20221220	PEXP		Calculated Patent Term Expiry	
AT362331 E	20070615	LSGT	+	granted / extensions (spc, cpc, pte)	
AT362331 E	20071115	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	REF DOCUMENT NUMBER : 1455605 COUNTRY OF REF DOCUMENT : EP
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AU2002358348 AA	20040909	LSLE	-MK6	APPLICATION LAPSED SECTION 142(2)(F)/REG. 8.3(3) - PCT APPLIC. NOT ENTERING NATIONAL PHASE	
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EP1455605 A1	20040915	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20040615
EP1455605 A1	20050706	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20050523
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EP1455605 A1	20160802	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SE REF LEGAL EVENT CODE : EUG
EP1455605 A1	20160815	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MM01 REF DOCUMENT NUMBER : 362331 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20151220
EP1455605 A1	20160824	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20151220
EP1455605 A1	20160831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20151221
EP1455605 A1	20160921	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP1455605 A1	20160930	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20160831
EP1455605 A1	20161003	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : ML REF DOCUMENT NUMBER : 20070402274 COUNTRY OF REF DOCUMENT : GR EFFECTIVE DATE : 20160707
EP1455605 A1	20161031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20151220
EP1455605 A1	20161031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20151231
EP1455605 A1	20161031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL	COUNTRY OF REF DOCUMENT : GB NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20151220

				OFFICE TO EPO]	
EP1455605 A1	20161031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20160701
EP1455605 A1	20161031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20151231
EP1455605 A1	20161130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20151220
EP1455605 A1	20161130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20151231
EP1455605 A1	20161130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20160707
EP1455605 A1	20161230	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20151220
EP1455605 A1	20170127	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20170127
EP1455605 A1	20170131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20151231
EP1455605 A1	20170228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20151221
EP1455605 A1	20170630	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20151220
EP1455605 A1	20170831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20170620
EP1455605 A1	20170929	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20170101
EP1455605 B1	20070516	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1455605 B1	20221220	PEXP		Calculated Patent Term Expiry	

EP1465504 A1	20041013	LSPB	+	published / reissued	
EP1465504 A1	20041013	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20040416
EP1465504 A1	20050504	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20050504
EP1465504 A1	20050504	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20050504
EP1465504 A1	20050504	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20050504
EP1465504 A1	20050504	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20050504
EP1465504 A1	20050504	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP1465504 A1	20050513	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1465504 A1	20050601	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP1465504 A1	20050804	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20050804
EP1465504 A1	20050804	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20050804
EP1465504 A1	20050804	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20050804
EP1465504 A1	20050916	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2239268 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP1465504 A1	20051220	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20051220
EP1465504 A1	20051231	LSLE	-PG25	LAPSED IN A CONTRACTING	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE

				STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20051231
EP1465504 A1	20051231	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20051231
EP1465504 A1	20060426	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20060207
EP1465504 A1	20071030	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : CH OWNER : N.V. NUTRICIA REF LEGAL EVENT CODE : PFA OLDPARTY : N.V. NUTRICIA#POSTBUS 1#2700 MA ZOETERMEER (NL) - TRANSFER TO- N.V. NUTRICIA#POSTBUS 1#2700 MA ZOETERMEER (NL)
EP1465504 A1	20110131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20101221 YEAR OF FEE PAYMENT : 9
EP1465504 A1	20110131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20101227 YEAR OF FEE PAYMENT : 9
EP1465504 A1	20110331	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20101201 YEAR OF FEE PAYMENT : 9
EP1465504 A1	20120131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20111221 YEAR OF FEE PAYMENT : 10
EP1465504 A1	20120131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20111220 YEAR OF FEE PAYMENT : 10
EP1465504 A1	20120131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20111230 YEAR OF FEE PAYMENT : 10
EP1465504 A1	20120131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20111205 YEAR OF FEE PAYMENT : 10
EP1465504 A1	20120629	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20120126 YEAR OF FEE PAYMENT : 10
EP1465504 A1	20130627	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : PT REF LEGAL EVENT CODE : MM4A TEXT : LAPSE DUE TO NON-PAYMENT OF FEES EFFECTIVE DATE : 20130620
EP1465504 A1	20130630	LSLE	-BERE	BE: LAPSED	PARTYTYPE : OWNER REF COUNTRY CODE : EP OWNER : *NUTRICIA N.V. EFFECTIVE DATE : 20121231
EP1465504 A1	20130731	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP1465504 A1	20130815	LSLE	REG	REFERENCE TO A	REF COUNTRY CODE : AT

				NATIONAL CODE	REF LEGAL EVENT CODE : MM01 REF DOCUMENT NUMBER : 294510 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20121220
EP1465504 A1	20130826	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DK REF LEGAL EVENT CODE : EBP
EP1465504 A1	20130830	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20130620
EP1465504 A1	20130830	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20121220
EP1465504 A1	20130925	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP1465504 A1	20130930	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20121231
EP1465504 A1	20131031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20121231
EP1465504 A1	20131031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20121220
EP1465504 A1	20131031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20121220
EP1465504 A1	20131031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20121231
EP1465504 A1	20140131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20130102
EP1465504 A1	20140228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20121220
EP1465504 A1	20150130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20141230 YEAR OF FEE PAYMENT : 13
EP1465504 A1	20150227	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20141210 YEAR OF FEE PAYMENT : 13

EP1465504 A1	20150331	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20141222 YEAR OF FEE PAYMENT : 13
EP1465504 A1	20150430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20150227 YEAR OF FEE PAYMENT : 13
EP1465504 A1	20150430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20150127 YEAR OF FEE PAYMENT : 13
EP1465504 A1	20150529	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20141230 YEAR OF FEE PAYMENT : 13
EP1465504 A1	20160701	LSDW	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R119 REF DOCUMENT NUMBER : 60204058 COUNTRY OF REF DOCUMENT : DE
EP1465504 A1	20160824	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20151220
EP1465504 A1	20160930	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20160831
EP1465504 A1	20161031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20160101
EP1465504 A1	20161031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20160701
EP1465504 A1	20161031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20151220
EP1465504 A1	20161130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20151231
EP1465504 A1	20161230	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20151220
EP1465504 A1	20170131	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20170131
EP1465504 A1	20170228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20151221
EP1465504 B1	20050504	LSGT	+	granted / extensions (spc,	

				cpc, pte)	
EP1465504 B1	20221220	PEXP		Calculated Patent Term Expiry	
EP1588629 A1	20051026	LSPB	+	published / reissued	
EP1588629 A1	20060412	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20060215
EP1588629 A1	20060705	LSFE	+AKX	DESIGNATION FEES PAID	COUNTRY OF REF DOCUMENT : AT COUNTRY OF REF DOCUMENT : BE COUNTRY OF REF DOCUMENT : BG COUNTRY OF REF DOCUMENT : CH COUNTRY OF REF DOCUMENT : CY COUNTRY OF REF DOCUMENT : CZ COUNTRY OF REF DOCUMENT : DE COUNTRY OF REF DOCUMENT : DK COUNTRY OF REF DOCUMENT : EE COUNTRY OF REF DOCUMENT : ES COUNTRY OF REF DOCUMENT : FI COUNTRY OF REF DOCUMENT : FR COUNTRY OF REF DOCUMENT : GB COUNTRY OF REF DOCUMENT : GR COUNTRY OF REF DOCUMENT : IE COUNTRY OF REF DOCUMENT : IT COUNTRY OF REF DOCUMENT : LI COUNTRY OF REF DOCUMENT : LU COUNTRY OF REF DOCUMENT : MC COUNTRY OF REF DOCUMENT : NL COUNTRY OF REF DOCUMENT : PT COUNTRY OF REF DOCUMENT : SE COUNTRY OF REF DOCUMENT : SI COUNTRY OF REF DOCUMENT : SK COUNTRY OF REF DOCUMENT : TR
EP1588629 A1	20061129	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20061027
EP1588629 A1	20090520	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP1588629 A1	20090529	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1588629 A1	20090624	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP1588629 A1	20090825	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : EP REF DOCUMENT NUMBER : 20090401689 COUNTRY OF REF DOCUMENT : GR
EP1588629 A1	20091030	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20090520
EP1588629 A1	20091030	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20090520
EP1588629 A1	20091030	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2327539 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP1588629 A1	20091130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20090520
EP1588629 A1	20100129	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT	COUNTRY OF REF DOCUMENT : CZ NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION

				INFORMATION FROM NATIONAL OFFICE TO EPO]	OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20090520
EP1588629 A1	20100129	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20090520
EP1588629 A1	20100129	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20090520
EP1588629 A1	20100226	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20090520
EP1588629 A1	20100331	LSOP	-26	OPPOSITION FILED	PARTYTYPE : OPPONENT OPPONENT : FRESENIUS KABI DEUTSCHLAND GMBH EFFECTIVE DATE : 20100219
EP1588629 A1	20100331	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20090820
EP1588629 A1	20100730	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20100701
EP1588629 A1	20110331	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20101201 YEAR OF FEE PAYMENT : 9
EP1588629 A1	20110331	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20101221 YEAR OF FEE PAYMENT : 9
EP1588629 A1	20110429	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20091220
EP1588629 A1	20110930	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20090520
EP1588629 A1	20120131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20111230 YEAR OF FEE PAYMENT : 10
EP1588629 A1	20120131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20111220 YEAR OF FEE PAYMENT : 10
EP1588629 A1	20120131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20111205

				OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	YEAR OF FEE PAYMENT : 10
EP1588629 A1	20120629	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20120126 YEAR OF FEE PAYMENT : 10
EP1588629 A1	20120629	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20111231 YEAR OF FEE PAYMENT : 10
EP1588629 A1	20130605	LSOP	-R26	OPPOSITION FILED (CORRECTED)	PARTYTYPE : OPPONENT OPPONENT : FRESENIUS KABI DEUTSCHLAND GMBH EFFECTIVE DATE : 20100219
EP1588629 A1	20130627	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : PT REF LEGAL EVENT CODE : MM4A TEXT : LAPSE DUE TO NON-PAYMENT OF FEES EFFECTIVE DATE : 20130620
EP1588629 A1	20130630	LSLE	-BERE	BE: LAPSED	PARTYTYPE : OWNER REF COUNTRY CODE : EP OWNER : N.V. NUTRICIA EFFECTIVE DATE : 20121231
EP1588629 A1	20130731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20121221
EP1588629 A1	20130731	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP1588629 A1	20130830	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20130620
EP1588629 A1	20130830	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : ML REF DOCUMENT NUMBER : 20090401689 COUNTRY OF REF DOCUMENT : GR EFFECTIVE DATE : 20130703
EP1588629 A1	20130925	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP1588629 A1	20130930	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20121231
EP1588629 A1	20131031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20121220
EP1588629 A1	20131031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20121231
EP1588629 A1	20131031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20130703

EP1588629 A1	20131031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20121231
EP1588629 A1	20140530	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20121220
EP1588629 A1	20150130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20141230 YEAR OF FEE PAYMENT : 13
EP1588629 A1	20150227	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20141210 YEAR OF FEE PAYMENT : 13
EP1588629 A1	20150310	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R064 REF DOCUMENT NUMBER : 60232423 COUNTRY OF REF DOCUMENT : DE
EP1588629 A1	20150310	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R103 REF DOCUMENT NUMBER : 60232423 COUNTRY OF REF DOCUMENT : DE
EP1588629 A1	20150331	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20141222 YEAR OF FEE PAYMENT : 13
EP1588629 A1	20150430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20150227 YEAR OF FEE PAYMENT : 13
EP1588629 A1	20150430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20150127 YEAR OF FEE PAYMENT : 13
EP1588629 A1	20150529	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20141230 YEAR OF FEE PAYMENT : 13
EP1588629 A1	20150701	LSRV	-27W	PATENT REVOKED	EFFECTIVE DATE : 20150310
EP1588629 A1	20150701	LSRV	-GBPR	GB: PATENT REVOKED UNDER ART. 102 OF THE EP CONVENTION DESIGNATING THE UK AS CONTRACTING STATE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20150310
EP1588629 A1	20150806	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R107 REF DOCUMENT NUMBER : 60232423 COUNTRY OF REF DOCUMENT : DE
EP1588629 A1	20160322	LSWD	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SE REF LEGAL EVENT CODE : ECNC
EP1588629 B1	20090520	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1588629 B1	20221220	PEXP		Calculated Patent Term Expiry	
ES2239268 T3	20050916	LSGT	+	granted / extensions (spc, cpc, pte)	

ES2239268 T3	20221220	PEXP		Calculated Patent Term Expiry	
ES2286317 T3	20071201	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2286317 T3	20221220	PEXP		Calculated Patent Term Expiry	
ES2327539 T3	20091030	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2327539 T3	20221220	PEXP		Calculated Patent Term Expiry	
JP2005513077 T2	20050512	LSPB	+	published / reissued	
JP2005513077 T2	20051123	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20051122
JP2005513077 T2	20051123	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20051122
JP2005513077 T2	20090819	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20090818
JP2005513077 T2	20100218	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20100217
JP2005513077 T2	20100330	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2005513077 T2	20100407	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20100406
JP2005513077 T2	20100408	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01
JP2005513077 T2	20100510	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20100428
JP2005513077 T2	20100514	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP2005513077 T2	20100514	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP2005513079 T2	20050512	LSPB	+	published / reissued	
JP2005513079 T2	20051123	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20051122
JP2005513079 T2	20051123	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20051122
JP2005513079 T2	20090819	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20090818
JP2005513079 T2	20100219	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20100218
JP2005513079 T2	20100325	LSGT	+TRDD	DECISION OF GRANT OR REJECTION	

				WRITTEN	
JP2005513079 T2	20100331	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20100330
JP2005513079 T2	20100401	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01
JP2005513079 T2	20100430	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20100423
JP2005513079 T2	20100430	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP2005513079 T2	20100510	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP4504683 B2	20100714	LSGT	+	granted / extensions (spc, cpc, pte)	
JP4504683 B2	20100427	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP4504683 B2	20130418	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4504683 B2	20130423	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 4
JP4504683 B2	20140417	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4504683 B2	20140422	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4504683 B2	20150423	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4504683 B2	20150428	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4504683 B2	20160414	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4504683 B2	20160426	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4504683 B2	20170430	LSLE	-LAPS	CANCELLATION BECAUSE OF NO PAYMENT OF ANNUAL FEES	
JP4504683 B2	20221220	PEXP		Calculated Patent Term Expiry	
JP4509563 B2	20100721	LSGT	+	granted / extensions (spc, cpc, pte)	
JP4509563 B2	20130514	LSLE	-LAPS	CANCELLATION BECAUSE OF NO PAYMENT OF ANNUAL FEES	
JP4509563 B2	20221220	PEXP		Calculated Patent Term Expiry	
PT1455605 T	20070824	LSGT	+	granted / extensions (spc, cpc, pte)	
PT1455605 T	20221220	PEXP		Calculated Patent Term Expiry	
PT1465504 T	20050831	LSGT	+	granted / extensions (spc, cpc, pte)	
PT1465504 T	20221220	PEXP		Calculated Patent	

				Term Expiry	
PT1588629 T	20090901	LSGT	+	granted / extensions (spc, cpc, pte)	
PT1588629 T	20221220	PEXP		Calculated Patent Term Expiry	
RU2004122130 A	20050420	LSPB	+	published / reissued	
RU2004122131 A	20050410	LSPB	+	published / reissued	
RU2313259 C2	20071227	LSGT	+	granted / extensions (spc, cpc, pte)	
RU2313259 C2	20170904	LSLE	-MM4A	THE PATENT IS INVALID DUE TO NON-PAYMENT OF FEES	EFFECTIVE DATE : 20161221
RU2313259 C2	20221220	PEXP		Calculated Patent Term Expiry	
RU2322089 C2	20080420	LSGT	+	granted / extensions (spc, cpc, pte)	
RU2322089 C2	20160810	LSLE	-MM4A	THE PATENT IS INVALID DUE TO NON-PAYMENT OF FEES	EFFECTIVE DATE : 20151221
RU2322089 C2	20221220	PEXP		Calculated Patent Term Expiry	
US2003118712 AA	20030626	LSPB	+	published / reissued	
US2003134027 AA	20030717	LSPB	+	published / reissued	
US2003198726 AA	20031023	LSPB	+	published / reissued	
US2003198726 AA	20070623	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2004228903 AA	20041118	LSPB	+	published / reissued	
US2004228903 AA	20040621	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : N.V. NUTRICIA, NETHERLANDS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:TE HENNEPE, FREDERIK GERHARD JOHAN; DE LANGE, MARIA ELISABETH HERMIEN; VAN LAERE, KATRIEN MARIA JOZEFA; AND OTHERS; REEL/FRAME:015497/0733 EFFECTIVE DATE : 20040614
US2004228903 AA	20100119	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2004228903 AA	20110304	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GENERAL NUTRITION INVESTMENT COMPANY, ARIZONA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:JPMORGAN CHASE BANK, N.A.; REEL/FRAME:025905/0054 EFFECTIVE DATE : 20110304
US2004258826 AA	20041223	LSPB	+	published / reissued	
US6884445 BB	20050426	LSGT	+	granted / extensions (spc, cpc, pte)	
US6884445 BB	20020423	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : N.V. NUTRICIA, NETHERLANDS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:NAVARRO Y KOREN, PETER ANTONIO; VAN LAERE, KATRIEN MARIA JOZEFA; DE LANGE, MARIA ELISABETH HERMIEN; AND OTHERS; REEL/FRAME:012823/0791 EFFECTIVE DATE : 20020124

US6884445 BB	20050406	LSGT	PAT1	Patented Case	
US6884445 BB	20080926	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6884445 BB	20121022	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US6884445 BB	20170426	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US6884445 BB	20170522	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US6884445 BB	20170522	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US6884445 BB	20170613	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20170426
US6884445 BB	20230110	PEXP		Calculated Patent Term Expiry (PTA 386 days)	
US6989166 BB	20060124	LSGT	+	granted / extensions (spc, cpc, pte)	
US6989166 BB	20030203	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : N.V. NUTRICIA, NETHERLANDS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:TE-HENNEPE, FREDERIK GERHARD JOHAN; DE LANGE, MARIA ELISABETH HERMIEN; VAN LAERE, KATRIEN MARIA JOZEFA; AND OTHERS; REEL/FRAME:013717/0794 EFFECTIVE DATE : 20021111
US6989166 BB	20060104	LSGT	PAT1	Patented Case	
US6989166 BB	20080205	LSRE	CC	CERTIFICATE OF CORRECTION	
US6989166 BB	20090615	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6989166 BB	20110304	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GENERAL NUTRITION INVESTMENT COMPANY, ARIZONA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:JPMORGAN CHASE BANK, N.A.; REEL/FRAME:025905/0054 EFFECTIVE DATE : 20110304
US6989166 BB	20130717	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US6989166 BB	20170904	LSFE	FEPP	FEE PAYMENT PROCEDURE	TEXT : MAINTENANCE FEE REMINDER MAILED (ORIGINAL EVENT CODE: REM.)
US6989166 BB	20180219	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	TEXT : PATENT EXPIRED FOR FAILURE TO PAY MAINTENANCE FEES (ORIGINAL EVENT CODE: EXP.)
US6989166 BB	20180219	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US6989166 BB	20180219	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US6989166 BB	20180313	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20180124
US6989166 BB	20230508	PEXP		Calculated Patent Term Expiry (PTA 195 days)	
US7422764 BB	20080909	LSGT	+	granted / extensions (spc, cpc, pte)	

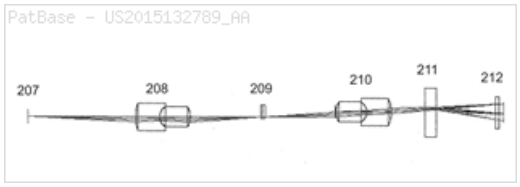
US7422764 BB	20040824	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : N.V. NUTRICIA, NETHERLANDS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:NAVARRO Y KOREN, PETER ANTONIO; VAN LAERE, KATRIEN MARIA JOZEFA; DE LANGE, MARIA ELISABETH HERMIEN; AND OTHERS; REEL/FRAME:015022/0750 EFFECTIVE DATE : 20040702
US7422764 BB	20080820	LSGT	PAT1	Patented Case	
US7422764 BB	20120302	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US7422764 BB	20160909	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US7422764 BB	20161010	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US7422764 BB	20161010	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US7422764 BB	20161101	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20160909
US7422764 BB	20260315	PEXP		Calculated Patent Term Expiry (PTA 632 days and a terminal disclaimer has been filed)	
WO03053165 A1	20030703	LSPB	+	published / reissued	
WO03053165 A1	20040416	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2002793590 COUNTRY OF REF DOCUMENT : EP
WO03053165 A1	20040618	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2470837 COUNTRY OF REF DOCUMENT : CA
WO03053165 A1	20040618	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2003553932 COUNTRY OF REF DOCUMENT : JP
WO03053165 A1	20040621	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 10871107 COUNTRY OF REF DOCUMENT : US
WO03053165 A1	20040720	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2004122131 COUNTRY OF REF DOCUMENT : RU
WO03053165 A1	20040820	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 20028282574 COUNTRY OF REF DOCUMENT : CN
WO03053165 A1	20041013	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2002793590 COUNTRY OF REF DOCUMENT : EP
WO03053165 A1	20050504	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2002793590 COUNTRY OF REF DOCUMENT : EP
WO03053169 A1	20030703	LSPB	+	published / reissued	
WO03053169 A1	20040615	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2002792105 COUNTRY OF REF DOCUMENT : EP
WO03053169 A1	20040617	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2470791 COUNTRY OF REF DOCUMENT : CA
WO03053169 A1	20040618	LSNP	+WWE	WIPO INFORMATION:	REF DOCUMENT NUMBER : 2003553935

				ENTRY INTO NATIONAL PHASE	COUNTRY OF REF DOCUMENT : JP
WO03053169 A1	20040621	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 10871001 COUNTRY OF REF DOCUMENT : US
WO03053169 A1	20040720	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2004122130 COUNTRY OF REF DOCUMENT : RU
WO03053169 A1	20040819	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 20028282175 COUNTRY OF REF DOCUMENT : CN
WO03053169 C1	20040910	LSRE	CR1	CORRECTION OF ENTRY IN SECTION I	TEXT : IN PCT GAZETTE 27/2003 UNDER (30) REPLACE "NL" BY "EP"
WO03053169 C1	20040915	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2002792105 COUNTRY OF REF DOCUMENT : EP
WO03053169 C1	20070516	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2002792105 COUNTRY OF REF DOCUMENT : EP

41) Family number: 59226063 (US2015132789A)

Title: OPTICAL IMAGING SYSTEM AND METHODS FOR USING THE SAME

Abstract: Aspects of the present disclosure include methods and systems for assaying a sample for an analyte. Methods according to certain embodiments include illuminating a sample with a slit-shaped beam of light, detecting light transmitted through the sample, determining absorbance of the transmitted light at one or more wavelengths and calculating concentration of the analyte based on the absorbance to assay the sample for the analyte. Systems for practicing the subject methods are also described.



Classifications:
International (IPC 8-9): G01J3/02 G01J3/04 G01J3/42 G01N G01N21/03 G01N21/05 G01N21/25 G01N21/27 G01N21/31 G01N21/59 G01N21/64 G01N33/72 G01N35/00 (Advanced/Invention);
G01N21/03 G01N21/359 G01N21/64 (Advanced/Non-invention)
CPC: G01N33/721 G01N21/31 G01J3/0208 G01J3/04 G01N2201/062 G01J3/42 G01N21/359 G01N21/6408 G01N21/6428 G01N21/6445 G01N2021/0346 G01N2021/6439 G01N2021/6491
US: 356/40 435/288.7 435/29

Family:

Publication number	Publication date	Application number	Application date
AU2014348910 AA	20160519	AU20140348910	20141110
AU2014348910 BB	20170420	AU20140348910	20141110
BR112016010721 A2	20170808	BR20161110721	20141110
CN105899936 A	20160824	CN201480062082	20141110
EP3074754 A1	20161005	EP20140861862	20141110
EP3074754 A4	20170726	EP20140861862	20141110
IN201647013757 A	20160831	IN201647013757	20160420
JP2016540974 T2	20161228	JP20160531004T	20141110
JP6518245 B2	20190522	JP20160531004T	20141110
US2015132789 AA	20150514	US20140537769	20141110
US2019004067 AA	20190103	US20180993503	20180530
US10018640 BB	20180710	US20140537769	20141110
WO15073384 A1	20150521	WO2014US64873	20141110
ZA201602900 A	20180131	ZA20160002900	20160429

Priority:

US20130903804P 20131113 US20140949833P 20140307 US20140537769 20141110
WO2014US64873 20141110 US20180993503 20180530

Probable Assignee: BECTON DICKINSON CO

Assignee(s): (std): BECTON DICKINSON CO

Assignee(s): BECTON DICKINSON AND CO

Inventor(s): (std): GOLDBERG EDWARD ; BORNHEIMER SCOTT

Inventor(s): SCOTT BORNHEIMER ; EDWARD GOLDBERG

Agent(s): FB RICE; FB RICE PTY LTD; DUXBURY STEPHEN; KOHNO TAKAO; BRET E; BOZICEVIC FIELD AND FRANCIS LLP; KHIN K; FIELD BRET E

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AU2014348910 AA	20160519	LSPB	+	published / reissued	
AU2014348910 AA	20160602	LSRE	DA3	AMENDMENTS MADE SECTION 104	TEXT : THE NATURE OF THE AMENDMENT IS: AMEND THE INVENTION TITLE TO READ OPTICAL IMAGING SYSTEM AND METHODS FOR USING THE SAME
AU2014348910 AA	20170817	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU2014348910 BB	20170420	LSGT	+	granted / extensions (spc, cpc, pte)	
AU2014348910 BB	20341110	PEXP		Calculated Patent Term Expiry	
CN105899936 A	20160824	LSPB	+	published /	

				reissued	
CN105899936 A	20160824	LSPB	+C06	PUBLICATION	
EP3074754 A1	20161005	LSPB	+	published / reissued	
EP3074754 A1	20161005	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20160419
EP3074754 A4	20170726	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	EFFECTIVE DATE : 20170628
EP3074754 A4	20180516	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20180416
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JP2016540974 T2	20161228	LSPB	+	published / reissued	
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JP6518245 B2	20190418	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP6518245 B2	20190423	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP6518245 B2	20190426	LSGT	+R150	特許証 (Patent certificate)	
JP6518245 B2	20341110	PEXP		Calculated Patent Term Expiry	
US10018640 BB	20180710	LSGT	+	granted / extensions (spc, cpc, pte)	
US10018640 BB	20141218	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BECTON, DICKINSON AND COMPANY, NEW JERSEY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BORNHEIMER, SCOTT; GOLDBERG, EDWARD; SIGNING DATES FROM 20141117 TO 20141202; REEL/FRAME:034551/0756

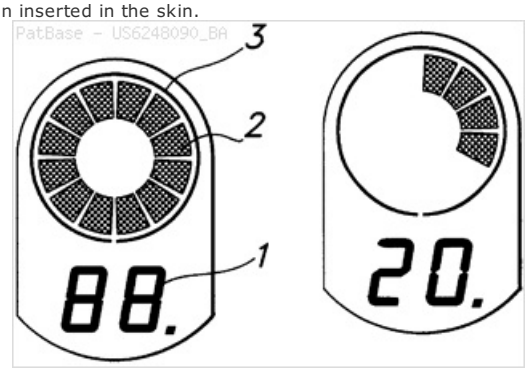
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US2015132789 AA	20150514	LSPB	+	published / reissued	
US2015132789 AA	20170510	LSES	ADV1	Advisory Action Mailed	
US2015132789 AA	20170907	LSES	NFA1	Non Final Action Mailed	
US2015132789 AA	20180315	LSES	ADV1	Advisory Action Mailed	
US2015132789 AA	20180602	LSFE	+PPV1	Publications -- Issue Fee Payment Verified	
US2015132789 AA	20180620	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2019004067 AA	20190103	LSPB	+	published / reissued	
US2019004067 AA	20181126	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BECTON, DICKINSON AND COMPANY, NEW JERSEY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BORNHEIMER, SCOTT; GOLDBERG, EDWARD; SIGNING DATES FROM 20141117 TO 20141202; REEL/FRAME:047584/0683
WO15073384 A1	20150521	LSPB	+	published / reissued	
WO15073384 A1	20160419	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2014861862 COUNTRY OF REF DOCUMENT : EP
WO15073384 A1	20160513	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2016531004 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO15073384 A1	20160513	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
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ZA201602900 A	20180131	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA201602900 A	20360428	PEXP		Calculated Patent Term Expiry	

42) Family number: 20502063 (US6248090B)

Title: Syringe with electronic representation of parameters

Abstract: A syringe having a dose setting mechanism, a button which can be operated to inject a set dose, a switch operated at a time between the start and completion of injection, and an electronic presentation of parameters such as the size of a set dose and the size of the last dose administered. The syringe also has a stop watch which is reset and started responsive to operation of the switch. The electronic presentation includes an indication of the number of hours elapsed from the activation of the switch, and may also include, for a predetermined period initially following the activation of the switch, a presentation of the number of seconds elapsed. The latter presentation can provide a visual indication to the patient of the length of time, after the injection button has been actuated to inject the dose, that the needle should remain inserted in the skin.

Classifications:
International (IPC 8-9): A61M5/178 A61M5/20 A61M5/31 A61M5/315 (Advanced/Invention); A61M5/178 A61M5/31 (Advanced/Non-invention); A61M5/178 A61M5/315 (Core/Invention); A61M5/31 (Core/Non-invention)
International (IPC 1-7): A61M31/00 A61M5/00 A61M5/178 A61M5/20 B01D53/92 F01N3/08
CPC: A61M5/31525 A61M5/31533 A61M5/31535 A61M5/31556 A61M5/31566 A61M5/31568 A61M5/31573 A61M2005/3125 A61M2005/3126 A61M2205/50 A61M2205/52 A61M2205/581 A61M2205/583
European: A61M5/315D A61M5/315E A61M5/315E2B3 A61M5/315F1A K61M205/50 K61M205/52 K61M205/58B K61M205/58D K61M5/315E1 K61M5/315F1 K61M5/315F1D K61M5/31A8 K61M5/31A8B
US: 604/207 604/67



Family:

Publication number	Publication date	Application number	Application date
AT240754 E	20030615	AT19970906803T	19970220
AU199718711 A1	19970910	AU19970018711	19970220
AU708528 B2	19990805	AU19970018711	19970220
BRPI9707598 A	19990727	BR1997PI07598	19970220
CA2246731 AA	19980820	CA19972246731	19970220
CA2246731 C	20060103	CA19972246731	19970220
CN1138575 C	20040218	CN19971093145	19970220
CN1213973 A	19990414	CN19971093145	19970220
CZ9802640 A3	19990113	CZ19980002640	19970220
DE69722255 D1	20030626	DE19976022255	19970220
DE69722255 T2	20040318	DE19976022255T	19970220
DK0959922 T3	20030901	DK19970906803T	19970220
EP0959922 A1	19991201	EP19970906803	19970220
EP0959922 B1	20030521	EP19970906803	19970220
ES2200155 T3	20040301	ES19970906803T	19970220
HU221172 B1	20020828	HU19990002706	19970220
HU9902706 AB	19991228	HU19990002706	19970220
HU9902706 AC	20000128	HU19990002706	19970220
IL125838 A0	19990411	IL19970125838	19970220
IL125838 A1	20031031	IL19970125838	19970220
IN199053 B	20060609	IN1997MA00317	19970217
JP2000506030 T2	20000523	JP19970529717T	19970220
JP4472026 B2	20100602	JP19970529717T	19970220
KR100446345 B1	20050115	KR19980706559	19970220
KR19990087165 A	19991215	KR19980706559	19970220
NO983880 A	19980821	NO19980003880	19980821
NO983880 A0	19980821	NO19980003880	19980821
NO983880 L	19980821	NO19980003880	19980821
PL185539 B1	20030530	PL19970328570	19970220
PL328570 A1	19990201	PL19970328570	19970220
RU2181299 C2	20020420	RU19980117611	19970220
RU98117611 A	20000627	RU19980117611	19980923
US6248090 BA	20010619	US19980137014	19980820
WO9730742 A1	19970828	WO1997DK00077	19970220
ZA9701529 A	19971016	ZA19970001529	19970221

Priority:

DK19960000199 19960223 WO1997DK00077 19970220

Probable Assignee: NOVO NORDISK AS

Assignee(s): (std): NOVONORDISK AS ; POULSEN JENS ULRIK ; SMEDEGAARD JOERGEN K ; NOVO NORDISK AS ; JENSEN JENS MOELLER

Assignee(s): JENSEN JENS MOLLER ; M S NOVO NORDISK A S ; NOVO NORDISK A S ; NOVO NORDISK A S BAGSVAERD ; NOVO NORDISK BAGSVAERD AS ; NOVO NORDISK A S NOVO ALLEDK ; SMEDEGAARD JORGEN K

Inventor(s): (std): JENSEN JENS M LLER ; SMEDEGAARD J RGEN K ; JENSEN JENS MOELLER ; POULSEN JENS ULRIK ; SMEDEGAARD JOERGEN K ; JENSEN JENS M ; POULSEN JENS U ; POULSEN JENS ULLRIK ; SMEDEGAARD JORGENK ; SMEDEGAARD K ; POULSEN ULRIK ; JENSEN MOLLER ; SMEDEGOR JERGEN K ; POUL SEN ENS UL RIK ; ENSEN ENS MELLER ; SMEDEGAARD JORGEN K ; JENSEN JENS MOLLER ; SMEDEGAARD JAERGEN K ; JENSEN JENS MAELLER

Inventor(s): JORGEN K SMEDEGAARD ; JENS ULRIK POULSEN ; JAERGEN K SMEDEGAARD ; JENS MAELLER JENSEN ; JORGEM K SMEDEGAARD ; JENSEN JENS M degrees LLER ; SMEDEGAARD J degrees RGEN K ; POUL'SEN ENS UL'RIK ; JENS MOLLER JENSEN ; JENS ULLRIK POULSEN ; JORGENK SMEDEGAARD

Agent(s): SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD; MCCARTHY TETRAULT LLP; REINHOLD COHN AND PARTNERS

Designated states: AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CN CU CZ DE DK EE ES FI FR GB GE GR HU IE IL IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MC MD MG MK MN MW MX NL NO NZ PL PT RO RU SD SE SG SI SK SZ TJ TM TR TT UA UG US UZ VN

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
AT240754 E	20030615	LSGT	+	granted / extensions (spc, cpc, pte)	
AT240754 E	20031215	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	REF DOCUMENT NUMBER : 0959922 COUNTRY OF REF DOCUMENT : EP
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AU199718711 A1	19970910	LSPB	+	published / reissued	
AU708528 B2	19990805	LSGT	+	granted / extensions (spc, cpc, pte)	
AU708528 B2	20170220	PEXP		Calculated Patent Term Expiry	
BRPI9707598 A	19990727	LSPB	+	published / reissued	
BRPI9707598 A	20050719	LSES	B07A	TECHNICAL EXAMINATION (OPINION): PUBLICATION OF TECHNICAL EXAMINATION (OPINION)	
BRPI9707598 A	20060103	LSRV	B09B	DECISION: REFUSAL	TEXT : "INDEFERIDO COM BASE NO ART. 8O EM VISTA DO ART. 13 DA LPI."
CA2246731 AA	19980820	LSPB	+	published / reissued	
CA2246731 AA	20020116	LSES	+EEER	EXAMINATION REQUEST	
CA2246731 C	20060103	LSGT	+	granted / extensions (spc, cpc, pte)	
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CN1138575 C	20170329	LSLE	-CX01	EXPIRY OF PATENT TERM	
CN1138575 C	20170220	PEXP		Calculated Patent Term Expiry	
CN1213973 A	19990414	LSPB	+	published / reissued	
CZ9802640 A3	19990113	LSPB	+	published / reissued	
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DE69722255 T2	20040318	LSGT	+	granted / extensions (spc, cpc, pte)	
DE69722255 T2	20170220	PEXP		Calculated Patent Term Expiry	
DK0959922 T3	20030901	LSGT	+	granted / extensions (spc, cpc, pte)	
DK0959922 T3	20170220	PEXP		Calculated Patent Term Expiry	
EP0959922 A1	19991201	LSPB	+	published / reissued	
EP0959922 A1	19991201	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19980923
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EP0959922 A1	20091030	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20090220
EP0959922 A1	20091125	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP0959922 A1	20100129	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20090220
EP0959922 A1	20100226	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20090228
EP0959922 A1	20100429	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20090221
EP0959922 A1	20100730	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION	COUNTRY OF REF DOCUMENT : ES NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20090221

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EP0959922 A1	20110331	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20090220
EP0959922 A1	20160108	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 20
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EP0959922 A1	20160429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20160211 YEAR OF FEE PAYMENT : 20
EP0959922 A1	20160531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20160217 YEAR OF FEE PAYMENT : 20
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EP0959922 A1	20170220	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R071 REF DOCUMENT NUMBER : 69722255 COUNTRY OF REF DOCUMENT : DE
EP0959922 A1	20170228	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP0959922 A1	20170315	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : PE20 EXPIRY DATE : 20170219
EP0959922 A1	20170531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF EXPIRATION OF PROTECTION LAPSED DATE : 20170219
EP0959922 B1	20030521	LSGT	+	granted / extensions (spc, cpc, pte)	
EP0959922 B1	20170219	PEXP		Calculated Patent Term Expiry	
EP0959922 B1	20170220	PEXP		Calculated Patent Term Expiry	
ES2200155 T3	20040301	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2200155 T3	20170220	PEXP		Calculated Patent Term Expiry	
HU221172 B1	20020828	LSGT	+	granted / extensions (spc, cpc, pte)	
HU221172 B1	20041129	LSLE	-HMM4	CANCELLATION OF FINAL PROT. DUE TO NON-PAYMENT OF FEE	
HU221172 B1	20170220	PEXP		Calculated Patent Term Expiry	
HU9902706 AB	19991228	LSPB	+	published / reissued	
IL125838 A1	20031031	LSPB	+	published /	

				reissued	
IL125838 A1	20040328	LSGT	+FF	PATENT GRANTED	
IL125838 A1	20040512	LSFE	+KB	PATENT RENEWED	
IL125838 A1	20070617	LSFE	+KB	PATENT RENEWED	
IL125838 A1	20110927	LSLE	-MM9K	PATENT NOT IN FORCE DUE TO NON-PAYMENT OF RENEWAL FEES	
IN199053 B	20060609	LSGT	+	granted / extensions (spc, cpc, pte)	
IN199053 B	20170217	PEXP		Calculated Patent Term Expiry	
JP2000506030 T2	20000523	LSPB	+	published / reissued	
JP2000506030 T2	20040115	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20031216
JP2000506030 T2	20051220	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20051220
JP2000506030 T2	20060713	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20060620
JP2000506030 T2	20070116	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20070116
JP2000506030 T2	20070517	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20070516
JP2000506030 T2	20070530	LSAL	A911	TRANSFER OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A911 EFFECTIVE DATE : 20070531
JP2000506030 T2	20070619	LSAL	-A912	REMOVAL OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A912 EFFECTIVE DATE : 20070614
JP2000506030 T2	20091223	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20091222
JP2000506030 T2	20100204	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01
JP2000506030 T2	20100311	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20100303
JP2000506030 T2	20100312	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP2000506030 T2	20100312	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP4472026 B2	20100602	LSGT	+	granted / extensions (spc, cpc, pte)	
JP4472026 B2	20100309	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP4472026 B2	20130228	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP4472026 B2	20130305	LSFE	+FPAY	RENEWAL FEE	YEAR OF FEE PAYMENT : 4

				PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	
JP4472026 B2	20140306	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4472026 B2	20140311	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4472026 B2	20150305	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4472026 B2	20150310	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4472026 B2	20160303	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4472026 B2	20160308	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4472026 B2	20170220	LSLE	-EXPY	CANCELLATION BECAUSE OF COMPLETION OF TERM	
JP4472026 B2	20170220	PEXP		Calculated Patent Term Expiry	
KR100446345 B1	20050115	LSGT	+	granted / extensions (spc, cpc, pte)	
KR100446345 B1	20080808	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20080808 YEAR OF FEE PAYMENT : 5
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KR100446345 B1	20180822	PEXP		Calculated Patent Term Expiry	
KR19990087165 A	19991215	LSPB	+	published / reissued	
KR19990087165 A	20020207	LSES	A201	REQUEST FOR EXAMINATION	
KR19990087165 A	20031230	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR19990087165 A	20040527	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
KR19990087165 A	20040820	LSGT	+GRNT	WRITTEN DECISION TO GRANT	
NO983880 A	19980821	LSPB	+	published / reissued	
NO983880 A	20030505	LSRV	-FC2A	WITHDRAWAL, REJECTION OR DISMISSAL OF LAID OPEN PATENT APPLICATION	
PL185539 B1	20030530	LSGT	+	granted / extensions (spc, cpc, pte)	
PL185539 B1	20100430	LSLE	-LAPS	DECISIONS ON THE LAPSE OF THE PROTECTION RIGHTS	EFFECTIVE DATE : 20090220
PL328570 A1	19990201	LSPB	+	published / reissued	
RU2181299 C2	20020420	LSGT	+	granted / extensions (spc, cpc, pte)	
RU2181299 C2	20100720	LSLE	-MM4A	THE PATENT IS INVALID DUE TO NON-PAYMENT OF FEES	EFFECTIVE DATE : 20090221
RU2181299 C2	20170220	PEXP		Calculated Patent Term Expiry	
RU98117611 A	20000627	LSPB	+	published / reissued	

US6248090 BA	20010619	LSGT	+	granted / extensions (spc, cpc, pte)	
US6248090 BA	19981026	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : NOVO NORDISK A/S, DENMARK OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:JERSEN, JENS MOLLER; POULSEN, JENS ULRIK; SMEDEGAARD, JORGEN K.; REEL/FRAME:009571/0152; SIGNING DATES FROM 19981013 TO 19981015
US6248090 BA	20010531	LSGT	PAT1	Patented Case	
US6248090 BA	20010531	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US6248090 BA	20021015	LSRE	CC	CERTIFICATE OF CORRECTION	
US6248090 BA	20050203	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6248090 BA	20081212	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US6248090 BA	20121210	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US6248090 BA	20180820	PEXP		Calculated Patent Term Expiry	
WO9730742 A1	19970828	LSPB	+	published / reissued	
WO9730742 A1	19970220	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 97193145.3 COUNTRY OF REF DOCUMENT : CN
WO9730742 A1	19980819	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : PV1998-2640 COUNTRY OF REF DOCUMENT : CZ
WO9730742 A1	19980820	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2246731 COUNTRY OF REF DOCUMENT : CA
WO9730742 A1	19980820	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2246731 COUNTRY OF REF DOCUMENT : CA KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO9730742 A1	19980820	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1997906803 COUNTRY OF REF DOCUMENT : EP
WO9730742 A1	19980820	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : PA/A/1998/006766 COUNTRY OF REF DOCUMENT : MX
WO9730742 A1	19980822	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1019980706559 COUNTRY OF REF DOCUMENT : KR
WO9730742 A1	19981224	LSWD	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : 8642
WO9730742 A1	19990113	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : PV1998-2640 COUNTRY OF REF DOCUMENT : CZ
WO9730742 A1	19991201	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1997906803 COUNTRY OF REF DOCUMENT : EP
WO9730742 A1	19991215	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1019980706559 COUNTRY OF REF DOCUMENT : KR
WO9730742 A1	20030521	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1997906803 COUNTRY OF REF DOCUMENT : EP
WO9730742 A1	20030613	LSRV	-WWR	WIPO INFORMATION:	REF DOCUMENT NUMBER : PV1998-2640

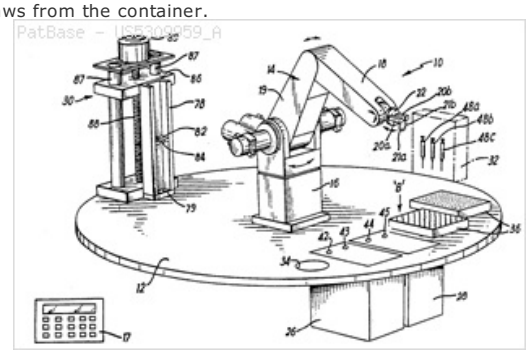
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WO9730742 A1	20040527	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1019980706559 COUNTRY OF REF DOCUMENT : KR
ZA9701529 A	19971016	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA9701529 A	20170220	PEXP		Calculated Patent Term Expiry	

43) Family number: 8702068 (US5309959A)

Title: Dispensing apparatus

Abstract: A dispensing apparatus comprises a base, and a robot device on the base having opposing jaw members. A number of stations locate on the base, and cooperate with the robot device in a sequence of operations such as to produce a measured pharmaceutical dose from a supply of a pharmaceutically acceptable substance. One of the stations locates several hypodermic syringes in parallel and a container, and produces relative movement of the appropriate syringe and the container towards and away from each other to arrange that the syringe penetrates and withdraws from the container.

Classifications:
International (IPC 8-9): A61B7/00 A61J3/00 A61M5/00 B65B3/00 B65B3/12 G01N35/00 G01R31/28 G01R31/319 G21F5/018 (Advanced/Invention);
A61J3/00 B65B3/00 G01N35/00 (Advanced/Non-invention);
A61B7/00 B65B3/00 G01R31/28 (Core/Invention);
G01N35/00 (Core/Non-invention)
International (IPC 1-7): A61B7/00 A61J3/00 B65B3/00 B65B3/12 B65B43/42 B65B43/50 G01F11/04 G01N1/14 G21F5/018
CPC: B65B3/003 G01N35/0099
European: B65B3/00B S01N35/00R S01N35/06A9
US: 141/103 141/130 141/98 422/100 422/505 422/547 422/549 422/99



Family:

Publication number	Publication date	Application number	Application date
AT153936 E	19970615	AT19930918016T	19930813
AU199347254 A1	19940315	AU19930047254	19930813
AU671478 B2	19960829	AU19930047254	19930813
CA2121685 AA	19940419	CA19932121685	19930813
DE69311294 D1	19970710	DE19936011294	19930813
DE69311294 T2	19971009	DE19936011294T	19930813
DK0607407 T3	19970804	DK19930918016T	19930813
EP0607407 A1	19940727	EP19930918016	19930813
EP0607407 B1	19970604	EP19930918016	19930813
ES2102666 T3	19970801	ES19930918016T	19930813
GB9217616 A0	19920930	GB19920017616	19920819
GB9305882 A0	19930512	GB19930005882	19930322
GR3024630 T3	19971231	GR19970402268T	19970904
JP7500521 T2	19950119	JP19940506015T	19930813
KR19940702810 A	19940917	KR19940701281	19940419
KR19947002810 A	19940917	KR19947001281	19930813
RU2110214 C1	19980510	RU19940021919	19930813
RU94021919 A1	19960310	RU19940021919	19940429
TW235238 B	19941201	TW19930106655	19930818
US5309959 A	19940510	US19920933373	19920824
US5479969 A	19960102	US19940211811	19940707
WO9404415 A1	19940303	WO1993GB01718	19930813

Priority:

US19920993373 19920324 GB19920017616 19920819 US19920993373 19920824
US19920933373 19920824 GB19930005882 19930322 WO1993GB00017 19930813
WO1993GB01718 19930813 US19940211811 19940707

Probable Assignee: BRITISH NUCLEAR FUELS PLC

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Inventor(s): (std): SHAW KEVIN TUDOR CLOSE ; HARDIE ROBERT WHITEFIELD ROAD ; SHOU KEVIN ; SHAW KEVIN ; KHARDI ROBERT ; HARDIE ROBERT

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Agent(s): GRIFFITH HACK; GOWLING LAFLEUR HENDERSON LLP

Designated states: AT AU BE CA CH DE DK ES FR GB GR IE IT JP KR LI LU MC NL PT RU SE US

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
AT153936 E	19970615	LSGT	+	granted / extensions (spc, cpc, pte)	
AT153936 E	19971115	LSPB	+UEP	PUBLICATION OF	

				TRANSLATION OF EUROPEAN PATENT SPECIFICATION	
AT153936 E	20020515	LSLE	-REN	CEASED DUE TO NON-PAYMENT OF THE ANNUAL FEE	
AT153936 E	20130813	PEXP		Calculated Patent Term Expiry	
AU199347254 A1	19940315	LSPB	+	published / reissued	
AU671478 B2	19960829	LSGT	+	granted / extensions (spc, cpc, pte)	
AU671478 B2	20020314	LSLE	-MK14	PATENT CEASED SECTION 143(A) (ANNUAL FEES NOT PAID) OR EXPIRED	
AU671478 B2	20130813	PEXP		Calculated Patent Term Expiry	
CA2121685 AA	19940419	LSPB	+	published / reissued	
CA2121685 AA	20010813	LSLE	-FZDE	DEAD	
DE69311294 D1	19980702	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE69311294 D1	20020926	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
DE69311294 T2	19971009	LSGT	+	granted / extensions (spc, cpc, pte)	
DE69311294 T2	20130813	PEXP		Calculated Patent Term Expiry	
DK0607407 T3	19970804	LSGT	+	granted / extensions (spc, cpc, pte)	
DK0607407 T3	20130813	PEXP		Calculated Patent Term Expiry	
EP0607407 A1	19940727	LSPB	+	published / reissued	
EP0607407 A1	19940824	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19940627
EP0607407 A1	19960207	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 19951228
EP0607407 B1	19970604	LSGT	+	granted / extensions (spc, cpc, pte)	
EP0607407 B1	19970613	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP0607407 B1	19970801	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2102666 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP0607407 B1	19980228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 19980228
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EP0607407 B1	20000710	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20000710 YEAR OF FEE PAYMENT : 8
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				NATIONAL OFFICE TO EPO]	YEAR OF FEE PAYMENT : 8
EP0607407 B1	20000718	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20000718 YEAR OF FEE PAYMENT : 8
EP0607407 B1	20000719	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20000719 YEAR OF FEE PAYMENT : 8
EP0607407 B1	20000719	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20000719 YEAR OF FEE PAYMENT : 8
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EP0607407 B1	20000724	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20000724 YEAR OF FEE PAYMENT : 8
EP0607407 B1	20000725	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20000725 YEAR OF FEE PAYMENT : 8
EP0607407 B1	20000726	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20000726 YEAR OF FEE PAYMENT : 8
EP0607407 B1	20000803	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20000803 YEAR OF FEE PAYMENT : 8
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EP0607407 B1	20000808	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20000808 YEAR OF FEE PAYMENT : 8
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EP0607407 B1	20010813	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20010813
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EP0607407 B1	20010814	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20010814
EP0607407 B1	20010831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20010831
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EP0607407 B1	20020228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20020228
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EP0607407 B1	20020403	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20010813
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EP0607407 B1	20020422	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DK REF LEGAL EVENT CODE : EBP
EP0607407 B1	20020430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20020430
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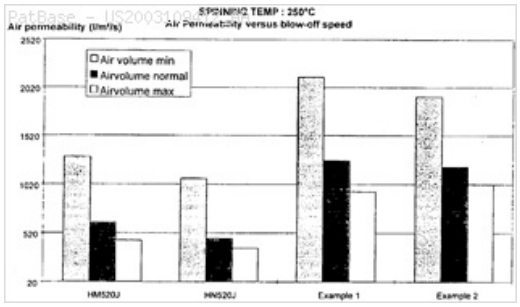
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EP0607407 B1	20020621	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST
EP0607407 B1	20020628	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : PT REF LEGAL EVENT CODE : MM4A TEXT : LAPSE DUE TO NON-PAYMENT OF FEES EFFECTIVE DATE : 20020228
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EP0607407 B1	20050813	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20050813
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ES2102666 T3	19970801	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2102666 T3	19970801	LSGT	+FG2A	DEFINITIVE PROTECTION	REF DOCUMENT NUMBER : 607407 COUNTRY OF REF DOCUMENT : ES
ES2102666 T3	20130813	PEXP		Calculated Patent Term Expiry	
GR3024630 T3	19971231	LSGT	+	granted / extensions (spc, cpc, pte)	
GR3024630 T3	20170904	PEXP		Calculated Patent Term Expiry	
JP7500521 T2	19950119	LSPB	+	published / reissued	
KR19940702810 A	19940917	LSPB	+	published / reissued	
KR19947002810 A	19940917	LSPB	+	published / reissued	
RU2110214 C1	19980510	LSGT	+	granted / extensions (spc, cpc, pte)	
RU2110214 C1	20130813	PEXP		Calculated Patent Term Expiry	
TW235238 B	19941201	LSGT	+	granted / extensions (spc, cpc, pte)	
TW235238 B	20130818	PEXP		Calculated Patent Term Expiry	
US5309959 A	19940510	LSGT	+	granted / extensions (spc, cpc, pte)	
US5309959 A	19921029	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BRITISH NUCLEAR FUELS PLC, UNITED KINGDOM OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNORS:SHAW, KEVIN; HARDIE, ROBERT; REEL/FRAME:006321/0118 EFFECTIVE DATE : 19921008
US5309959 A	19971014	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5309959 A	20020510	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5309959 A	20020611	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US5309959 A	20020611	LSLE	-STCH	INFORMATION ON STATUS:	TEXT : PATENT EXPIRED DUE

				PATENT DISCONTINUATION	TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US5309959 A	20020709	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20020510
US5309959 A	20120824	PEXP		Calculated Patent Term Expiry	
US5479969 A	19960102	LSGT	+	granted / extensions (spc, cpc, pte)	
US5479969 A	19951002	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BRITISH NUCLEAR FUELS PLC, UNITED KINGDOM OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:HARDIE, ROBERT; SHAW, KEVIN; REEL/FRAME:007653/0944 EFFECTIVE DATE : 19950920
US5479969 A	19990623	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5479969 A	20040102	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5479969 A	20040204	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US5479969 A	20040204	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
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US5479969 A	20140707	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
WO9404415 A1	19940303	LSPB	+	published / reissued	
WO9404415 A1	19940419	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1993918016 COUNTRY OF REF DOCUMENT : EP
WO9404415 A1	19940419	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2121685 COUNTRY OF REF DOCUMENT : CA
WO9404415 A1	19940707	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 08211811 COUNTRY OF REF DOCUMENT : US
WO9404415 A1	19940727	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1993918016 COUNTRY OF REF DOCUMENT : EP
WO9404415 A1	19970604	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1993918016 COUNTRY OF REF DOCUMENT : EP

44) Family number: 15437068 (US2003109412A)

Title: PROPYLENE POLYMERS WITH AN ULTRA HIGH MELT FLOW RATE

Abstract: The present invention concerns pelletized propylene homo- or copolymer compositions having an ultra high melt flow rate (MFR) and a process for producing propylene homo- or copolymer fibres. According to the invention, the polymer composition has an MFR2 of 400 g/10 min or more and is obtainable by polymerising propylene at elevated pressure, optionally together with hydrogen and/or comonomers, in the presence of a catalyst in a reaction sequence including at least one bulk reaction zone.



Classifications:
International (IPC 8-9): C08F10/02 C08F10/06 C08F110/06 C08F2/02 C08F210/06 C08J3/12 D01D5/08 D01F6/06 D01F6/30 D01F6/46 D01F8/06 (Advanced/Invention);
C08F10/06 C08F110/06 C08F2/02 (Advanced/Non-invention);
C08F10/00 C08F110/00 C08F2/02 C08F210/00 D01F6/04 D01F6/28 D01F6/46 D01F8/06 (Core/Invention);
C08F110/00 (Core/Non-invention)
International (IPC 1-7): C08F10/06 C08F110/06 C08F2/02 C08F2/02 C08F210/06 C11D3/37 D01F6/04
CPC: C08F10/02 C08F10/06 C08F110/06 D01F6/06 D01F6/30
European: C08F10/02 C08F10/06 D01F6/06 D01F6/30 M08F110/06
US: 510/475

Family:

Publication number	Publication date	Application number	Application date
AT310029 E	20051215	AT20000988838T	20001227
AU200125195 A1	20010709	AU20010025195	20001227
AU200125195 A5	20010709	AU20010025195D	20001227
BRPI0016744 A	20020903	BR2000PI16744	20001227
CA2395922 AA	20020627	CA20002395922	20001227
CN1234735 C	20060104	CN20008017872	20001227
CN1332080 C	20070815	CN200510104145	20001227
CN1414983 A	20030430	CN20008017872	20001227
CN1743519 A	20060308	CN200510104145	20001227
DE60024149 D1	20051222	DE20006024149	20001227
DE60024149 D1	20051222	DE20006024149T	20001227
DE60024149 T2	20060803	DE20006024149T	20001227
DK1303547 T3	20060327	DK20000988838T	20001227
EP1303547 A1	20030423	EP20000988838	20001227
EP1303547 B1	20051116	EP20000988838	20001227
FI111955 B	20031015	FI19990002791	19991227
FI19992791 A	20010628	FI19990002791	19991227
FI992791 A	20010628	FI19990002791	19991227
KR100682700 B1	20070215	KR20027008311	20001227
KR20020075386 A	20021004	KR20027008311	20001227
US2003109412 AA	20030612	US20020149912	20020819
WO0148041 A1	20010705	WO2000FI01149	20001227

Priority:

FI19990002791 19991227 WO2000FI01149 20001227 KR20027008311 20020626 WO2000FI01149 20020626

Probable Assignee: BOREALIS TECHNOLOGY OY

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Assignee(s): BOREALIS TECHNOLOGY OY ; BOREALIS TECHNOLOGY OY PORVOO

Inventor(s): (std): LESKINEN P ; LESKINEN PAULI ; NOYNAERT N ; NOYNAERT NANCY ; VERPOEST MARIJKE ; ALASTALO K ; ALASTALO KAUNO ; NOYNAERT K ALASTALO P LESKINEN ; P LESKINEN ; N NOYNAERT ; K ALASTALO P LESKINEN N NOYNAERT ; K ALASTALO ; MARIJKE ALASTALO KAUNO LESKINE

Inventor(s): KAUNO ALASTALO ; ALASTALO KAUNO LESKINEN PAULI NOYNAERT NANCY VERPO ; ALASTALO KAUNO LESKINEN PAULI NOYNAERT NANCY ; ALASTALO KAUNO LESKINEN PAULI NOYNAERT NANCY VERPOEST MARIJKE ; NANCY NOYNAERT ; MARIJKE VERPOEST ; PAULI LESKINEN

Agent(s): OGILVY RENAULT LLP SENCRL SRL

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CR CU CY CZ DE DK DM DZ EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT310029 E	20051215	LSGT	+	granted / extensions (spc, cpc, pte)	
AT310029 E	20060515	LSLE	-RER	CEASED AS TO	

				PARAGRAPH 5 LIT. 3 LAW INTRODUCING PATENT TREATIES	
AT310029 E	20201227	PEXP		Calculated Patent Term Expiry	
AU200125195 A1	20010709	LSPB	+	published / reissued	
AU200125195 A5	20020829	LSLE	-MK6	APPLICATION LAPSED SECTION 142(2) (F)/REG. 8.3(3) - PCT APPLIC. NOT ENTERING NATIONAL PHASE	
BRPI0016744 A	20020903	LSPB	+	published / reissued	
BRPI0016744 A	20100223	LSRV	-B11B	DISMISSAL ACC. ART. 36, PAR 1 OF IPL - NO REPLY WITHIN 90 DAYS TO FULLFIL THE NECESSARY REQUIREMENTS	
CA2395922 AA	20020627	LSPB	+	published / reissued	
CA2395922 AA	20050316	LSES	+EEER	EXAMINATION REQUEST	
CA2395922 AA	20101029	LSLE	-FZDE	DEAD	
CN1234735 C	20060104	LSGT	+	granted / extensions (spc, cpc, pte)	
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CN1234735 C	20201227	PEXP		Calculated Patent Term Expiry	
CN1332080 C	20070815	LSGT	+	granted / extensions (spc, cpc, pte)	
CN1332080 C	20070815	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN1332080 C	20201227	PEXP		Calculated Patent Term Expiry	
CN1414983 A	20030430	LSPB	+	published / reissued	
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CN1743519 A	20060308	LSPB	+	published / reissued	
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DE60024149 D1	20061207	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
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EP1303547 A1	20030423	LSPB	+	published / reissued	
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EP1303547 A1	20041117	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20041004
EP1303547 A1	20160129	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20151211 YEAR OF FEE PAYMENT : 16
EP1303547 A1	20160129	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20151221 YEAR OF FEE PAYMENT : 16
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				[ANNOUNCED FROM NATIONAL OFFICE TO EPO]	PAYMENT DATE : 20151221 YEAR OF FEE PAYMENT : 16
EP1303547 A1	20160429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20151228 YEAR OF FEE PAYMENT : 16
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EP1303547 B1	20051116	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20051116
EP1303547 B1	20051116	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20051116
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EP1303547 B1	20051130	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1303547 B1	20051214	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
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EP1303547 B1	20051229	LSLE	-PG25	LAPSED IN A	COUNTRY OF REF DOCUMENT : IE

				CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20051229
EP1303547 B1	20051231	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20051231
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EP1303547 B1	20060216	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20060216
EP1303547 B1	20060227	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20060227
EP1303547 B1	20060417	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20060417
EP1303547 B1	20060425	LSRV	-LTIE	LT: INVALIDATION OF EUROPEAN PATENT OR PATENT EXTENSION	REF COUNTRY CODE : EP EFFECTIVE DATE : 20051116
EP1303547 B1	20060501	LSLE	-NLV1	NL: LAPSED OR ANNULLED DUE TO FAILURE TO FULFILL THE REQUIREMENTS OF ART. 29P AND 29M OF THE PATENTS ACT	REF COUNTRY CODE : EP
EP1303547 B1	20060531	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP1303547 B1	20061004	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
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EP1303547 B1	20090331	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20081212 YEAR OF FEE PAYMENT : 9
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EP1303547 B1	20100630	LSLE	-BERE	BE: LAPSED	PARTYTYPE : OWNER REF COUNTRY CODE : EP OWNER : *BOREALIS TECHNOLOGY OY EFFECTIVE DATE : 20091231

EP1303547 B1	20100727	LSLE	-EUG	SE: EUROPEAN PATENT HAS LAPSED	REF COUNTRY CODE : EP
EP1303547 B1	20100809	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DK REF LEGAL EVENT CODE : EBP
EP1303547 B1	20101029	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20091231
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EP1303547 B1	20151221	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 16
EP1303547 B1	20161222	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 17
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EP1303547 B1	20170630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20161223 YEAR OF FEE PAYMENT : 17
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EP1303547 B1	20180131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20171221 YEAR OF FEE PAYMENT : 18
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EP1303547 B1	20201227	PEXP		Calculated Patent Term Expiry	
FI111955 B	20031015	LSPB	+	published / reissued	
FI111955 B	20191227	PEXP		Calculated Patent Term Expiry	
FI19992791 A	20010628	LSPB	+	published / reissued	
FI992791 A	20010628	LSPB	+	published / reissued	
KR100682700 B1	20070215	LSGT	+	granted / extensions (spc, cpc, pte)	
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KR100682700 B1	20060718	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR100682700 B1	20061227	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
KR100682700 B1	20070207	LSGT	+GRNT	WRITTEN DECISION TO GRANT	
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US2003109412 AA	20020819	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BOREALIS TECHNOLOGY OY, FINLAND OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ALASTALO, KAUNO; LESKINEN, PAULI; NOYNAERT, NANCY; AND OTHERS; REEL/FRAME:013197/0566 EFFECTIVE DATE : 20020708
US2003109412 AA	20061004	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
WO0148041 A1	20010705	LSPB	+	published / reissued	
WO0148041 A1	20020527	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2000988838 COUNTRY OF REF DOCUMENT : EP
WO0148041 A1	20020626	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL	REF DOCUMENT NUMBER : 1020027008311

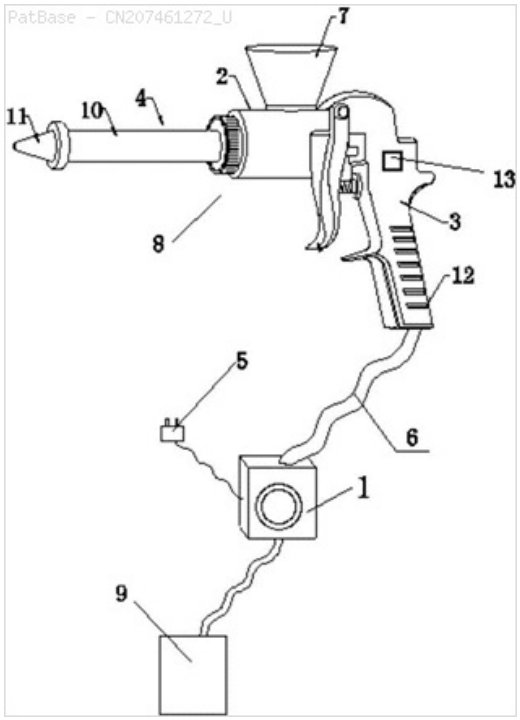
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WO0148041 A1	20020627	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2395922 COUNTRY OF REF DOCUMENT : CA
WO0148041 A1	20020819	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 10149912 COUNTRY OF REF DOCUMENT : US
WO0148041 A1	20021004	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1020027008311 COUNTRY OF REF DOCUMENT : KR
WO0148041 A1	20021205	LSWD	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : 8642
WO0148041 A1	20030423	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2000988838 COUNTRY OF REF DOCUMENT : EP
WO0148041 A1	20040930	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : JP
WO0148041 A1	20051116	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2000988838 COUNTRY OF REF DOCUMENT : EP

45) Family number: 70034068 (CN207461272U)

Title: MILLET FIELD CHEMISTRY BROMACIL IS TO ATOMIZER

Abstract: The utility model discloses a millet field chemistry bromacil is to atomizer, including the spray pistol, the spray pistol includes the body of a gun, body of a gun one end bottom fixedly connected with **handle**, body of a gun top surface fixed mounting has the **doser**, body of a gun side is equipped with atomizer, atomizer includes the drain pipe, drain pipe one end with body of a gun threaded connection, the drain pipe other end is connected with the toper shower nozzle, **handle** bottom grafting water pipe, the grafting water pipe communicates with each other with the drain pipe, the water pump isconnected to the water pipe other end, the water pump is connected with the plug, the **medical** kit is connected on the water pump pipe way. The utility model discloses the people hands at the spray pistol position, the volume of spraying is little can prevent effectively that the **liquid** medicine from spouting millet on, through the opening and closing of switch, can open and close the water pump,realize spraying to taking out of pesticide in the **medical** kit. The utility model discloses an it is rational in infrastructure, convenient to use.

Classifications:
International (IPC 8-9): A01M21/04 (Advanced/Invention)



Family:

Publication number	Publication date	Application number	Application date
CN207461272 U	20180608	CN201721581337U	20171123

Priority:

CN201721581337U 20171123

Probable Assignee: UNIV SHANXI AGRICULTURAL

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Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
CN207461272 U	20180608	LSGT	+	granted / extensions (spc, cpc, pte)	
CN207461272 U	20180608	LSGT	+GR01	PATENT GRANT	
CN207461272 U	20271123	PEXP		Calculated Patent Term Expiry	

46) Family number: 28995071 (US2003157068A)

Title: METHOD OF TREATMENT OF OSTEOPOROSIS WITH COMPOSITIONS OF RED RICE FERMENTATION PRODUCTS

Abstract: Methods are disclosed for using red rice fermentation products for the treatment or prevention of osteoporosis and abnormal bone mass conditions. Particular Monascus strains yield fermentation products with the desired biological activities.

Classifications:

International (IPC 8-9): A23L1/10 A23L1/28 A23L1/30 A61K31/235 A61K31/365 A61K31/366 A61K35/00 A61K35/70 A61K35/74 A61K36/00 A61K36/06 A61K36/062 A61K36/81 A61K36/899 A61K9/08 A61K9/10 A61K9/20 A61K9/48 A61P1/16 A61P25/28 A61P3/06 A61P7/02 A61P9/00 A61P9/10 A61P9/12 C12N1/02 C12N1/14 C12P1/00 C12P1/02 C12P7/62 (Advanced/Invention); A23L1/10 A23L1/28 A61K9/08 A61K9/10 A61K9/48 C12P1/00 C12R1/645 (Advanced/Non-invention); A23L1/30 A61K35/00 A61K36/00 A61K36/06 A61K36/88 A61K9/08 A61K9/10 A61K9/20 A61K9/48 A61P1/00 A61P25/00 A61P3/00 A61P9/00 C12N1/02 C12N1/14 C12P1/00 C12P7/62 (Core/Invention)
International (IPC 1-7): A01N63/00 A01N63/04 A23L1/10 A23L1/28 A23L1/30 A23L15/00 A61K A61K31/235 A61K31/365 A61K35/00 A61K35/70 A61K35/72 A61K35/74 A61K35/78 A61K9/08 A61K9/10 A61K9/20 A61K9/48 A61P1/16 A61P25/28 A61P3/06 A61P7/00 A61P7/02 A61P9/00 A61P9/10 A61P9/12 C12N1/02 C12N1/14 C12P1/00 C12P1/02 C12P7/62
CPC: Y10S435/911 A61K36/81 A23L33/105 A61K36/062 A61K36/899 C12R1/645
European: A23L1/30B A61K36/062 A61K36/81 A61K36/899 C12R1/645
US: 424/195.16 424/195.160P 424/255.1 424/725 424/75 424/750 424/750S 424/780 424/93.5 424/93.500P 424/93.51 426/44 426/531 426/60 435/135 435/135S 435/254.1 435/254.100S 435/261 435/41 435/911

Family:

Publication number	Publication date	Application number	Application date
AT383164 E	20080115	AT19980954688T	19981106
AU199746587 A1	19980424	AU19970046587	19970929
AU199911709 A1	19990531	AU19990011709	19981106
BRPI9712168 A	20000118	BR1997PI12168	19970929
BRPI9815272 A	20001219	BR1998PI15272	19981106
CA2267340 AA	19990329	CA19972267340	19970929
CA2309100 AA	20000501	CA19982309100	19981106
CA2309100 C	20090915	CA19982309100	19981106
DE69838988 D1	20080221	DE19986038988	19981106
DE69838988 D1	20080221	DE19986038988T	19981106
DE69838988 T2	20090115	DE19986038988T	19981106
DK1044009 T3	20080428	DK19980954688T	19981106
EP0932395 A1	19990804	EP19970945365	19970929
EP1044009 A2	20001018	EP19980954688	19981106
EP1044009 A4	20010718	EP19980954688	19981106
EP1044009 B1	20080109	EP19980954688	19981106
EP1044009 B8	20080220	EP19980954688	19981106
ES2299217 T3	20080516	ES19980954688T	19981106
HU9904650 AB	20000528	HU19990004650	19970929
IL129216 A0	20000217	IL19970129216	19970929
JP2001501621 T2	20010206	JP19980516787T	19970929
JP2003521217 T2	20030715	JP20000520093T	19981106
KR20000048765 A	20000725	KR19997002751	19970929
PT1044009 T	20080320	PT19980954688T	19981106
US2003157068 AA	20030821	US20030354537	20030128
US2003194413 AA	20031016	US20020321259	20021217
US6046022 A	20000404	US19970965202	19971106
US6632428 BA	20031014	US20000542438	20000404
US7238348 BB	20070703	US20030354537	20030128
WO9814177 A1	19980409	WO1997US17574	19970929
WO9923996 A2	19990520	WO1998IB01918	19981106
WO9923996 A3	19990819	WO1998IB01918	19981106

Priority:

US19960720548 19960930 WO1997US17574 19970929 US19970965202 19971106
WO1998IB01918 19981106 US20000542438 20000404 US20020321259 20021217
US20030354537 20030128

Probable Assignee: BEIJING PEKING UNIV WBL LTD CORP

Assignee(s): (std): BEIJING PEKING UNIV WBL ; PHARMANEX INC ; ZHANG MAO LIANG ; ZHOU YU FANG ; PENG CHI XIU ; UNIV BEIJING

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Inventor(s): PENG ; ZHOU ; MAO LIANG ZHANG ; CHI XIU PENG ; MICHAEL N CHANG ; MAO L ZHANG ; CHI X PONG

Agent(s): PHILLIPS ORMONDE FITZPATRICK; OSLER HOSKIN AND HARCOURT LLP; GOUDREAU GAGE DUBUC; LAVERY DE BILLY LLP; CORNISH KRISTINA VICTORIA JOY ET AL; FISH AND RICHARDSON PC

Designated states: AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CU CY CZ DE DK EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT UA UG US UZ VN YU ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT383164 E	20080115	LSGT	+	granted / extensions (spc, cpc, pte)	
AT383164 E	20091115	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	REF DOCUMENT NUMBER : 1044009 COUNTRY OF REF DOCUMENT : EP
AT383164 E	20181106	PEXP		Calculated Patent Term Expiry	
AU199746587 A1	19980424	LSPB	+	published / reissued	
AU199746587 A1	20020221	LSLE	-MK5	APPLICATION LAPSED SECTION 142(2)(E) - PATENT REQUEST AND COMPL. SPECIFICATION NOT ACCEPTED	
AU199911709 A1	19990531	LSPB	+	published / reissued	
AU199911709 A1	20000720	LSLE	-MK6	APPLICATION LAPSED SECTION 142(2) (F)/REG. 8.3(3) - PCT APPLIC. NOT ENTERING NATIONAL PHASE	
BRPI9712168 A	20000118	LSPB	+	published / reissued	
BRPI9712168 A	20051108	LSFE	-B08F	APPLICATION FEES: DISMISSAL - ARTICLE 86 OF INDUSTRIAL PROPERTY LAW	TEXT : REFERENTE A 4A , 5A , 6A , 7A E 8A ANUIDADES.
BRPI9815272 A	20001219	LSPB	+	published / reissued	
BRPI9815272 A	20080102	LSES	B07A	TECHNICAL EXAMINATION (OPINION): PUBLICATION OF TECHNICAL EXAMINATION (OPINION)	
BRPI9815272 A	20081028	LSRV	B09B	DECISION: REFUSAL	TEXT : DE ACORDO COM O ART. 37, INDEFIRO O PRESENTE PEDIDO, UMA VEZ QUE NAO ATENDE AO REQUISITO DE ATIVIDADE INVENTIVA (ART. 8O COMBINADO COM ART. 13 DA LPI)
BRPI9815272 A	20101005	LSAS	B25A	REQUESTED TRANSFER OF RIGHTS APPROVED	PARTYTYPE : OWNER OWNER : BEIJING PEKING UNIVERSITY WBL BIOTECH CO., LTD. (C OLDPARTY : TRANSFERIDO DE: PEKING UNIVERSITY
CA2267340 AA	19990329	LSPB	+	published / reissued	
CA2267340 AA	20030929	LSLE	-FZDE	DEAD	
CA2309100 AA	20000501	LSPB	+	published / reissued	
CA2309100 AA	20030924	LSES	+EEER	EXAMINATION REQUEST	
CA2309100 C	20090915	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2309100 C	20190108	LSLE	-MKEX	EXPIRY	EFFECTIVE DATE : 20181106
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DE69838988 D1	20080403	LSAS	8327	CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER	PARTYTYPE : OWNER OWNER : BEIJING PEKING UNIVERSITY WBL BIOTECH CO., LTD, CN
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				OF THE PATENT OWNER	UNIVERSITY WBL BIOTECH CO., LTD, CN
DE69838988 D1	20080403	LSAS	8327	CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER	PARTYTYPE : OWNER OWNER : BEIJING PEKING UNIVERSITY WBL BIOTECH CO., LTD, CN
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EP1044009 A2	20160229	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20151111 YEAR OF FEE PAYMENT : 18
EP1044009 A2	20160229	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20151014 YEAR OF FEE PAYMENT : 18
EP1044009 A4	20010718	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	EFFECTIVE DATE : 20010601
EP1044009 A4	20030917	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20030806

EP1044009 A4	20061004	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20030806
EP1044009 A4	20070221	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20030806
EP1044009 B1	20080109	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1044009 B1	20080109	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP1044009 B1	20080131	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1044009 B1	20080206	LSAS	RAP2	RIGHTS OF A PATENT TRANSFERRED	PARTYTYPE : OWNER OWNER : BEIJING PEKING UNIVERSITY WBL BIOTECH CO., LTD
EP1044009 B1	20080206	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP1044009 B1	20181105	PEXP		Calculated Patent Term Expiry	
EP1044009 B1	20181106	PEXP		Calculated Patent Term Expiry	
EP1044009 B8	20080516	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2299217 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP1044009 B8	20080521	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : EP REF DOCUMENT NUMBER : 20080400955 COUNTRY OF REF DOCUMENT : GR
EP1044009 B8	20081106	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : PT OWNER : BEIJING PEKING UNIVERSITY WBL BIOTECH CO., LTD, CN REF LEGAL EVENT CODE : PC4A EFFECTIVE DATE : 20081024
EP1044009 B8	20081217	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20081010
EP1044009 B8	20090630	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20081130
EP1044009 B8	20090731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20080109
EP1044009 B8	20100630	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20081106
EP1044009 B8	20151008	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 18
EP1044009 B8	20161028	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP

					YEAR OF FEE PAYMENT : 19
EP1044009 B8	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20161110 YEAR OF FEE PAYMENT : 19
EP1044009 B8	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20161010 YEAR OF FEE PAYMENT : 19
EP1044009 B8	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20161110 YEAR OF FEE PAYMENT : 19
EP1044009 B8	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20161109 YEAR OF FEE PAYMENT : 19
EP1044009 B8	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20161115 YEAR OF FEE PAYMENT : 19
EP1044009 B8	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20161102 YEAR OF FEE PAYMENT : 19
EP1044009 B8	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20161028 YEAR OF FEE PAYMENT : 19
EP1044009 B8	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20161101 YEAR OF FEE PAYMENT : 19
EP1044009 B8	20170228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20161013 YEAR OF FEE PAYMENT : 19
EP1044009 B8	20170228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20161010 YEAR OF FEE PAYMENT : 19
EP1044009 B8	20170228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20161027 YEAR OF FEE PAYMENT : 19
EP1044009 B8	20170228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20161111 YEAR OF FEE PAYMENT : 19
EP1044009 B8	20170228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20161122 YEAR OF FEE PAYMENT : 19
EP1044009 B8	20170228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20161025 YEAR OF FEE PAYMENT : 19
EP1044009 B8	20170228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20161027 YEAR OF FEE PAYMENT : 19
EP1044009 B8	20171026	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 20
EP1044009 B8	20180131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20171109 YEAR OF FEE PAYMENT : 20

				EPO]	
EP1044009 B8	20180131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20171031 YEAR OF FEE PAYMENT : 20
EP1044009 B8	20180131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20171110 YEAR OF FEE PAYMENT : 20
EP1044009 B8	20180131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20171026 YEAR OF FEE PAYMENT : 20
EP1044009 B8	20180131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20171115 YEAR OF FEE PAYMENT : 20
EP1044009 B8	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20171123 YEAR OF FEE PAYMENT : 20
EP1044009 B8	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20171026 YEAR OF FEE PAYMENT : 20
EP1044009 B8	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20171114 YEAR OF FEE PAYMENT : 20
EP1044009 B8	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20171013 YEAR OF FEE PAYMENT : 20
EP1044009 B8	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20171101 YEAR OF FEE PAYMENT : 20
EP1044009 B8	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20171011 YEAR OF FEE PAYMENT : 20
EP1044009 B8	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20171012 YEAR OF FEE PAYMENT : 20
EP1044009 B8	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20171025 YEAR OF FEE PAYMENT : 20
EP1044009 B8	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20171201 YEAR OF FEE PAYMENT : 20
EP1044009 B8	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20171113 YEAR OF FEE PAYMENT : 20
EP1044009 B8	20181106	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R071 REF DOCUMENT NUMBER : 69838988 COUNTRY OF REF DOCUMENT : DE
EP1044009 B8	20181112	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DK REF LEGAL EVENT CODE : EUP EFFECTIVE DATE : 20181106
EP1044009 B8	20181115	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL

EP1044009 B8	20181121	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : PE20 EXPIRY DATE : 20181105
EP1044009 B8	20181215	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MK07 REF DOCUMENT NUMBER : 383164 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20181106
EP1044009 B8	20181226	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MK9A
EP1044009 B8	20190102	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SE REF LEGAL EVENT CODE : EUG
EP1044009 B8	20190131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF EXPIRATION OF PROTECTION LAPSED DATE : 20181106
EP1044009 B8	20190131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF EXPIRATION OF PROTECTION LAPSED DATE : 20181113
EP1044009 B8	20190228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF EXPIRATION OF PROTECTION LAPSED DATE : 20181105
ES2299217 T3	20080516	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2299217 T3	20181106	PEXP		Calculated Patent Term Expiry	
HU9904650 AB	20000528	LSPB	+	published / reissued	
JP2001501621 T2	20010206	LSPB	+	published / reissued	
JP2003521217 T2	20030715	LSPB	+	published / reissued	
JP2003521217 T2	20051019	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20051018
JP2003521217 T2	20071227	LSAS	A711	NOTIFICATION OF CHANGE IN APPLICANT	TEXT : JAPANESE INTERMEDIATE CODE: A711 EFFECTIVE DATE : 20071226
JP2003521217 T2	20080130	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A821 EFFECTIVE DATE : 20071227
JP2003521217 T2	20080527	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20080527
JP2003521217 T2	20081122	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20081121
JP2003521217 T2	20081218	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A821 EFFECTIVE DATE : 20081121
JP2003521217 T2	20090121	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20090120
JP2003521217 T2	20090516	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20090515

KR20000048765 A	20000725	LSPB	+	published / reissued	
KR20000048765 A	20020930	LSDW	-WITN	WITHDRAWAL DUE TO NO REQUEST FOR EXAMINATION	
PT1044009 T	20080320	LSGT	+	granted / extensions (spc, cpc, pte)	
PT1044009 T	20181106	PEXP		Calculated Patent Term Expiry	
US2003157068 AA	20030821	LSPB	+	published / reissued	
US2003157068 AA	20031029	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BEIJING PEKING UNIVERSITY WBL CORPORATION LTD., CH OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:LIANG, ZHANG MAO; WEN, DUAN ZHEN; XIU, PENG CHI; AND OTHERS; REEL/FRAME:014638/0816 EFFECTIVE DATE : 20030124
US2003157068 AA	20031103	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BEIJING PEKING UNIVERSITY WBL CORPORATION LTD., CH OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:LIANG, ZHANG MAO; WEN, DUAN ZHEN; XIU, PENG CHI; AND OTHERS; REEL/FRAME:014100/0546 EFFECTIVE DATE : 20030124
US2003157068 AA	20070613	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2003194413 AA	20031016	LSPB	+	published / reissued	
US2003194413 AA	20040610	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US6046022 A	20000404	LSGT	+	granted / extensions (spc, cpc, pte)	
US6046022 A	19980626	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PEKING UNIVERSITY, CHINA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ZHANG, MAO LIANG; PENG, CHI-XIU; ZHOU, YU-FANG; REEL/FRAME:009285/0947; SIGNING DATES FROM 19980506 TO 19980526
US6046022 A	20000324	LSGT	PAT1	Patented Case	
US6046022 A	20000324	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US6046022 A	20031006	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6046022 A	20050210	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BEIJING PEKING UNIVERSITY WBL BIOTECH CO., LTD., C OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:PEKING UNIVERSITY; REEL/FRAME:015698/0648 EFFECTIVE DATE : 20050202
US6046022 A	20071004	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US6046022 A	20110923	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US6046022 A	20171106	PEXP		Calculated Patent Term Expiry	
US6632428 BA	20031014	LSGT	+	granted / extensions (spc, cpc, pte)	
US6632428 BA	20030925	LSGT	PAT1	Patented Case	
US6632428 BA	20030925	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE

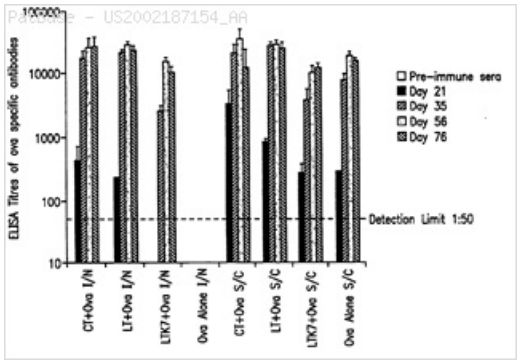
US6632428 BA	20050210	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BEIJING PEKING UNIVERSITY WBL BIOTECH CO., LTD., C OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:PEKING UNIVERSITY; REEL/FRAME:015698/0648 EFFECTIVE DATE : 20050202
US6632428 BA	20070416	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6632428 BA	20110414	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US6632428 BA	20150414	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US6632428 BA	20200404	PEXP		Calculated Patent Term Expiry	
US7238348 BB	20070703	LSGT	+	granted / extensions (spc, cpc, pte)	
US7238348 BB	20030128	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BEIJING PEKING UNIVERSITY WBL CORPORATION LTD., CH OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:LIANG, ZHANG MAO; XIU, PENG CHI; YU-FANG, ZHOU; AND OTHERS; REEL/FRAME:013721/0935 EFFECTIVE DATE : 20030124
US7238348 BB	20070613	LSGT	PAT1	Patented Case	
US7238348 BB	20110103	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US7238348 BB	20150105	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US7238348 BB	20190218	LSFE	FEPP	FEE PAYMENT PROCEDURE	TEXT : MAINTENANCE FEE REMINDER MAILED (ORIGINAL EVENT CODE: REM.); ENTITY STATUS OF PATENT OWNER: LARGE ENTITY
US7238348 BB	20240528	PEXP		Calculated Patent Term Expiry (PTA 486 days)	
WO9814177 A1	19980409	LSPB	+	published / reissued	
WO9814177 A1	19990329	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2267340 COUNTRY OF REF DOCUMENT : CA
WO9814177 A1	19990329	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2267340 COUNTRY OF REF DOCUMENT : CA KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO9814177 A1	19990330	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 1998 516787 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO9814177 A1	19990330	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1019997002751 COUNTRY OF REF DOCUMENT : KR
WO9814177 A1	19990330	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : PV1999-1118 COUNTRY OF REF DOCUMENT : CZ
WO9814177 A1	19990330	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : PA/A/1999/003004 COUNTRY OF REF DOCUMENT : MX

WO9814177 A1	19990408	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 335068 COUNTRY OF REF DOCUMENT : NZ
WO9814177 A1	19990430	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1997945365 COUNTRY OF REF DOCUMENT : EP
WO9814177 A1	19990524	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 97180031.6 COUNTRY OF REF DOCUMENT : CN
WO9814177 A1	19990804	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1997945365 COUNTRY OF REF DOCUMENT : EP
WO9814177 A1	20000315	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : PV1999-1118 COUNTRY OF REF DOCUMENT : CZ
WO9814177 A1	20000725	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1019997002751 COUNTRY OF REF DOCUMENT : KR
WO9814177 A1	20020403	LSWD	-WWW	WIPO INFORMATION: WITHDRAWN IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1997945365 COUNTRY OF REF DOCUMENT : EP
WO9814177 A1	20020930	LSWD	-WWW	WIPO INFORMATION: WITHDRAWN IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1019997002751 COUNTRY OF REF DOCUMENT : KR
WO9814177 A1	20050805	LSRV	-WWR	WIPO INFORMATION: REFUSED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : PV1999-1118 COUNTRY OF REF DOCUMENT : CZ
WO9923996 A2	19990520	LSPB	+	published / reissued	
WO9923996 A3	20000501	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2309100 COUNTRY OF REF DOCUMENT : CA
WO9923996 A3	20000501	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2309100 COUNTRY OF REF DOCUMENT : CA KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO9923996 A3	20000504	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1020007004921 COUNTRY OF REF DOCUMENT : KR
WO9923996 A3	20000602	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1998954688 COUNTRY OF REF DOCUMENT : EP
WO9923996 A3	20000907	LSWD	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : 8642
WO9923996 A3	20001018	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1998954688 COUNTRY OF REF DOCUMENT : EP
WO9923996 A3	20010416	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1020007004921 COUNTRY OF REF DOCUMENT : KR
WO9923996 A3	20051011	LSRV	-WWR	WIPO INFORMATION: REFUSED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1020007004921 COUNTRY OF REF DOCUMENT : KR
WO9923996 A3	20080109	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL	REF DOCUMENT NUMBER : 1998954688

47) Family number: 28294072 (US2002187154A)

Title: NONTOXIC MUCOSAL ADJUVANT

Abstract: The present invention is directed to immunogenic compositions comprising an immunologically effective amount of an antigen against which an immune response is desired and a mucosal adjuvant, wherein the mucosal adjuvant comprises a detoxified mutant A subunit or detoxified mutant holotoxin of pertussis toxin (PT) or Pseudomonas endotoxin A, wherein the antigen is not the detoxified mutant. The present invention is also directed to methods for the manufacture of the same, and to methods of enhancing an immune response to an antigen in a mammal comprising administering to the mammal the immunogenic compositions.



Classifications:
International (IPC 8-9): A01N37/18 A61K38/00 A61K39/00 A61K39/02 A61K39/05 A61K39/095 A61K39/10 A61K39/106 A61K39/108 A61K39/12 A61K39/13 A61K39/145 A61K39/245 A61K39/38 A61K39/39 A61K39/395 A61K45/00 A61K47/00 A61K9/52 A61P25/28 A61P31/04 A61P31/12 A61P35/00 A61P37/02 A61P37/08 C07K14/245 (Advanced/Invention); A61K39/395 (Advanced/Non-invention); A61K39/00 A61K39/39 A61K39/395 C07K14/195 (Core/Invention)
International (IPC 1-7): A61K39/00 A61K39/02 A61K39/38 A61K39/39
CPC: Y10S424/832 C07K14/245 A61K39/00 A61K39/395 A61K2039/55544 Y02A50/466
European: A61K39/00 A61K39/395 C07K14/245 K61K39/555B3
US: 424/184.1 424/184.100P 424/204.1 424/206.1 424/217.1 424/231.1 424/234.1 424/234.100P 424/235.1 424/235.100S 424/236.1 424/240.1 424/245.1 424/249.1 424/250.1 424/254.1 424/257.1 424/261.1 424/264.1 424/265.1 424/278.1 424/282.1 424/832 514/1.1 514/12 514/2 514/2.4 514/2.6 514/2.8 514/3.7

Family:

Publication number	Publication date	Application number	Application date
AT187078 E	19991215	AT19940903889T	19941222
AU199512785 A1	19950710	AU19950012785	19941222
CA2179771 AA	19960621	CA19942179771	19941222
CA2179771 C	20010220	CA19942179771	19941222
DE69421939 D1	20000105	DE19946021939	19941222
DE69421939 T2	20000615	DE19946021939T	19941222
DE69421939 T3	20091105	DE19946021939T	19941222
DK0732937 T3	20000501	DK19950903889T	19941222
DK0732937 T3	20000501	DK19940903889T	19941222
DK0732937 T4	20090608	DK19940903889T	19941222
DK0732937 T4	20090608	DK19950903889T	19941222
EP0732937 A1	19960925	EP19950903889	19941222
EP0732937 B1	19991201	EP19950903889	19941222
EP0732937 B2	20090318	EP19950903889	19941222
ES2139879 T3	20000216	ES19950903889T	19941222
ES2139879 T5	20090610	ES19950903889T	19941222
GB9326174 A0	19940223	GB19930026174	19931222
GR3032497 T3	20000531	GR20000400191T	20000127
JP10500099 T2	19980106	JP19950517300T	19941222
JP2006143729 A2	20060608	JP20050335023	20051118
JP2009298812 A2	20091224	JP20090221669	20090925
JP2010184934 A2	20100826	JP20100124422	20100531
JP2012246326 A2	20121213	JP20120206594	20120920
JP4283889 B2	20090624	JP19950517300T	19941222
JP5148577 B2	20130220	JP20090221669	20090925
PT732937 T	20000531	PT19950903889T	19941222
US2002187154 AA	20021212	US20020163448	20020604
US2004028690 AA	20040212	US20030351075	20030124
US2006177469 AA	20060810	US20060399571	20060406
US7070781 BB	20060704	US20030351075	20030124
US7485304 BB	20090203	US20060399571	20060406
WO9517211 A1	19950629	WO1995IB00013	19941222

Priority:

GB19930026174 19931222
US19940646333 19941222
JP19950517300T 19941222
US19980046098 19980323
US20060399571 20060406
WO1994IB00068 19940324
JP20050335023 19941222
WO1995IB00013 19941222
US20020163448 20020604
JP19950517300 19941222
JP20090221669 19941222
US19960646333 19960605
US20030351075 20030124

Probable Assignee: NOVARTIS AG

Assignee(s): (std): BIOCINE SCLAVO ; BIOCINE SPA ; RAPPUOLI RINO ; CHIRON SPA ; CHIRON SRL ; NOVARTIS VACCINES AND DIAGNOSTICS SRL ; NOVARTIS VACCINES AND DIAGNOSTIC ; NOVARTIS AG

Assignee(s): NOVARTIS VACCINES AND DIAGNOSTICS S R L ; BIOCINE S P A ; CHIRON S R L ; CHIRON S P A ; CHIRON S P A SIENA

Inventor(s): (std): RINO RAPPUOLI ; RAPPUOLI RINO

Agent(s): FB RICE; FB RICE PTY LTD; BORDEN LADNER GERVAIS LLP; HALLYBONE HUW GEORGE ET AL; CHIRON INTELLECTUAL PROPERTY R440 CORP; NOVARTIS VACCINES AND DIAGNOSTICS SRL; PASTERNAK DAHNA S; DAHNA S

Designated states: AM AT AU BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CZ DE DK EE ES FI FR GA GB GE GN GR HU IE IT JP KE KG KP KR KZ LI LK LR LT LU LV MC MD MG ML MN MR MW NE NL NO NZ PL PT RO RU SD SE SI SK SN SZ TD TG TJ TT UA US UZ VN

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT187078 E	19991215	LSGT	+	granted / extensions (spc, cpc, pte)	
AT187078 E	20091115	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	REF DOCUMENT NUMBER : 0732937 COUNTRY OF REF DOCUMENT : EP
AT187078 E	20141222	PEXP		Calculated Patent Term Expiry	
AU199512785 A1	19950710	LSPB	+	published / reissued	
CA2179771 AA	19960621	LSPB	+	published / reissued	
CA2179771 AA	19960806	LSES	+EEER	EXAMINATION REQUEST	
CA2179771 C	20010220	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2179771 C	20150202	LSLE	-MKLA	LAPSED	EFFECTIVE DATE : 20141222
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DE69421939 D1	20001207	LSOP	-8363	OPPOSITION AGAINST THE PATENT	
DE69421939 D1	20040519	LSAS	8327	CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER	PARTYTYPE : OWNER OWNER : CHIRON S.R.L., SIENA, IT
DE69421939 D1	20081016	LSAS	8327	CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER	PARTYTYPE : OWNER OWNER : NOVARTIS VACCINES AND DIAGNOSTICS S.R.L., SIEN, IT
DE69421939 D1	20090528	LSOP	+8366	RESTRICTED MAINTAINED AFTER OPPOSITION PROCEEDINGS	
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DE69421939 T2	20141222	PEXP		Calculated Patent Term Expiry	
DE69421939 T3	20091105	LSGT	+	granted / extensions (spc, cpc, pte)	
DE69421939 T3	20141222	PEXP		Calculated Patent Term Expiry	
DK0732937 T3	20000501	LSGT	+	granted / extensions (spc, cpc, pte)	
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DK0732937 T3	20141222	PEXP		Calculated Patent Term Expiry	
DK0732937 T3	20141222	PEXP		Calculated Patent Term Expiry	
EP0732937 A1	19960925	LSPB	+	published / reissued	
EP0732937 A1	19960925	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19960620
EP0732937 A1	19970618	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 19970506
EP0732937 A1	19990203	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : CHIRON S.P.A.
EP0732937 B1	19991201	LSGT	+	granted / extensions (spc, cpc, pte)	
EP0732937 B1	19991215	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP

EP0732937 B1	20000126	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP0732937 B1	20000201	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONOFLAPSE : THE PATENT HAS BEEN ANNULLED BY A DECISION OF A NATIONAL AUTHORITY LAPSED DATE : 20000201
EP0732937 B1	20000216	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2139879 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP0732937 B1	20001102	LSOP	-26	OPPOSITION FILED	PARTYTYPE : OPPONENT OPPONENT : PEPTIDE THERAPEUTICS LIMITED EFFECTIVE DATE : 20000901
EP0732937 B1	20001220	LSOP	-26	OPPOSITION FILED	PARTYTYPE : OPPONENT OPPONENT : PEPTIDE THERAPEUTICS LIMITED EFFECTIVE DATE : 20000831
EP0732937 B1	20001220	LSOP	-26	OPPOSITION FILED	PARTYTYPE : OPPONENT OPPONENT : AMERICAN HOME PRODUCTS CORPORATION EFFECTIVE DATE : 20000901
EP0732937 B1	20010102	LSOP	-NLR1	NL: OPPOSITION HAS BEEN FILED WITH THE EPO	PARTYTYPE : OPPONENT REF COUNTRY CODE : EP OPPONENT : PEPTIDE THERAPEUTICS LIMITED
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EP0732937 B1	20010627	LSOP	-26	OPPOSITION FILED	PARTYTYPE : OPPONENT OPPONENT : PEPTIDE THERAPEUTICS LIMITED EFFECTIVE DATE : 20000831
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EP0732937 B1	20010903	LSOP	-NLR1	NL: OPPOSITION HAS BEEN FILED WITH THE EPO	PARTYTYPE : OPPONENT REF COUNTRY CODE : EP OPPONENT : PEPTIDE THERAPEUTICS LIMITED
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EP0732937 B1	20030115	LSOP	-R26	OPPOSITION FILED (CORRECTED)	PARTYTYPE : OPPONENT OPPONENT : PEPTIDE THERAPEUTICS LIMITED * 20000901 WYETH * 20 EFFECTIVE DATE : 20000831

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EP0732937 B1	20041115	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : CH OWNER : CHIRON S.R.L. REF LEGAL EVENT CODE : PFA OLDPARTY : CHIRON S.P.A.#VIA FIORENTINA, 1#53100 SIENA (IT) -TRANSFER TO- CHIRON S.R.L.#VIA FIORENTINA, 1#53100 SIENA (IT)
EP0732937 B1	20050302	LSAS	RAP2	RIGHTS OF A PATENT TRANSFERRED	PARTYTYPE : OWNER OWNER : CHIRON S.R.L.
EP0732937 B1	20061231	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20061231 YEAR OF FEE PAYMENT : 13
EP0732937 B1	20070124	LSAS	RAP2	RIGHTS OF A PATENT TRANSFERRED	PARTYTYPE : OWNER OWNER : NOVARTIS VACCINES AND DIAGNOSTICS S.R.L.
EP0732937 B1	20080123	LSOP	-R26	OPPOSITION FILED (CORRECTED)	PARTYTYPE : OPPONENT OPPONENT : WYETH EFFECTIVE DATE : 20000901
EP0732937 B1	20080123	LSOP	-R26	OPPOSITION FILED (CORRECTED)	PARTYTYPE : OPPONENT OPPONENT : SANOFI PASTEUR LIMITED EFFECTIVE DATE : 20000831
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EP0732937 B1	20080331	LSAS	BECN	BE: CHANGE OF HOLDER'S NAME	PARTYTYPE : OWNER REF COUNTRY CODE : EP OWNER : NOVARTIS VACCINES AND DIAGNOSTICS S.R.L. EFFECTIVE DATE : 20080331
EP0732937 B1	20080430	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : CH OWNER : NOVARTIS VACCINES AND DIAGNOSTICS S.R.L. REF LEGAL EVENT CODE : PFA OLDPARTY : CHIRON S.R.L.#VIA FIORENTINA, 1#53100 SIENA (IT) -TRANSFER TO- NOVARTIS VACCINES AND DIAGNOSTICS S.R.L.#VIA FIORENTINA 1#53100 SIENA (SI) (IT)
EP0732937 B1	20081017	LSAS	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : CD
EP0732937 B1	20141222	PEXP		Calculated Patent Term Expiry	
EP0732937 B2	20090318	LSGT	+	granted / extensions (spc, cpc, pte)	
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EP0732937 B2	20090331	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : AEN TEXT : AUFRECHTERHALTUNG DES

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EP0732937 B2	20090506	LSOP	NLR2	NL: DECISION OF OPPOSITION	REF COUNTRY CODE : EP EFFECTIVE DATE : 20090318
EP0732937 B2	20090515	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : EP REF DOCUMENT NUMBER : 20090401183 COUNTRY OF REF DOCUMENT : GR
EP0732937 B2	20090610	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : DC2A DATE OF REF DOCUMENT : 20090423 KIND CODE OF REF DOCUMENT : T5 DESIGNATED STATE(S) :
EP0732937 B2	20090831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20071222
EP0732937 B2	20110228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20110118 YEAR OF FEE PAYMENT : 17
EP0732937 B2	20110331	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20101222 YEAR OF FEE PAYMENT : 17
EP0732937 B2	20110531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20101215 YEAR OF FEE PAYMENT : 17
EP0732937 B2	20121231	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20121211 YEAR OF FEE PAYMENT : 19
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EP0732937 B2	20130329	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20121127 YEAR OF FEE PAYMENT : 19

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EP0732937 B2	20131031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20130702
EP0732937 B2	20131031	LSDW	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R119 REF DOCUMENT NUMBER : 69421939 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20130702
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EP0732937 B2	20141031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20140702
EP0732937 B2	20141128	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20131222
EP0732937 B2	20141128	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20131231
EP0732937 B2	20150102	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : PT REF LEGAL EVENT CODE : MM4A TEXT : MAXIMUM VALIDITY LIMIT REACHED EFFECTIVE DATE : 20141222
EP0732937 B2	20150130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA	COUNTRY OF REF DOCUMENT : DK NOTIFICATIONOFLAPSE : LAPSE

				POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20131231
EP0732937 B2	20150407	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20150407
EP0732937 B2	20150430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20131223
EP0732937 B2	20150430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF EXPIRATION OF PROTECTION LAPSED DATE : 20150102
EP0732937 B2	20150731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF EXPIRATION OF PROTECTION LAPSED DATE : 20140701
EP0732937 B2	20141222	PEXP		Calculated Patent Term Expiry	
ES2139879 T3	20000216	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2139879 T3	20000216	LSGT	+FG2A	DEFINITIVE PROTECTION	REF DOCUMENT NUMBER : 732937 COUNTRY OF REF DOCUMENT : ES
ES2139879 T3	20141222	PEXP		Calculated Patent Term Expiry	
ES2139879 T5	20090610	LSGT	+	granted / extensions (spc, cpc, pte)	
GR3032497 T3	20000531	LSGT	+	granted / extensions (spc, cpc, pte)	
GR3032497 T3	20200127	PEXP		Calculated Patent Term Expiry	
JP10500099 T2	19980106	LSPB	+	published / reissued	
JP10500099 T2	20050823	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20050823
JP10500099 T2	20051208	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20051118
JP10500099 T2	20051208	LSAS	A72	NOTIFICATION OF CHANGE IN NAME OF APPLICANT	TEXT : JAPANESE INTERMEDIATE CODE: A721 EFFECTIVE DATE : 20051118
JP10500099 T2	20070410	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20070410
JP10500099 T2	20080520	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20080520
JP10500099 T2	20080701	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20080630
JP10500099 T2	20080813	LSAL	A911	TRANSFER OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A911 EFFECTIVE DATE : 20080814
JP10500099 T2	20090227	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP10500099 T2	20090304	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20090303

				(UTILITY MODEL)	
JP10500099 T2	20090305	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01
JP10500099 T2	20090326	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20090323
JP10500099 T2	20090327	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP10500099 T2	20090330	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP2006143729 A2	20060608	LSPB	+	published / reissued	
JP2006143729 A2	20081114	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20081113
JP2006143729 A2	20090513	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20090512
JP2006143729 A2	20090703	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A132 EFFECTIVE DATE : 20090702
JP2006143729 A2	20090926	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20090925
JP2006143729 A2	20091020	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A821 EFFECTIVE DATE : 20090925
JP2006143729 A2	20091207	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20091204
JP2006143729 A2	20100406	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20100405
JP2006143729 A2	20100525	LSWD	-A761	WRITTEN WITHDRAWAL OF APPLICATION	TEXT : JAPANESE INTERMEDIATE CODE: A761 EFFECTIVE DATE : 20100524
JP2009298812 A2	20091224	LSPB	+	published / reissued	
JP2009298812 A2	20090929	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20090925
JP2009298812 A2	20100601	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20100531
JP2009298812 A2	20111004	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20111003
JP2009298812 A2	20120403	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20120402
JP2009298812 A2	20120419	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A821 EFFECTIVE DATE : 20120402
JP2009298812 A2	20120523	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20120522
JP2009298812 A2	20120921	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20120920

JP2009298812 A2	20121009	LSAL	A911	TRANSFER OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A911 EFFECTIVE DATE : 20121005
JP2009298812 A2	20121030	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2009298812 A2	20121102	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20121101
JP2009298812 A2	20121206	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20121128
JP2009298812 A2	20121207	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
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JP2010184934 A2	20100826	LSPB	+	published / reissued	
JP2010184934 A2	20100602	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20100531
JP2010184934 A2	20110519	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20110518
JP2010184934 A2	20111004	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20111003
JP2010184934 A2	20120403	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20120402
JP2010184934 A2	20120523	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20120522
JP2010184934 A2	20120921	LSWD	-A761	WRITTEN WITHDRAWAL OF APPLICATION	TEXT : JAPANESE INTERMEDIATE CODE: A761 EFFECTIVE DATE : 20120920
JP2012246326 A2	20121213	LSPB	+	published / reissued	
JP2012246326 A2	20120924	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20120920
JP2012246326 A2	20121129	LSWD	-A761	WRITTEN WITHDRAWAL OF APPLICATION	TEXT : JAPANESE INTERMEDIATE CODE: A761 EFFECTIVE DATE : 20121128
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JP4283889 B2	20120301	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP4283889 B2	20120306	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 4
JP4283889 B2	20130327	LSLE	-LAPS	CANCELLATION BECAUSE OF NO PAYMENT OF ANNUAL FEES	
JP4283889 B2	20141222	PEXP		Calculated Patent Term Expiry	
JP5148577 B2	20130220	LSGT	+	granted / extensions (spc, cpc, pte)	
JP5148577 B2	20121108	LSGT	+A01	特許査定書 (Decision of patent grant)	

JP5148577 B2	20121204	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP5148577 B2	20141222	LSLE	-EXPY	CANCELLATION BECAUSE OF COMPLETION OF TERM	
JP5148577 B2	20290925	PEXP		Calculated Patent Term Expiry	
PT732937 T	20000531	LSGT	+	granted / extensions (spc, cpc, pte)	
PT732937 T	20150531	PEXP		Calculated Patent Term Expiry	
US2002187154 AA	20021212	LSPB	+	published / reissued	
US2002187154 AA	20020708	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CHIRON S.P.A., ITALY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:RAPPUOLI, RINO; REEL/FRAME:012860/0739 EFFECTIVE DATE : 20020611
US2002187154 AA	20031105	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CHIRON S.R.L., ITALY OLDPARTY : CHANGE OF NAME; ASSIGNOR:CHIRON S.P.A.; REEL/FRAME:014699/0226 EFFECTIVE DATE : 20021212
US2002187154 AA	20031105	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CHIRON S.R.L.,ITALY OLDPARTY : CHANGE OF NAME; ASSIGNOR:CHIRON S.P.A.; REEL/FRAME:014699/0226 EFFECTIVE DATE : 20021212
US2002187154 AA	20040517	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2004028690 AA	20040212	LSPB	+	published / reissued	
US2004028690 AA	20140804	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US2006177469 AA	20060810	LSPB	+	published / reissued	
US7070781 BB	20060704	LSGT	+	granted / extensions (spc, cpc, pte)	
US7070781 BB	20031105	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CHIRON S.R.L., ITALY OLDPARTY : CHANGE OF NAME; ASSIGNOR:CHIRON S.P.A.; REEL/FRAME:014699/0226 EFFECTIVE DATE : 20021212
US7070781 BB	20031105	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CHIRON S.R.L.,ITALY OLDPARTY : CHANGE OF NAME; ASSIGNOR:CHIRON S.P.A.; REEL/FRAME:014699/0226 EFFECTIVE DATE : 20021212
US7070781 BB	20090918	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CHIRON SPA, ITALY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:RAPPUOLI, RINO; REEL/FRAME:023245/0835 EFFECTIVE DATE : 20020611
US7070781 BB	20090921	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : NOVARTIS VACCINES AND DIAGNOSTICS S.R.L., ITALY OLDPARTY : CHANGE OF NAME; ASSIGNOR:CHIRON S.R.L.; REEL/FRAME:023273/0343 EFFECTIVE DATE : 20060503
US7070781 BB	20091202	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US7070781 BB	20140704	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US7070781 BB	20140804	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362

US7070781 BB	20140826	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20140704
US7070781 BB	20230124	PEXP		Calculated Patent Term Expiry	
US7485304 BB	20090203	LSGT	+	granted / extensions (spc, cpc, pte)	
US7485304 BB	20090114	LSGT	PAT1	Patented Case	
US7485304 BB	20120705	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US7485304 BB	20170203	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US7485304 BB	20170306	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US7485304 BB	20170306	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US7485304 BB	20170328	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20170203
US7485304 BB	20260406	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
WO9517211 A1	19950629	LSPB	+	published / reissued	
WO9517211 A1	19960605	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 1996 646333 COUNTRY OF REF DOCUMENT : US DATE OF REF DOCUMENT : 19960605 KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO9517211 A1	19960614	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1995903889 COUNTRY OF REF DOCUMENT : EP
WO9517211 A1	19960621	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2179771 COUNTRY OF REF DOCUMENT : CA
WO9517211 A1	19960925	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1995903889 COUNTRY OF REF DOCUMENT : EP
WO9517211 A1	19961031	LSWD	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : 8642
WO9517211 A1	19991201	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1995903889 COUNTRY OF REF DOCUMENT : EP

48) Family number: 28174075 (US2002004063A)

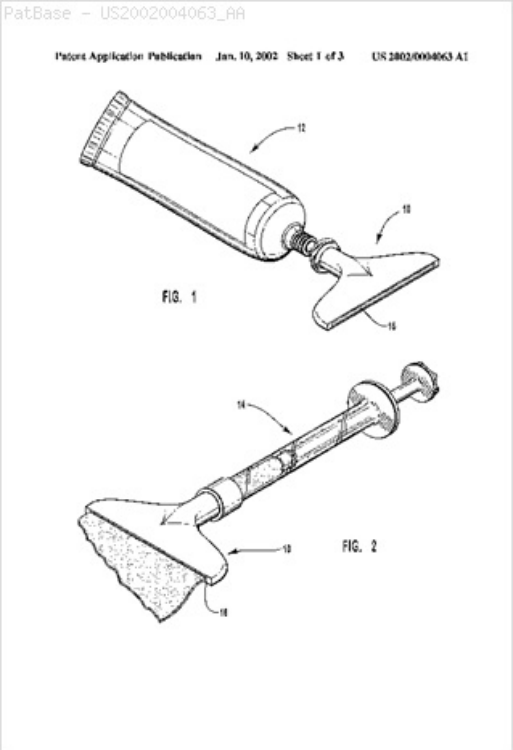
Title: METHODS AND APPARATUS FOR DRUG DELIVERY INVOLVING PHASE CHANGING FORMULATIONS

Abstract: This invention relates to an apparatus and method of drug delivery on a human body surface. The formulation comprises a drug, a conversion agent capable of converting the formulation from a less solid phase to a coherent, soft, solid phase, and a vehicle medium or carrier for the drug and conversion agent. The drug formulation is applied to this human body surface in its less than solid phase and is subsequently converted to a soft solid phase while the drug is being delivered through the human body surface. After delivery of the drug is complete, the soft solid formulation can be removed or peeled from the body surface as a coherent solid formulation. The drug formulation provides control over drug delivery rates and allows the formulation to be removed without leaving a messy, residual formulation on the body surface.

FDA Data:

Application number	Active ingredient	Proprietary name	Applicant	Date of approval
021717	LIDOCAINE; TETRACAINE	LIDOCAINE AND TETRACAINE	GALDERMA LABS LP	Jun 29, 2006
021717	LIDOCAINE; TETRACAINE	PLIAGLIS	GALDERMA LABS LP	Jun 29, 2006
021717	LIDOCAINE; TETRACAINE	PLIAGLIS	TARO PHARMS	Jun 29, 2006

Classifications:
International (IPC 8-9): A61F13/00 A61F13/02 A61K31/167 A61K31/245 A61K31/351 A61K31/4174 A61K31/4353 A61K31/4418 A61K31/445 A61K31/4468 A61K31/455 A61K31/47 A61K31/497 A61K31/506 A61K31/522 A61K31/5575 A61K31/568 A61K31/573 A61K31/60 A61K31/616 A61K31/7036 A61K31/7042 A61K31/7056 A61K45/00 A61K47/02 A61K47/04 A61K47/10 A61K47/22 A61K47/24 A61K47/30 A61K47/32 A61K47/34 A61K47/36 A61K47/38 A61K47/42 A61K47/44 A61K47/46 A61K9/00 A61K9/06 A61K9/08 A61K9/10 A61K9/70 A61M35/00 A61P15/10 A61P17/02 A61P23/02 A61P43/00 (Advanced/Invention);
A61K31/167 A61K31/351 A61K31/4353 A61K31/4418 A61K31/445 A61K31/4468 A61K31/455 A61K31/47 A61K31/506 A61K31/568 A61K31/60 A61K31/7042 A61K47/10 A61K47/22 A61K47/24 A61K47/32 A61K47/36 A61K47/38 A61K47/42 A61K47/46 A61K9/10 A61M35/00 (Advanced/Non-invention)
International (IPC 1-7): A01N25/34 A61F13/00 A61F13/02 A61K31/16 A61K31/167 A61K31/235 A61K31/245 A61K31/351 A61K31/4174 A61K31/4353 A61K31/4418 A61K31/445 A61K31/4468 A61K31/455 A61K31/47 A61K31/497 A61K31/506 A61K31/522 A61K31/5575 A61K31/568 A61K31/573 A61K31/60 A61K31/616 A61K31/7036 A61K31/7042 A61K31/7056 A61K45/08 A61K47/04 A61K47/10 A61K47/22 A61K47/24 A61K47/30 A61K47/32 A61K47/36 A61K47/38 A61K47/42 A61K47/46 A61K9/00 A61K9/10 A61K9/70 A61M35/00 A61P15/10 A61P17/02 A61P23/02
CPC: Y10S514/817 Y10S514/944 A61K9/7015 A61K9/0034
European: A61K9/00M8 A61K9/70D
US: 424/400 424/400S 424/402 424/443 424/443P 424/448 424/449 424/449S 424/78.02 514/772.2 514/817 514/944



Family:

Publication number	Publication date	Application number	Application date
AT345757 E	20061215	AT20000966921T	20000927
AU200077198 A1	20010430	AU20000077198	20000927
AU200077198 A5	20010430	AU20000077198D	20000927
CA2386017 AA	20020325	CA20002386017	20000927
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CN100367927 C	20080213	CN20008013501	20000927
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DE60032021 D1	20070104	DE20006032021	20000927
DE60032021 D1	20070104	DE20006032021T	20000927
DE60032021 T2	20070614	DE20006032021T	20000927
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EP1244401 A4	20040811	EP20000966921	20000927
EP1244401 B1	20061122	EP20000966921	20000927
EP1702597 A2	20060920	EP20060014222	20000927
EP1702597 A3	20080326	EP20060014222	20000927
ES2276697 T3	20070701	ES20000966921T	20000927
JP2003510259 T2	20030318	JP20010526122T	20000927
JP2007126462 A2	20070524	JP20060316632	20061124
JP2007217431 A2	20070830	JP20070140999	20070528

JP2012246315 A2	20121213	JP20120203191	20120914
PT1244401 T	20070228	PT20000966921T	20000927
US2002004063 AA	20020110	US19990407720	19990928
US6528086 BB	20030304	US19990407720	19990928
WO0122907 A1	20010405	WO2000US26478	20000927

Priority:

US19990407720 19990928 EP20000966921 20000927 JP20010526122 20000927
WO2000US26478 20000927 JP20070140999 20000927 JP20010526122T 20000927

Probable Assignee: CRESCITA THERAPEUTICS INC

Assignee(s): (std): ZARS INC ; ZARS

Assignee(s): ZARS PHARMA INC ; ZHANG JIE ; ZIONS FIRST NATIONAL BANK ; ZARS PHARMA INC WAS KNOWN AS ZARS INC.. ; CRESCITA THERAPEUTICS INC ; NUVO RESEARCH AMERICA INC ; NUVO RESEARCH INC ; PALADIN LABS INC

Inventor(s): (std): JIE ZHANG ; ZHANG JIE

Agent(s): CASSAN MACLEAN; CASSAN MACLEAN IP AGENCY INC; GEMMELL PETER ALAN ET AL; OHNO SEIJI; MORITA KOJI; TANAKA REIKO; KITANO TAKESHI

Designated states: AE AG AL AM AT AU AZ BA BB BE BG BR BY BZ CA CH CN CR CU CY CZ DE DK DM DZ EE ES FI FR GB GD GE GH GM GR HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK MN MW MX NL NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT345757 E	20061215	LSGT	+	granted / extensions (spc, cpc, pte)	
AT345757 E	20070715	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	REF DOCUMENT NUMBER : 1244401 COUNTRY OF REF DOCUMENT : EP
AT345757 E	20200927	PEXP		Calculated Patent Term Expiry	
AU200077198 A1	20010430	LSPB	+	published / reissued	
AU200077198 A5	20020606	LSLE	-MK6	APPLICATION LAPSED SECTION 142(2)(F)/REG. 8.3(3) - PCT APPLIC. NOT ENTERING NATIONAL PHASE	
CA2386017 AA	20020325	LSPB	+	published / reissued	
CA2386017 AA	20020415	LSES	+EEER	EXAMINATION REQUEST	
CA2386017 C	20100406	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2386017 C	20200927	PEXP		Calculated Patent Term Expiry	
CN100367927 C	20080213	LSGT	+	granted / extensions (spc, cpc, pte)	
CN100367927 C	20080213	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN100367927 C	20200927	PEXP		Calculated Patent Term Expiry	
CN101219108 A	20080716	LSPB	+	published / reissued	
CN101219108 A	20080716	LSPB	+C06	PUBLICATION	
CN101219108 A	20130327	LSRV	-C12	REJECTION OF A PATENT APPLICATION AFTER ITS PUBLICATION	
CN1376043 A	20021023	LSPB	+	published / reissued	
CN1376043 A	20021023	LSPB	+C06	PUBLICATION	
DE60032021 D1	20071213	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
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DE60032021 T2	20070614	LSGT	+	granted / extensions (spc, cpc, pte)	
DE60032021 T2	20071213	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE60032021 T2	20200927	PEXP		Calculated Patent Term Expiry	
DK1244401 T3	20070219	LSGT	+	granted / extensions (spc,	

				cpc, pte)	
DK1244401 T3	20200927	PEXP		Calculated Patent Term Expiry	
EP1244401 A1	20021002	LSPB	+	published / reissued	
EP1244401 A1	20021002	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20020316
EP1244401 A1	20151030	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20150810 YEAR OF FEE PAYMENT : 16
EP1244401 A1	20151130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20150911 YEAR OF FEE PAYMENT : 16
EP1244401 A1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20160921 YEAR OF FEE PAYMENT : 17
EP1244401 A1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20160921 YEAR OF FEE PAYMENT : 17
EP1244401 A1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20160816 YEAR OF FEE PAYMENT : 17
EP1244401 A4	20040811	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	EFFECTIVE DATE : 20040623
EP1244401 A4	20041117	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20040930
EP1244401 A4	20060802	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : ZARS, INC.
EP1244401 B1	20061122	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1244401 B1	20061122	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP1244401 B1	20061215	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1244401 B1	20061229	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP1244401 B1	20070215	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : EP REF DOCUMENT NUMBER : 20070400211 COUNTRY OF REF DOCUMENT : GR
EP1244401 B1	20070701	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2276697 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP1244401 B1	20071031	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20070823
EP1244401 B1	20110429	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20070927
EP1244401 B1	20110729	LSRE	+PGRI	PATENT REINSTATED IN CONTRACTING STATE [ANNOUNCED FROM	COUNTRY OF REF DOCUMENT : IT REINSTATED DATE :

				NATIONAL OFFICE TO EPO]	20110616
EP1244401 B1	20150629	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 16
EP1244401 B1	20151030	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20150922 YEAR OF FEE PAYMENT : 16
EP1244401 B1	20151030	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20150911 YEAR OF FEE PAYMENT : 16
EP1244401 B1	20151030	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20150909 YEAR OF FEE PAYMENT : 16
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EP1244401 B1	20151030	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20150728 YEAR OF FEE PAYMENT : 16
EP1244401 B1	20151130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20150812 YEAR OF FEE PAYMENT : 16
EP1244401 B1	20160229	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY PAYMENT DATE : 20150810 YEAR OF FEE PAYMENT : 16
EP1244401 B1	20160816	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 17
EP1244401 B1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20160912 YEAR OF FEE PAYMENT : 17
EP1244401 B1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20160920 YEAR OF FEE PAYMENT : 17
EP1244401 B1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20160920 YEAR OF FEE PAYMENT : 17
EP1244401 B1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20160913 YEAR OF FEE PAYMENT : 17
EP1244401 B1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20160914 YEAR OF FEE PAYMENT : 17
EP1244401 B1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20160826 YEAR OF FEE PAYMENT : 17
EP1244401 B1	20161230	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20160725 YEAR OF FEE PAYMENT : 17

EP1244401 B1	20161230	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20160810 YEAR OF FEE PAYMENT : 17
EP1244401 B1	20170428	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20160930
EP1244401 B1	20170428	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20160927
EP1244401 B1	20170428	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP1244401 B1	20170531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20170327
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EP1244401 B1	20170628	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP1244401 B1	20170705	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : ML REF DOCUMENT NUMBER : 20070400211 COUNTRY OF REF DOCUMENT : GR EFFECTIVE DATE : 20170411
EP1244401 B1	20170731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20160927
EP1244401 B1	20170731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20160930
EP1244401 B1	20170731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20170411
EP1244401 B1	20170731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20160930
EP1244401 B1	20170925	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 18
EP1244401 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20170927 YEAR OF FEE PAYMENT : 18

EP1244401 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170925 YEAR OF FEE PAYMENT : 18
EP1244401 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20170925 YEAR OF FEE PAYMENT : 18
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EP1244401 B1	20180423	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DK REF LEGAL EVENT CODE : EBP EFFECTIVE DATE : 20170930
EP1244401 B1	20180502	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SE REF LEGAL EVENT CODE : EUG
EP1244401 B1	20180515	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MM01 REF DOCUMENT NUMBER : 345757 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20170927
EP1244401 B1	20180629	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20171001
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EP1244401 B1	20180831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20170927
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EP1244401 B1	20180925	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 19
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EP1244401 B1	20190228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20181001 YEAR OF FEE PAYMENT : 19
EP1244401 B1	20200927	PEXP		Calculated Patent Term Expiry	
EP1702597 A2	20060920	LSPB	+	published / reissued	
EP1702597 A3	20080618	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20080509
EP1702597 A3	20080730	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20080627
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ES2276697 T3	20070701	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2276697 T3	20200927	PEXP		Calculated Patent Term Expiry	
JP2003510259 T2	20030318	LSPB	+	published / reissued	
JP2003510259 T2	20060524	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20060523
JP2003510259 T2	20061125	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20061124
JP2003510259 T2	20070207	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20070206
JP2003510259 T2	20070508	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20070507

JP2003510259 T2	20070621	LSAL	A911	TRANSFER OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A911 EFFECTIVE DATE : 20070620
JP2003510259 T2	20070717	LSAL	-A912	REMOVAL OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A912 EFFECTIVE DATE : 20070713
JP2003510259 T2	20070928	LSWD	-A761	WRITTEN WITHDRAWAL OF APPLICATION	TEXT : JAPANESE INTERMEDIATE CODE: A761 EFFECTIVE DATE : 20070927
JP2007126462 A2	20070524	LSPB	+	published / reissued	
JP2007126462 A2	20100421	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20100420
JP2007126462 A2	20101021	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20101020
JP2007126462 A2	20110309	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20110308
JP2007126462 A2	20120516	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20120515
JP2007217431 A2	20070830	LSPB	+	published / reissued	
JP2007217431 A2	20070928	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20070927
JP2007217431 A2	20070928	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20070927
JP2007217431 A2	20110216	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20110215
JP2007217431 A2	20110816	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20110815
JP2007217431 A2	20120516	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20120515
JP2007217431 A2	20120915	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20120914
JP2007217431 A2	20121005	LSAL	A911	TRANSFER OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A911 EFFECTIVE DATE : 20121004
JP2012246315 A2	20121213	LSPB	+	published / reissued	
JP2012246315 A2	20120920	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20120919
JP2012246315 A2	20120920	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20120919
JP2012246315 A2	20140319	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20140318
JP2012246315 A2	20140813	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20140812
PT1244401 T	20070228	LSGT	+	granted / extensions (spc, cpc, pte)	
PT1244401 T	20200927	PEXP		Calculated Patent Term Expiry	

US2002004063 AA	20020110	LSPB	+	published / reissued	
US2002004063 AA	20030213	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US6528086 BB	20030304	LSGT	+	granted / extensions (spc, cpc, pte)	
US6528086 BB	19990928	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ZARS, UTAH OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ZHANG, JIE; REEL/FRAME:010298/0336 EFFECTIVE DATE : 19990928
US6528086 BB	20030213	LSGT	PAT1	Patented Case	
US6528086 BB	20060831	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6528086 BB	20100511	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ZIONS FIRST NATIONAL BANK,UTAH OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:ZARS PHARMA, INC.; REEL/FRAME:024369/0046 EFFECTIVE DATE : 20100503
US6528086 BB	20100511	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ZIONS FIRST NATIONAL BANK, UTAH OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:ZARS PHARMA, INC.; REEL/FRAME:024369/0046 EFFECTIVE DATE : 20100503
US6528086 BB	20100907	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US6528086 BB	20110513	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ZARS PHARMA, INC., FORMERLY KNOWN AS ZARS, INC., U OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:ZIONS FIRST NATIONAL BANK; REEL/FRAME:026276/0717 EFFECTIVE DATE : 20110513
US6528086 BB	20120706	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ZARS PHARMA, INC., UTAH OLDPARTY : MERGER; ASSIGNOR:ZARS, INC.; REEL/FRAME:028504/0064 EFFECTIVE DATE : 20070730
US6528086 BB	20120710	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : NUVO RESEARCH AMERICA, INC., DELAWARE OLDPARTY : CONFIRMATION OF ASSIGNMENT; ASSIGNOR:ZARS PHARMA, INC.; REEL/FRAME:028541/0011 EFFECTIVE DATE : 20120613
US6528086 BB	20120712	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : NUVO RESEARCH INC., ONTARIO OLDPARTY : CONFIRMATION OF ASSIGNMENT; ASSIGNOR:NUVO RESEARCH AMERICA, INC.; REEL/FRAME:028549/0771 EFFECTIVE DATE : 20120613
US6528086 BB	20120820	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PALADIN LABS INC., CANADA OLDPARTY : GENERAL SECURITY AGREEMENT; ASSIGNOR:NUVO RESEARCH INC.; REEL/FRAME:028816/0225 EFFECTIVE DATE : 20120524
US6528086 BB	20140903	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12

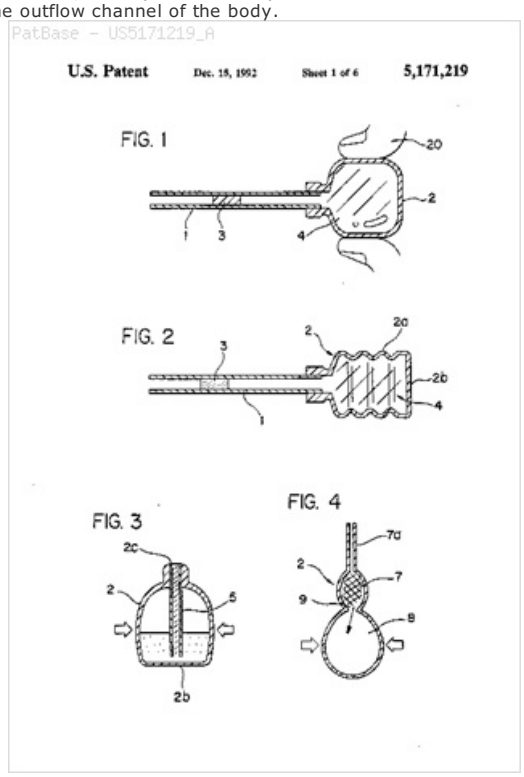
US6528086 BB	20150108	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : NUVO RESEARCH INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:PALADIN LABS INC.; REEL/FRAME:034664/0991 EFFECTIVE DATE : 20141201
US6528086 BB	20160818	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CRESCITA THERAPEUTICS INC., CANADA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:NUVO RESEARCH INC.; REEL/FRAME:039475/0668 EFFECTIVE DATE : 20160301
US6528086 BB	20190928	PEXP		Calculated Patent Term Expiry	
WO0122907 A1	20010405	LSPB	+	published / reissued	
WO0122907 A1	20020316	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2000966921 COUNTRY OF REF DOCUMENT : EP
WO0122907 A1	20020325	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2386017 COUNTRY OF REF DOCUMENT : CA
WO0122907 A1	20020328	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2001 526122 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO0122907 A1	20020328	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 008135010 COUNTRY OF REF DOCUMENT : CN
WO0122907 A1	20020905	LSWD	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : 8642
WO0122907 A1	20021002	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2000966921 COUNTRY OF REF DOCUMENT : EP
WO0122907 A1	20061122	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2000966921 COUNTRY OF REF DOCUMENT : EP

49) Family number: 29369077 (US5171219A)

Title: PHARMACEUTICAL PREPARATION ADMINISTRATOR

Abstract: A preparation administrator comprises an administrator body (1) including a solid preparation (3) and having at its one end an inflow channel for the solvent and at the other end an outflow channel for the **liquid** preparation, a solvent container (2) containing a solvent to dissolve, disperse or suspend the preparation and being connected to the inflow channel of the administrator body, and a means for ejecting the solvent together with the solid preparation in the body through the outflow channel of the body. A solid preparation (3) in the administrator body is dissolved, or suspended or dispersed in the solvent fed from the solvent container and ejected as a **liquid** preparation through the outflow channel of the body.

Classifications:
International (IPC 8-9): A61M11/00 A61M3/00 A61M31/00 A61M35/00 B05B11/02 (Advanced/Invention);
B05B11/00 (Advanced/Non-invention);
A61M11/00 A61M3/00 A61M35/00 B05B11/02 (Core/Invention);
B05B11/00 (Core/Non-invention)
International (IPC 1-7): A61M11/00 A61M3/00 A61M31/00 A61M35/00 A61M37/00
CPC: A61M35/003 B05B11/02
European: A61M35/00B B05B11/02
US: 222/162 222/320 604/142 604/416 604/82 604/85 604/90



Family:

Publication number	Publication date	Application number	Application date
AT128369 E	19951015	AT19900110805T	19900607
CA2018528 AA	19901208	CA19902018528	19900607
DE69022633 D1	19951102	DE19906022633	19900607
DE69022633 T2	19960502	DE19906022633T	19900607
DK0401822 T3	19951120	DK19900110805T	19900607
EP0401822 A2	19901212	EP19900110805	19900607
EP0401822 A3	19910320	EP19900110805	19900607
EP0401822 B1	19950927	EP19900110805	19900607
ES2080085 T3	19960201	ES19900110805T	19900607
GR3017546 T3	19951231	GR19950402564T	19950928
JP3090157 A2	19910416	JP19900105715	19900420
JP3108077 B2	20001113	JP19900105715	19900420
US5171219 A	19921215	US19900534874	19900608

Priority:
JP19890147769 19890608 JP19900105715 19900420 CA19902018528 19900607

Probable Assignee: SUMITOMO PHARMA

Assignee(s): (std): SUMITOMO PHARMA ; TAKADA YOSHIHIRO

Assignee(s): SUMITOMO PHARMACEUTICALS COMPANY LIMITED ; SUMITOMO PHARMACEUTICALS CO LTD OSAKA JP ; AISAKA AYUMI ; FUJIOKA KEIJI ; SUMITOMO PHARMACEUT CO LTD ; SUMITOMO PHARMACEUTICALS CO ; SUMITOMO PHARMACEUTICALS CO LTD

Inventor(s): (std): AISAKA AYUMI ; FUJIOKA KEIJI ; FUJIOKA TAKAHARU ; TAKADA YOSHIHIRO

Inventor(s): TAKADA YOSHIHIRO SUITA SHI OSAKA FU JP ; FUJIOKA KEIJI AMAGASAKI SHI HYOGO KEN JP ; AISAKA AYUMI MORIGUCHI SHI OSAKA FU JP

Agent(s): KIRBY EADES GALE BAKER

Designated states: AT BE CH DE DK ES FR GB GR IT LI LU NL SE

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
AT128369 E	19951015	LSGT	+	granted / extensions (spc, cpc, pte)	
AT128369 E	19960615	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	
AT128369 E	19980315	LSLE	-REN	CEASED DUE TO NON-PAYMENT OF THE ANNUAL FEE	
AT128369 E	20100607	PEXP		Calculated Patent Term Expiry	
CA2018528 AA	19901208	LSPB	+	published / reissued	
CA2018528 AA	19970509	LSES	+EEER	EXAMINATION REQUEST	
CA2018528 AA	20010607	LSLE	-FZDE	DEAD	
DE69022633 D1	19961024	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE69022633 D1	20010809	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
DE69022633 T2	19960502	LSGT	+	granted / extensions (spc, cpc, pte)	
DK0401822 T3	19951120	LSGT	+	granted / extensions (spc, cpc, pte)	
DK0401822 T3	20100607	PEXP		Calculated Patent Term Expiry	
EP0401822 A2	19901212	LSPB	+	published / reissued	
EP0401822 A2	19910306	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19901228
EP0401822 A3	19930303	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 19930115
EP0401822 B1	19950927	LSGT	+	granted / extensions (spc, cpc, pte)	
EP0401822 B1	19960201	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2080085 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP0401822 B1	19960522	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 19960522 YEAR OF FEE PAYMENT : 7
EP0401822 B1	19960607	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 19960607 YEAR OF FEE PAYMENT : 7
EP0401822 B1	19960625	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 19960625 YEAR OF FEE PAYMENT : 7
EP0401822 B1	19960628	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 19960628 YEAR OF FEE PAYMENT : 7
EP0401822 B1	19960630	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 19960630
EP0401822 B1	19960630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 19960630 YEAR OF FEE PAYMENT : 7
EP0401822 B1	19960918	LSGT	+26N	NO OPPOSITION FILED	
EP0401822 B1	19970607	LSLE	-PG25	LAPSED IN A CONTRACTING STATE	COUNTRY OF REF DOCUMENT : AT LAPSED DATE : 19970607

				[ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	
EP0401822 B1	19970607	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 19970607
EP0401822 B1	19970607	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DK REF LEGAL EVENT CODE : EBP
EP0401822 B1	19970630	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE LAPSED DATE : 19970630
EP0401822 B1	19970630	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 19970630
EP0401822 B1	19971231	LSLE	-BERE	BE: LAPSED	PARTYTYPE : OWNER REF COUNTRY CODE : EP OWNER : SUMITOMO PHARMACEUTICALS CY LTD EFFECTIVE DATE : 19970630
EP0401822 B1	19980101	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL LAPSED DATE : 19980101
EP0401822 B1	19980302	LSLE	-NLV4	NL: LAPSED OR ANULLED DUE TO NON-PAYMENT OF THE ANNUAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 19980101
EP0401822 B1	19990506	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 19990506 YEAR OF FEE PAYMENT : 10
EP0401822 B1	19990601	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 19990601 YEAR OF FEE PAYMENT : 10
EP0401822 B1	19990609	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 19990609 YEAR OF FEE PAYMENT : 10
EP0401822 B1	19990616	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 19990616 YEAR OF FEE PAYMENT : 10
EP0401822 B1	19990630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 19990630 YEAR OF FEE PAYMENT : 10
EP0401822 B1	19990831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 19990831 YEAR OF FEE PAYMENT : 10
EP0401822 B1	20000607	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20000607
EP0401822 B1	20000608	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM	COUNTRY OF REF DOCUMENT : ES NOTIFICATIONOFLAPSE : THE PATENT HAS BEEN ANNULLED BY A DECISION OF A NATIONAL AUTHORITY

				NATIONAL OFFICE TO EPO]	LAPSED DATE : 20000608
EP0401822 B1	20000608	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20000608
EP0401822 B1	20000630	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20000630
EP0401822 B1	20000630	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20000630
EP0401822 B1	20010124	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20000607
EP0401822 B1	20010215	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP0401822 B1	20010219	LSLE	-EUG	SE: EUROPEAN PATENT HAS LAPSED	REF COUNTRY CODE : EP TEXT : 90110805.0
EP0401822 B1	20010228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20010228
EP0401822 B1	20010330	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST
EP0401822 B1	20010403	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20010403
EP0401822 B1	20020401	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20020304
EP0401822 B1	20050607	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20050607
EP0401822 B1	20100607	PEXP		Calculated Patent Term Expiry	
ES2080085 T3	19960201	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2080085 T3	19960201	LSGT	+FG2A	DEFINITIVE PROTECTION	REF DOCUMENT NUMBER : 401822 COUNTRY OF REF DOCUMENT : ES
ES2080085 T3	20100607	PEXP		Calculated Patent Term Expiry	
GR3017546 T3	19951231	LSGT	+	granted / extensions (spc, cpc, pte)	
GR3017546 T3	20150928	PEXP		Calculated Patent Term Expiry	
JP3090157 A2	19910416	LSPB	+	published / reissued	
JP3108077 B2	20001113	LSGT	+	granted / extensions (spc, cpc, pte)	
JP3108077 B2	20040817	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250

JP3108077 B2	20070807	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 9
JP3108077 B2	20090908	LSLE	-LAPS	CANCELLATION BECAUSE OF NO PAYMENT OF ANNUAL FEES	
JP3108077 B2	20100420	PEXP		Calculated Patent Term Expiry	
US5171219 A	19921215	LSGT	+	granted / extensions (spc, cpc, pte)	
US5171219 A	19901015	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SUMITOMO PHARMACEUTICALS COMPANY, LIMITED, JAPAN OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNORS:FUJIOKA, KEIJI; TAKADA, YOSHIHIRO; AISAKA, AYUMI; REEL/FRAME:005467/0907 EFFECTIVE DATE : 19900907
US5171219 A	19921202	LSGT	PAT1	Patented Case	
US5171219 A	19960522	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5171219 A	20001217	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5171219 A	20010220	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20001215
US5171219 A	20180127	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US5171219 A	20180127	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US5171219 A	20100608	PEXP		Calculated Patent Term Expiry	

50) Family number: 53425077 (US2014315323A)

Title: USE OF TRANSITION-METAL OXIDE NANOPARTICLES AS SENSITIVE MATERIALS IN CHEMICAL SENSORS FOR DETECTING OR ASSAYING VAPORS OF TARGET MOLECULES

Abstract: The invention relates to the use of nanoparticles of at least one oxide of at least one transition metal doped with a rare earth element, particularly YxVO4Eu1-x nanoparticles obtained through a sol-gel process, as a sensitive material in a chemical sensor for detecting peroxide-compound vapors. The material is used in a **liquid** process, in a spray of the initial sol, or in a solid thin film after being deposited on a substrate. The inorganic, fluorescent character of the nanoparticles makes it possible to obtain a sensitive material for an optical sensor that has good performance stability over time. The intended uses are the detection of explosives or explosive precursors, particularly peroxides, the control or monitoring of atmospheric pollution and ambient-air quality, and the monitoring of industrial sites.

Classifications:
International (IPC 8-9): B82Y15/00 G01N21/64 G01N29/02 G01N29/036 G01N33/00 G01N33/22 (Advanced/Invention);
G01N21/63 G01N21/77 (Advanced/Non-invention)
CPC: G01N33/0004 G01N21/643 G01N29/022 G01N29/036 G01N33/22 G01N2021/7786 G01N2291/0255 G01N2291/0256 Y10T436/206664
US: 436/135

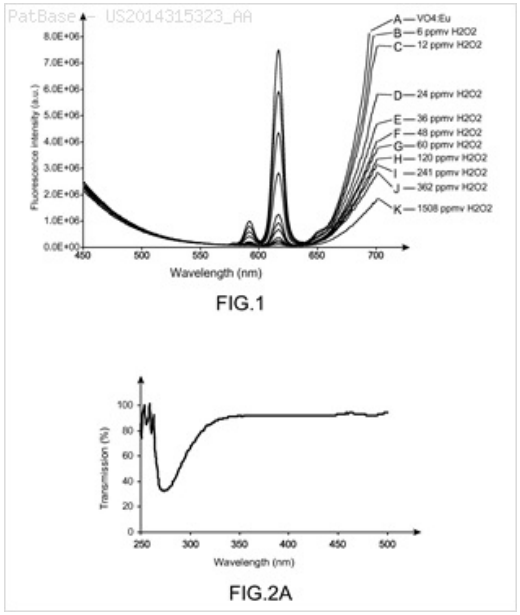


FIG.1
FIG.2A

Family:

Publication number	Publication date	Application number	Application date
DE602012028564 D1	20170316	DE201260028564T	20120928
DE602012052478 D1	20181115	DE201260052478T	20120928
EP2761285 A1	20140806	EP20120762649	20120928
EP2761285 B1	20170208	EP20120762649	20120928
EP3165915 A1	20170510	EP20160206006	20120928
EP3165915 B1	20181017	EP20160206006	20120928
ES2624750 T3	20170717	ES20120762649T	20120928
ES2705559 T3	20190325	ES20160206006T	20120928
FR2980847 A1	20130405	FR20110058755	20110929
FR2980847 B1	20140829	FR20110058755	20110929
US2014315323 AA	20141023	US20120347918	20120928
US9964528 BB	20180508	US20120347918	20120928
WO13045646 A1	20130404	WO2012EP69238	20120928

Priority:

FR20110058755 20110929 EP20120762649 20120928 EP20160206006 20120928 WO2012EP69238 20120928

Probable Assignee: COMMISSARIAT A LENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES

Assignee(s): (std): COMMISSARIAT A L ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES ; COMMISSARIAT A LENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES ; COMMISSARIAT ENERGIE ATOMIQUE ; COMMISSARIAT L ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES ; PEREIRA FRANCK ; OUDOT NATACHA

Assignee(s): COMMISSARIAT A L'ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES ; COMMISSARIAT A L ENERGIE ATOMIQUE ET AUX ENERGIESALTERNATIVES

Inventor(s): (std): PEREIRA FRANCK ; OUDOT NATACHA

Inventor(s): FRANCK PEREIRA ; NATACHA OUDOT

Agent(s): AHNER PHILIPPE; BREVALEX; LINAGE RAFAEL; VALLEJO JUAN PEDRO; PEARNE AND GORDON LLP; AUGARDE ERIC ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
DE602012052478 D1	20181009	LSAS	R081	CHANGE OF APPLICANT/PATENTEE	PARTYTYPE : OWNER OWNER : COMMISSARIAT À L'ÉNERGIE ATOMIQUE ET AUX ÉNERGIES ALTERNATIVES, PARIS, FR OLDPARTY : COMMISSARIAT À L'ÉNERGIE ATOMIQUE ET AUX ÉNERGIES ALTERNATIVES, PARIS, FR
EP2761285 A1	20140806	LSPB	+	published / reissued	
EP2761285 A1	20140806	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20140331
EP2761285 A1	20150318	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20150212
EP2761285 A1	20160921	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20160823
EP2761285 B1	20170208	LSGT	+	granted / extensions (spc, cpc, pte)	
EP2761285 B1	20170208	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D TEXT : NOT ENGLISH
EP2761285 B1	20170215	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP2761285 B1	20170215	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 867093 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20170215
EP2761285 B1	20170308	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D TEXT : LANGUAGE OF EP DOCUMENT: FRENCH
EP2761285 B1	20170316	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602012028564 COUNTRY OF REF DOCUMENT : DE
EP2761285 B1	20170612	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : LT REF LEGAL EVENT CODE : MG4D
EP2761285 B1	20170715	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MK05 REF DOCUMENT NUMBER : 867093 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20170208
EP2761285 B1	20170717	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2624750 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) : EFFECTIVE DATE : 20170717
EP2761285 B1	20170731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170208
EP2761285 B1	20170731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM	COUNTRY OF REF DOCUMENT : NO NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE

				NATIONAL OFFICE TO EPO]	DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170508
EP2761285 B1	20170731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170208
EP2761285 B1	20170731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170208
EP2761285 B1	20170731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170509
EP2761285 B1	20170831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LV NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170208
EP2761285 B1	20170831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170608
EP2761285 B1	20170831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170208
EP2761285 B1	20170831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170508
EP2761285 B1	20170831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RS NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170208
EP2761285 B1	20170929	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 6
EP2761285 B1	20171031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170208

EP2761285 B1	20171031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170208
EP2761285 B1	20171031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170208
EP2761285 B1	20171031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170208
EP2761285 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20170920 YEAR OF FEE PAYMENT : 6
EP2761285 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170911 YEAR OF FEE PAYMENT : 6
EP2761285 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20170914 YEAR OF FEE PAYMENT : 6
EP2761285 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170929 YEAR OF FEE PAYMENT : 6
EP2761285 B1	20171109	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 602012028564 COUNTRY OF REF DOCUMENT : DE
EP2761285 B1	20171130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SM NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170208
EP2761285 B1	20171130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170208
EP2761285 B1	20171130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170208
EP2761285 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20170912 YEAR OF FEE PAYMENT : 6

				EPO]	
EP2761285 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20170816 YEAR OF FEE PAYMENT : 6
EP2761285 B1	20180117	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20171109
EP2761285 B1	20180228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170208
EP2761285 B1	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20171016 YEAR OF FEE PAYMENT : 6
EP2761285 B1	20180430	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP2761285 B1	20180531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170208
EP2761285 B1	20180627	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP2761285 B1	20180629	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20170928
EP2761285 B1	20180731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20170928
EP2761285 B1	20180731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20170930
EP2761285 B1	20180731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20170930
EP2761285 B1	20180831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20170930
EP2761285 B1	20180928	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170208
EP2761285 B1	20180928	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 7

EP2761285 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180913 YEAR OF FEE PAYMENT : 7
EP2761285 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20180814 YEAR OF FEE PAYMENT : 7
EP2761285 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20180928 YEAR OF FEE PAYMENT : 7
EP2761285 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20180911 YEAR OF FEE PAYMENT : 7
EP2761285 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20180917 YEAR OF FEE PAYMENT : 7
EP2761285 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20180919 YEAR OF FEE PAYMENT : 7
EP2761285 B1	20190228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20181023 YEAR OF FEE PAYMENT : 7
EP2761285 B1	20190628	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT; INVALID AB INITIO LAPSED DATE : 20120928
EP2761285 B1	20320928	PEXP		Calculated Patent Term Expiry	
EP3165915 A1	20170510	LSPB	+	published / reissued	
EP3165915 A1	20170510	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20161221
EP3165915 A1	20180425	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20180327
EP3165915 A1	20181003	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20180827
EP3165915 B1	20181017	LSGT	+	granted / extensions (spc, cpc, pte)	
EP3165915 B1	20181017	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D TEXT : NOT ENGLISH
EP3165915 B1	20181114	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D TEXT : LANGUAGE OF EP DOCUMENT: FRENCH
EP3165915 B1	20181115	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602012052478 COUNTRY OF REF DOCUMENT : DE
EP3165915 B1	20181115	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 1054642 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20181115
EP3165915 B1	20190312	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : LT REF LEGAL EVENT CODE : MG4D

EP3165915 B1	20190315	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MK05 REF DOCUMENT NUMBER : 1054642 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20181017
EP3165915 B1	20190325	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2705559 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) : EFFECTIVE DATE : 20190325
EP3165915 B1	20190430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LV NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20181017
EP3165915 B1	20190430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NO NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20190117
EP3165915 B1	20190430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20181017
EP3165915 B1	20190430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20181017
EP3165915 B1	20190430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20181017
EP3165915 B1	20190430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IS NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20190217
EP3165915 B1	20190430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20190117
EP3165915 B1	20190430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM	COUNTRY OF REF DOCUMENT : LT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE

				NATIONAL OFFICE TO EPO]	WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20181017
EP3165915 B1	20190430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20181017
EP3165915 B1	20320928	PEXP		Calculated Patent Term Expiry	
ES2624750 T3	20170717	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2624750 T3	20320928	PEXP		Calculated Patent Term Expiry	
ES2705559 T3	20190325	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2705559 T3	20320928	PEXP		Calculated Patent Term Expiry	
FR2980847 A1	20130405	LSPB	+	published / reissued	
FR2980847 A1	20160928	LSFE	+PLFP	FEE PAYMENT	YEAR OF FEE PAYMENT : 6
FR2980847 A1	20170929	LSFE	+PLFP	FEE PAYMENT	YEAR OF FEE PAYMENT : 7
FR2980847 B1	20140829	LSGT	+	granted / extensions (spc, cpc, pte)	
FR2980847 B1	20170929	LSFE	PLFP	Fee Payement (FEE PAYMENT)	PAYMENT DATE : 20170929 YEAR OF FEE PAYMENT : 7
FR2980847 B1	20181001	LSLE	-ST	NOTIFICATION OF LAPSE	
FR2980847 B1	20310929	PEXP		Calculated Patent Term Expiry	
US2014315323 AA	20141023	LSPB	+	published / reissued	
US2014315323 AA	20150730	LSES	NFA1	Non Final Action Mailed	
US2014315323 AA	20161208	LSES	NFA1	Non Final Action Mailed	
US2014315323 AA	20180102	LSES	+ALW2	Allowed -- Notice of Allowance Not Yet Mailed	
US2014315323 AA	20180102	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2014315323 AA	20180327	LSFE	-AWA4	Awaiting TC Resp., Issue Fee Not Paid	
US2014315323 AA	20180327	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2014315323 AA	20180329	LSFE	+PPR1	Publications -- Issue Fee Payment Received	
US2014315323 AA	20180402	LSFE	+PPV1	Publications -- Issue Fee Payment Verified	
US2014315323 AA	20180418	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US9964528 BB	20180508	LSGT	+	granted / extensions (spc, cpc, pte)	
US9964528 BB	20140709	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COMMISSARIAT A L'ENERGIE ATOMIQUE ET AUX ENERGIES OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:PEREIRA, FRANCK; OUDOT, NATACHA; REEL/FRAME:033277/0579 EFFECTIVE DATE : 20140704

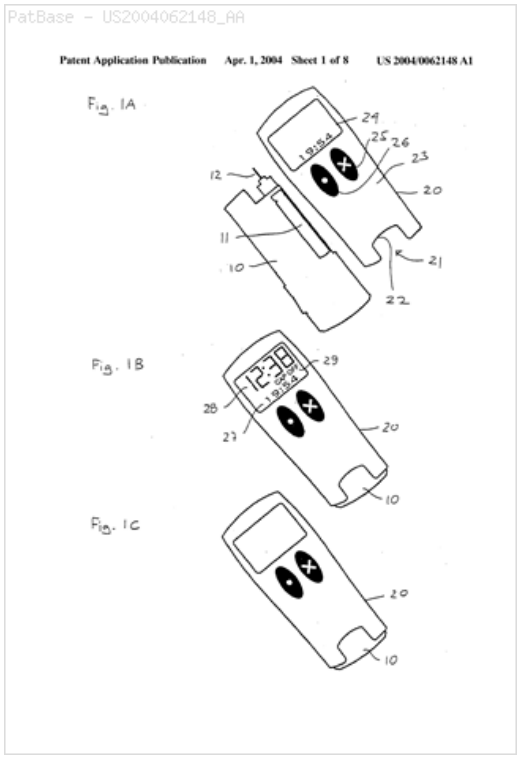
US9964528 BB	20180418	LSGT	PAT1	Patented Case	
US9964528 BB	20320928	PEXP		Calculated Patent Term Expiry	
WO13045646 A1	20130404	LSPB	+	published / reissued	
WO13045646 A1	20140331	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO13045646 A1	20140331	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2012762649 COUNTRY OF REF DOCUMENT : EP
WO13045646 A1	20140709	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 14347918 COUNTRY OF REF DOCUMENT : US

51) Family number: 30303078 (US2004062148A)

Title: DEVICE WITH TIME INDICATING MEANS

Abstract: The invention relates to a timer device capable of performing one or more control actions in response to the time lapsed since a user initiated action took place. The timer device comprises contact means operatable between two conditions, timer means, and means for storing first and second time stamps. The device further comprises control means for setting a first time stamp in response to the contact means being operated between first and second conditions, setting a second time stamp in response to the contact means being operated between the second and first conditions, calculating the time elapsed between the two time stamps, comparing the elapsed time with a preset time value, and performing a control action if the elapsed time is greater than the preset time value.

Classifications:
International (IPC 8-9): A61B19/02 A61J7/04 A61M5/00 A61M5/178 A61M5/20 A61M5/32 G04B25/06 G04B47/00 G04F1/00 G04F10/00 G04F8/00 G04G15/00 (Advanced/Invention);
A61M5/28 A61M5/31 (Advanced/Non-invention)
International (IPC 1-7): A61J7/04 G04F1/00 G04F10/00 G04F8/00 G04G15/00
CPC: A61M5/20 A61M5/178 A61M5/28 A61M5/3129 A61M2005/3125 A61M2205/50 A61M2205/581 G04B25/06 G04F1/005 A61J7/0436
European: A61J7/04B3 A61M5/178 A61M5/20 G04B25/06 G04F1/00B K61J7/04B3A2 K61M205/50 K61M205/58B K61M5/28 K61M5/31A8 K61M5/31C
US: 368/10 368/107 368/113 604/187 604/192



Family:

Publication number	Publication date	Application number	Application date
AT524769 E	20110915	AT20030764974T	20030712
AU2003254340 AA	20040209	AU20030254340	20030712
AU2003254340 AH	20040209	AU20030254340	20030712
DE60338390 D1	20111117	DE20036038390	20030712
DK1527376 T3	20111219	DK20030764974T	20030712
EP1391794 A1	20040225	EP20020388054	20020819
EP1527376 A2	20050504	EP20030764974	20030712
EP1527376 B1	20110914	EP20030764974	20030712
ES2373439 T3	20120203	ES20030764974T	20030712
JP2006507856 T2	20060309	JP20040522442T	20030712
JP4563174 B2	20101013	JP20040522442T	20030712
US2004062148 AA	20040401	US20030618878	20030714
US2007030764 AA	20070208	US20060544525	20061005
US7133329 BB	20061107	US20030618878	20030714
US7397730 BB	20080708	US20060544525	20061005
WO04010231 A2	20040129	WO2003EP07559	20030712
WO04010231 A3	20040610	WO2003EP07559	20030712

Priority:

US20020398300P 20020723 EP20020388054 20020819 EP20030764974 20030712
WO2003EP07559 20030712 US20030618878 20030714 US20060544525 20061005

Probable Assignee: NOVO NORDISK AS

Assignee(s): (std): LIFESCAN INC ; NOVO NORDISK AS

Assignee(s): SKYGGEBJERG OLE ; PANDURO RASMUS ; SYME STEVEN ; WEBEN BARRY ; LIFESCAN INC MILPITAS ; NOVO NORDISK A S ; ALVAREZ ICAZA MANUEL ; BJORLIG NINA ; CHRISTENSEN LARS ; LAV STEFFEN

Inventor(s): (std): SKYGGEBJERG OLE ; CHRISTENSEN LARS HOFMANN ; PANDURO RASMUS ; BJOERLIG NINA ; LAV STEFFEN ; WEBER BARRY ; ALVAREZ ICAZA MANUEL ; SYME STEVEN ; HOFMANN CHRISTENSEN LARS ; BJORLIG NINA ; CHRISTENSEN LARS ; WEBEN BARRY ; CHRISTENSEN LARS H ; ICAZA MANUEL ALVAREZ ; NINA BJORLIG ; LARS HOFMANN CHRISTENSEN ; RASMUS PANDURO ; OLE SKYGGEBJERG ; MANUEL ALVAREZ ICAZA ; BARRY WEBER ; STEFFEN LAV ; STEVEN SYME

Inventor(s): WEBER BARRY LIVERMORE

Agent(s): KELLBERG LARS; NOVO NORDISK INC PATENT DEPARTMENT; RICHARD W; REZA; MARC A; BEGAN MARC

A

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT524769 E	20110915	LSGT	+	granted / extensions (spc, cpc, pte)	
AT524769 E	20120315	LSLE	-RER	CEASED AS TO PARAGRAPH 5 LIT. 3 LAW INTRODUCING PATENT TREATIES	
AT524769 E	20230712	PEXP		Calculated Patent Term Expiry	
AU2003254340 AA	20040209	LSPB	+	published / reissued	
AU2003254340 AA	20050505	LSLE	-MK6	APPLICATION LAPSED SECTION 142(2)(F)/REG. 8.3(3) - PCT APPLIC. NOT ENTERING NATIONAL PHASE	
DK1527376 T3	20111219	LSGT	+	granted / extensions (spc, cpc, pte)	
DK1527376 T3	20230712	PEXP		Calculated Patent Term Expiry	
EP1391794 A1	20040225	LSPB	+	published / reissued	
EP1391794 A1	20041117	LSFE	+AKX	DESIGNATION FEES PAID	
EP1391794 A1	20050601	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20040826
EP1527376 A2	20050504	LSPB	+	published / reissued	
EP1527376 A2	20050504	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20050223
EP1527376 A2	20100623	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20100525
EP1527376 A2	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20160627 YEAR OF FEE PAYMENT : 14
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EP1527376 A2	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20160622 YEAR OF FEE PAYMENT : 14
EP1527376 A2	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20160622 YEAR OF FEE PAYMENT : 14
EP1527376 B1	20110914	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1527376 B1	20110914	LSGT	REG	REFERENCE TO A	REF COUNTRY CODE : GB

				NATIONAL CODE	REF LEGAL EVENT CODE : FG4D
EP1527376 B1	20110915	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1527376 B1	20111012	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP1527376 B1	20111117	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 60338390 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20111117
EP1527376 B1	20120104	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : T3
EP1527376 B1	20120131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20110914
EP1527376 B1	20120203	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2373439 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) : EFFECTIVE DATE : 20120203
EP1527376 B1	20120229	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20111215
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EP1527376 B1	20120315	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MK05 REF DOCUMENT NUMBER : 524769 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20110914
EP1527376 B1	20120330	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20110914
EP1527376 B1	20120430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20110914

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EP1527376 B1	20120531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20110914
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EP1527376 B1	20120531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20120116
EP1527376 B1	20120822	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20120615
EP1527376 B1	20121011	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 60338390 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20120615
EP1527376 B1	20130228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120731
EP1527376 B1	20130508	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP1527376 B1	20130628	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20111214
EP1527376 B1	20130731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120712
EP1527376 B1	20140530	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120712
EP1527376 B1	20140731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20030712
EP1527376 B1	20140829	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20140611 YEAR OF FEE PAYMENT : 12

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EP1527376 B1	20141031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20140710 YEAR OF FEE PAYMENT : 12
EP1527376 B1	20141031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20140710 YEAR OF FEE PAYMENT : 12
EP1527376 B1	20141128	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20140711 YEAR OF FEE PAYMENT : 12
EP1527376 B1	20141231	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20140717 YEAR OF FEE PAYMENT : 12
EP1527376 B1	20160222	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DK REF LEGAL EVENT CODE : EBP EFFECTIVE DATE : 20150731
EP1527376 B1	20160301	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SE REF LEGAL EVENT CODE : EUG
EP1527376 B1	20160429	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20150712
EP1527376 B1	20160531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20150801
EP1527376 B1	20160531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20150713
EP1527376 B1	20160622	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 14
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EP1527376 B1	20160831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20150731
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EP1527376 B1	20170621	LSFE	REG	REFERENCE TO A	REF COUNTRY CODE : FR

				NATIONAL CODE	REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 15
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EP1527376 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170620 YEAR OF FEE PAYMENT : 15
EP1527376 B1	20180621	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 16
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EP1527376 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180620 YEAR OF FEE PAYMENT : 16
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EP1527376 B1	20230712	PEXP		Calculated Patent Term Expiry	
ES2373439 T3	20120203	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2373439 T3	20230712	PEXP		Calculated Patent Term Expiry	
JP2006507856 T2	20060309	LSPB	+	published / reissued	
JP2006507856 T2	20060706	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20060705
JP2006507856 T2	20090707	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20090707
JP2006507856 T2	20091209	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20091208

JP2006507856 T2	20100610	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2006507856 T2	20100706	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20100706
JP2006507856 T2	20100708	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01
JP2006507856 T2	20100805	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20100728
JP2006507856 T2	20100806	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP2006507856 T2	20100806	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP4563174 B2	20101013	LSGT	+	granted / extensions (spc, cpc, pte)	
JP4563174 B2	20100803	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP4563174 B2	20130801	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4563174 B2	20130806	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4563174 B2	20140731	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4563174 B2	20140805	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4563174 B2	20150730	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4563174 B2	20150804	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4563174 B2	20160804	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4563174 B2	20160809	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4563174 B2	20170803	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4563174 B2	20170808	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4563174 B2	20180802	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4563174 B2	20180807	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4563174 B2	20230712	PEXP		Calculated Patent Term Expiry	
US2004062148 AA	20040401	LSPB	+	published / reissued	
US2004062148 AA	20061018	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE

US2007030764 AA	20070208	LSPB	+	published / reissued	
US2007030764 AA	20080618	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US7133329 BB	20061107	LSGT	+	granted / extensions (spc, cpc, pte)	
US7133329 BB	20031117	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : NOVO NORDISK A/S, DENMARK OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:SKYGGEBJERG, OLE; CHRISTENSEN, LARS HOFMANN; PANDURO, RASMUS; AND OTHERS; REEL/FRAME:014696/0398; SIGNING DATES FROM 20030813 TO 20031010
US7133329 BB	20061018	LSGT	PAT1	Patented Case	
US7133329 BB	20100506	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US7133329 BB	20140501	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US7133329 BB	20180419	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US7133329 BB	20240628	PEXP		Calculated Patent Term Expiry (PTA 350 days)	
US7397730 BB	20080708	LSGT	+	granted / extensions (spc, cpc, pte)	
US7397730 BB	20080618	LSGT	PAT1	Patented Case	
US7397730 BB	20090526	LSRE	CC	CERTIFICATE OF CORRECTION	
US7397730 BB	20120104	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US7397730 BB	20151209	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US7397730 BB	20261005	PEXP		Calculated Patent Term Expiry	
WO04010231 A2	20040129	LSPB	+	published / reissued	
WO04010231 A3	20050111	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2003764974 COUNTRY OF REF DOCUMENT : EP
WO04010231 A3	20050124	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2004522442 COUNTRY OF REF DOCUMENT : JP
WO04010231 A3	20050504	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2003764974 COUNTRY OF REF DOCUMENT : EP

52) Family number: 29732081 (US6071539A)

Title: Effervescent granules and methods for their preparation

Abstract: According to the present invent, effervescent granules having a controllable rate of effervescence are provided. Such granules comprise an acidic agent, an alkaline agent, a hot-melt extrudable binder capable of forming a eutectic mixture with the acidic agent and, optionally, a plasticizer. The effervescent granules are made by a hot-melt extrusion process.

Classifications:
International (IPC 8-9): A61K31/485 A61K31/506 A61K31/522 A61K47/46 A61K9/00 A61K9/16 A61K9/20 A61K9/46 A61P25/02 A61P25/22 A61P31/12 (Advanced/Invention);
A61K9/16 (Advanced/Non-invention);
A61K31/00 A61K47/00 A61K9/00 A61P25/00 A61P31/00 (Core/Invention)
International (IPC 1-7): A61K31/485 A61K31/506 A61K31/522 A61K47/46 A61K9/00 A61K9/16 A61K9/20 A61K9/46 A61P25/02 A61P25/22 A61P31/12
CPC: A61K9/0056 A61K9/0007 A61K9/0034 A61K9/1694 A61K9/2095 A61K9/1641
European: A61K9/00L6 A61K9/00M18B A61K9/00M8 A61K9/16P4 A61K9/20P
US: 424/43 424/44 424/464 424/466 424/489 424/490

Family:

Publication number	Publication date	Application number	Application date
AT410145 E	20081015	AT20010927938T	20010420
AU2001254826 AA	20011107	AU20010254826	20010420
AU2001254826 BB	20060316	AU20010254826	20010420
AU200154826 A1	20011107	AU20010054826	20010420
AU200154826 A5	20011107	AU20010054826	20010420
BG107193 A	20030630	BG20020107193	20021014
BG65877 B1	20100430	BG20020107193	20021014
CA2406833 AA	20021018	CA20012406833	20010420
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JP2003531161 T2	20031021	JP20010577922T	20010420
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KR20030011829 A	20030211	KR20027014142	20010420
MXPA02010338 A1	20031211	MX2002PA10338	20010420
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WO0180822 A2	20011101	WO2001EP05017	20010420
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Priority:

US19960026991P 19960920 US19970934109 19970919 US19990468513 19991221
US20000553528 20000420 US20000553528 20000420 WO2001EP05017 20010420

Probable Assignee: ETHYPHARM SA

Assignee(s): (std): DELMAS PASCAL ; ETHYPHARM ; ETHYPHARM SA ; ETHYPHARM INC ; ETHYPHARM LAB PROD ETHIQUES ; PROD ETHIQUES ETHYPHARM S A LA ; ROBINSON JOSEPH R ; MCGINITY JAMES WILLIAM ; PROD ETHIQUES ETHYPHARM LAB SA ; PROD ETHYQUES ETHYPHARM S A LA ; PROD ETHIQUES ETHYPHARM SA LAB

Assignee(s): LABORATOIRES DES PRODUITS ETHYQUES ETHYPHARM SA ; ETHYPHARM S A ; LABORATOIRES DES PRODUITS ETHYQUES ETHYPHARM S A ; LABORATOIRES DES PRODUITS ETHIQUES ETHYPHARM SA ; LABORATOIRES DES PRODUITS ETHIQUES ETHYPHARM S A ; LABORATOIRES DES PRODUITS ETHIQUES ETHYPHARM ; ETHYPHARM HOUDAN

Inventor(s): (std): MCGINITY JAMES W ; MCGINITY J W ; JR ROBINSON ; JW MCGINITY ; JAMES WILLIAM MCGINITY ; JOSEPH R ROBINSON ; MCGINITY JAMES ; DELMAS J R ROBINSON J W MCGINI ; DELMAS P ; DELMAS PASCAL ; ROBINSON JOSEPH R ; MCGINITY JAMES WILLIAM ; MCGINITY JAMES WILLIAMS ; ROBINSON J R ; PASCAL DELMAS ; P DELMAS ; ROBINSON JOSEPH

Inventor(s): J R ROBINSON ; J W MCGINITY ; J R ROBINSON J W MCGINITY P DELMAS ; JR ROBINSON JW MCGINITY P DELMAS

Agent(s): GRIFFITH HACK; GOUDREAU GAGE DUBUC; LAVERY DE BILLY LLP; TOUATI CATHERINE; REINHOLD COHN

AND PARTNERS

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT410145 E	20081015	LSGT	+	granted / extensions (spc, cpc, pte)	
AT410145 E	20090415	LSLE	-RER	CEASED AS TO PARAGRAPH 5 LIT. 3 LAW INTRODUCING PATENT TREATIES	
AT410145 E	20210420	PEXP		Calculated Patent Term Expiry	
AU2001254826 AA	20011107	LSPB	+	published / reissued	
AU2001254826 BB	20060316	LSGT	+	granted / extensions (spc, cpc, pte)	
AU2001254826 BB	20060713	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU2001254826 BB	20210420	PEXP		Calculated Patent Term Expiry	
AU200154826 A1	20011107	LSPB	+	published / reissued	
BG107193 A	20030630	LSPB	+	published / reissued	
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BG65877 B1	20221014	PEXP		Calculated Patent Term Expiry	
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DK1274398 T3	20210420	PEXP		Calculated Patent Term Expiry	
EP1274398 A2	20030115	LSPB	+	published / reissued	
EP1274398 A2	20030115	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20021014
EP1274398 A2	20060927	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20051219

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EP1274398 B1	20081015	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
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EP1274398 B1	20090218	LSAS	RAP2	RIGHTS OF A PATENT TRANSFERRED	PARTYTYPE : OWNER OWNER : ETHYPHARM
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				EPO]	FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20081008
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JP2003531161 T2	20110825	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20110824

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JP2003531161 T2	20120711	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20120710
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JP2003531161 T2	20120816	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20120808
JP2003531161 T2	20120817	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
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JP5063848 B2	20150806	LSFE	R20	特許料納付書 (Patent fee payment form)	
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KR20030011829 A	20070817	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR20030011829 A	20080618	LSRV	-E601	DECISION TO REFUSE APPLICATION	

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MXPA02010338 A1	20060627	LSGT	+FG	GRANT OR REGISTRATION	
NO20024947 A	20021212	LSPB	+	published / reissued	
NO333395 B1	20130527	LSGT	+	granted / extensions (spc, cpc, pte)	
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NO333395 B1	20221015	PEXP		Calculated Patent Term Expiry	
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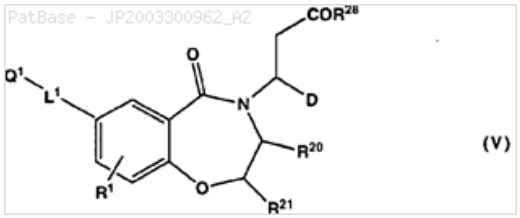
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ZA200208456 A	20221017	PEXP		Calculated Patent Term Expiry	

53) Family number: 13258085 (US5250679A)

Title: Nonpeptidyl platelet aggregation inhibitors having specificity for the GPIIbIIIreceptor

Abstract: A benzodiazepinedione derivative which acts as a nonpeptidyl platelet aggregation inhibitor is provided. This inhibitor potently inhibits fibrinogen binding to the GPIIbIIIa receptor and is provided in therapeutic compositions for the treatment of diseases for which blocking platelet aggregation is indicated. These nonpeptidyl inhibitors are provided in combination with thrombolytics and anticoagulants.



Classifications:
International (IPC 8-9): A61K31/00 A61K31/55 A61K31/551 A61K31/5513 A61K31/5517 A61K31/553 A61K31/67 A61K31/675 A61P43/00 A61P7/02 C07D223/16 C07D243/10 C07D243/14 C07D267/14 C07D401/06 C07D401/12 C07D403/02 C07D405/12 C07D413/02 C07D417/02 C07D487/04 C07F9/547 (Advanced/Invention); A61K31/55 A61K31/551 A61K31/553 A61P43/00 (Advanced/Non-invention); A61K31/00 A61K31/55 A61K31/551 A61K31/553 A61K31/67 A61P43/00 A61P7/00 C07D223/00 C07D243/00 C07D267/00 C07D401/00 (Core/Invention)
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CPC: C07D223/16 C07D243/10 C07D243/14 C07D267/14
European: C07D223/16 C07D243/10 C07D243/14 C07D267/14
US: 514/150 514/210.21 514/211 514/211.05 514/212.06 514/212.07 514/212.08 514/213 514/215 514/217 514/219 514/220 514/221 514/80 540/490 540/493 540/495 540/504 540/506 540/512 540/521 540/522 540/523 540/552 540/580 540/593

Family:

Publication number	Publication date	Application number	Application date
AT133412 E	19960215	AT19920922468T	19921015
AU199227976 A1	19930521	AU19920027976	19921015
AU673501 B2	19961114	AU19920027976	19921015
CA2119745 AA	19940322	CA19922119745	19921015
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DE69207916 D1	19960307	DE19926007916	19921015
DE69207916 T2	19961017	DE19926007916T	19921015
DK0610334 T3	19960603	DK19920922468T	19921015
EP0610334 A1	19940817	EP19920922468	19921015
EP0610334 B1	19960124	EP19920922468	19921015
ES2085651 T3	19960601	ES19920922468T	19921015
FI941222 A	19940602	FI19940001222	19940315
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GE20032957 B	20030110	GE19920001917	19921015
GR3019517 T3	19960731	GR19960400905T	19960402
JP2003300962 A2	20031021	JP20030104672	20030408
JP3789468 B2	20060621	JP19930507790T	19921015
JP7500341 T2	19950112	JP19930507790T	19921015
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RU94024560 A1	19951227	RU19940024560	19940415
US5250679 A	19931005	US19920866931	19920410
US5403836 A	19950404	US19930058722	19930506
US5565449 A	19961015	US19950452479	19950526
US5663166 A	19970902	US19950452056	19950526
US5674863 A	19971007	US19950451849	19950526
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WO9308174 A1	19930429	WO1992US08788	19921015

Priority:

US19910001477 19911018 US19910781477 19911018 US19920866931 19920410
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US19950451794 19950526 US19950452479 19950526 US19950452056 19950526
US19950451849 19950526

Probable Assignee: GENENTECH INC SOUTH SAN FRANCISCO CALIF US

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Inventor(s): (std): BARKER PETER ; BLACKBURN BRENT ; GADEK THOMAS ; MCDOWELL ROBERT ; MCGEE LAWRENCE ; WEBB ROB ; ROBARGE KIRK ; SOMERS TODD

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Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; DENNISON ASSOCIATES; SIMANENKOVA

TATYANA

Designated states: AT AU BB BE BF BG BJ BR CA CF CG CH CI CM CS DE DK ES FI FR GA GB GN GR HU IE IT JP KP KR LI LK LU MC MG ML MN MR MW NL NO PL RO RU SD SE SN TD TG US

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT133412 E	19960215	LSGT	+	granted / extensions (spc, cpc, pte)	
AT133412 E	19960815	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	
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AU199227976 A1	19930521	LSPB	+	published / reissued	
AU673501 B2	19961114	LSGT	+	granted / extensions (spc, cpc, pte)	
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JP7500341 T2	20041028	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20041006
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JP7500341 T2	20060228	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP7500341 T2	20060307	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20060307
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JP7500341 T2	20060407	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
MD960330 A	19980531	LSPB	+	published / reissued	
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NO307417 B1	20121112	LSLE	-MK1K	PATENT EXPIRED	
NO307417 B1	20140415	PEXP		Calculated Patent Term Expiry	
NO941378 A	19940620	LSPB	+	published / reissued	
US5250679 A	19931005	LSGT	+	granted / extensions (spc, cpc, pte)	
US5250679 A	19920518	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GENENTECH, INC. A CORP. OF DELAWARE, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNORS:BLACKBURN, BRENT; MCDOWELL, ROBERT; GADEK, THOMAS; AND OTHERS; REEL/FRAME:006113/0729; SIGNING DATES FROM 19920512 TO 19920513
US5250679 A	19930924	LSGT	PAT1	Patented Case	
US5250679 A	19930924	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5250679 A	19970325	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
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US5250679 A	20050309	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
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WO9308174 A1	19940325	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1992922468 COUNTRY OF REF DOCUMENT : EP
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WO9308174 A1	19960124	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1992922468 COUNTRY OF REF DOCUMENT : EP

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54) Family number: 11513085 (US5888516A)

Title: RECOMBINANT PAPILLOMAVIRUS VACCINES

Abstract: Recombinant expression vectors encoding the L1 and L2 proteins of papillomavirus, methods of making and using the recombinant proteins and purified virus-like particles comprised of the recombinant proteins are provided.

Classifications:
International (IPC 8-9): A61K35/76 A61K38/00 A61K39/00 A61K39/12 A61K39/395 A61P17/00 A61P31/00 A61P31/12 A61P31/20 A61P37/04 C07H21/04 C07K14/025 C12N1/19 C12N1/21 C12N15/09 C12N15/17 C12N15/18 C12N15/37 C12N15/81 C12N5/10 C12N7/00 C12N7/01 C12N7/02 C12N7/04 C12P21/02 G01N33/569 (Advanced/Invention); A61K38/00 A61K39/00 A61K39/12 A61K39/395 A61P17/00 C12N1/19 C12N1/21 C12N15/09 C12N5/10 C12N7/00 C12N7/02 C12N7/04 C12P21/02 G01N33/569 (Advanced/Non-invention); A61K35/66 A61K38/00 A61K39/12 A61K39/395 A61P17/00 A61P31/00 A61P37/00 C07H21/00 C07K14/005 C12N1/19 C12N1/21 C12N15/00 C12N15/09 C12N15/16 C12N15/34 C12N15/81 C12N5/10 C12N7/00 C12N7/01 C12N7/02 C12N7/04 C12P21/02 G01N33/569 (Core/Invention); A61K38/00 A61K39/00 (Core/Non-invention)
International (IPC 1-7): A61K35/76 A61K38/00 A61K39/00 A61K39/12 A61K39/395 A61P31/20 C07H21/04 C07K14/005 C07K14/025 C12N1/19 C12N1/21 C12N15/09 C12N15/17 C12N15/18 C12N15/37 C12N15/81 C12N15/86 C12N5/10 C12N7/00 C12N7/02 C12N7/04 C12P21/02 C12Q1/68 G01N33/52 G01N33/569
CPC: Y10S977/804 Y10S977/915 Y10S977/917 Y10S977/918 C07K14/005 A61K38/00 A61K39/00 C12N15/81 C12N2710/20022 C12N2710/20023 C12N2710/20034
European: C07K14/005 C07K14/025 C12N15/81 K61K38/00 K61K39/00 M07K207/00 M12N710/20022 M12N710/20023 M12N710/20034
US: 424/204.1 435/236 435/69.3 977/804 977/915 977/917 977/918

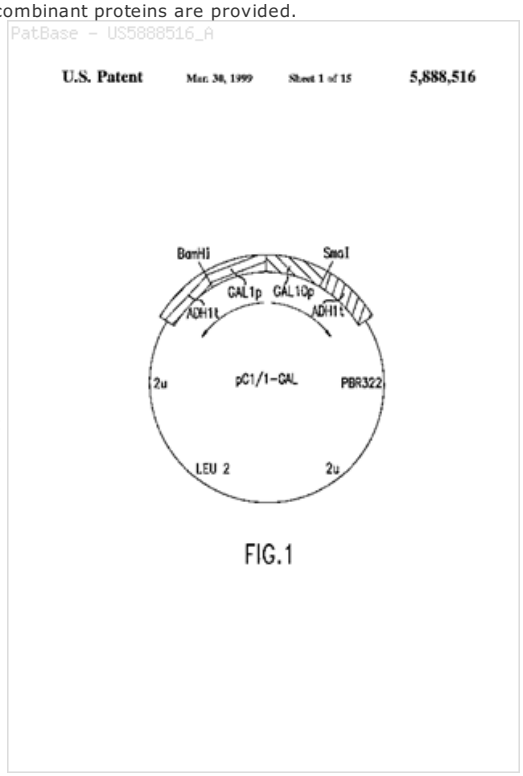


FIG.1

Family:

Publication number	Publication date	Application number	Application date
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AU199525495 A1	19951205	AU19950025495	19950515
AU693203 B2	19980625	AU19950025495	19950515
BG100974 A	19980430	BG19960100974	19961112
BRPI9507657 A	19970909	BR1995PI07657	19950515
CA2189882 AA	19961107	CA19952189882	19950515
CA2189882 C	20050920	CA19952189882	19950515
CN1152935 A	19970625	CN19951094158	19950515
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DE69535018 T2	20070215	DE19956035018T	19950515
DK0757717 T3	20060925	DK19950919820T	19950515
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NO322133 B1	20060821	NO19960004862	19961115
NO964862 A	19970116	NO19960004862	19961115
NO964862 A0	19961115	NO19960004862	19961115
NO964862 L	19970116	NO19960004862	19961115
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RO117541 B1	20020430	RO19960002165	19950515
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WO9531532 A1	19951123	WO1995US06006	19950515

Priority:

US19940242794 19940516 US19940254096 19940606 EP19950919820 19950515
US19950440800 19950515 WO1995US06006 19950515 US19950463566 19950605
US19970969523 19971022

Probable Assignee: MERCK SHARP AND DOHME CORP

Assignee(s): (std): COOK JAMES C III ; GEORGE HUGH A ; HOFMANN KATHRYN J ; JANSEN KATHRIN U ; JOYCE JOSEPH G ; LEHMAN ERNEST DALE ; MERCK AND CO INC ; MARKUS HENRY Z ; ROSOLOWSKY MARK ; SCHULTZ LOREN D

Assignee(s): MERK EHND KO INK ; COOK JAMES C ; MERCK AND CO ; MERCK AND COINC ; MERCK AND CO INC RAHWAY NEW JERSEY ; MERK EHND KO ; MERCK SHARP AND DOHME CORP ; SCHERING CORP

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Inventor(s): COOK JAMES CIII ; SCHULTZ LOREN ; SHUL'TS LOREN D. ; DZHORDZH KH'JU A. ; H A GEORGE ; J C COOK III ; K U JANSEN ; KATHRIN U JANSEN ; HUGH A GEORGE ; KATHRYN J HOFMANN ; JOSEPH G JOYCE ; ERNEST DALE LEHMAN ; HENRY Z MARKUS ; LOREN D SCHULTZ ; JAMES C COOK III

Agent(s): SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD; GOWLING LAFLEUR HENDERSON LLP

Designated states: AM AT AU BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CZ DE DK EE ES FI FR GA GB GE GN GR HU IE IS IT JP KE KG KR KZ LI LK LR LT LU LV MC MD MG ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SN SZ TD TG TJ TM TT UA UG US UZ

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT328068 E	20060615	LSGT	+	granted / extensions (spc, cpc, pte)	
AT328068 E	20070415	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	REF DOCUMENT NUMBER : 0757717 COUNTRY OF REF DOCUMENT : EP
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AU693203 B2	19980625	LSGT	+	granted / extensions (spc, cpc, pte)	
AU693203 B2	20150515	PEXP		Calculated Patent Term Expiry	
BG100974 A	19980430	LSPB	+	published / reissued	
BRPI9507657 A	19970909	LSPB	+	published / reissued	
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BRPI9507657 A	20051227	LSRV	B09B	DECISION: REFUSAL	
CA2189882 AA	19961107	LSPB	+	published / reissued	
CA2189882 AA	20020405	LSES	+EEER	EXAMINATION REQUEST	
CA2189882 C	20050920	LSGT	+	granted / extensions (spc, cpc, pte)	
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CA2189882 C	20150515	PEXP		Calculated Patent Term Expiry	
CN1152935 A	19970625	LSPB	+	published / reissued	
CN1152935 A	19970625	LSPB	+C06	PUBLICATION	
CN1152935 A	20040811	LSDW	-C02	DEEMED WITHDRAWAL OF PATENT APPLICATION AFTER PUBLICATION (PATENT LAW 2001)	
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DE69535018 D1	20121213	LSAS	R081	CHANGE OF APPLICANT/PATENTEE	PARTYTYPE : OWNER OWNER : SCHERING CORPORATION, RAHWAY, US OLDPARTY : MERCK SHARP & DOHME CORP., 07065-0900 RAHWAY, NEW JERSEY, US
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EP0757717 B1	20120713	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : CH OWNER : MERCK SHARP & DOHME CORP. REF LEGAL EVENT CODE : PFA OLDPARTY : SCHERING CORPORATION#2000 GALLOPING HILL ROAD#KENILWORTH, NJ 07033 (US) -TRANSFER TO- MERCK SHARP & DOHME CORP.#126 EAST LINCOLN AVENUE#RAHWAY, NEW JERSEY 07065 (US)
EP0757717 B1	20120713	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : CH OWNER : SCHERING CORPORATION, US REF LEGAL EVENT CODE : PFUS OLDPARTY : FORMER OWNER: MERCK SHARP + DOHME CORP., US
EP0757717 B1	20120720	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : PT OWNER : SCHERING CORPORATION, US REF LEGAL EVENT CODE : PC4A EFFECTIVE DATE : 20120711
EP0757717 B1	20120831	LSAS	BECN	BE: CHANGE OF HOLDER'S NAME	PARTYTYPE : OWNER REF COUNTRY CODE : EP OWNER : MERCK SHARP & DOHME CORP. EFFECTIVE DATE : 20120802

EP0757717 B1	20120905	LSAS	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : SD EFFECTIVE DATE : 20120828
EP0757717 B1	20121003	LSAS	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : TD EFFECTIVE DATE : 20120924
EP0757717 B1	20121031	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : ES OWNER : MERCK SHARP & DOHME CORP. REF LEGAL EVENT CODE : PC2A EFFECTIVE DATE : 20121019
EP0757717 B1	20121231	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : SI OWNER : MERCK SHARP & DOHME CORP.; US REF LEGAL EVENT CODE : SP73 EFFECTIVE DATE : 20121127
EP0757717 B1	20130207	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : DE OWNER : MERCK SHARP & DOHME CORP., US REF LEGAL EVENT CODE : R081 REF DOCUMENT NUMBER : 69535018 COUNTRY OF REF DOCUMENT : DE OLDPARTY : FORMER OWNER: MERCK SHARP & DOHME CORP., 07065-0900 RAHWAY, US EFFECTIVE DATE : 20121213
EP0757717 B1	20130207	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : DE OWNER : SCHERING CORPORATION, US REF LEGAL EVENT CODE : R081 REF DOCUMENT NUMBER : 69535018 COUNTRY OF REF DOCUMENT : DE OLDPARTY : FORMER OWNER: MERCK SHARP & DOHME CORP., 07065-0900 RAHWAY, US EFFECTIVE DATE : 20121213
EP0757717 B1	20130207	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : DE OWNER : MERCK SHARP & DOHME CORP., RAHWAY, US REF LEGAL EVENT CODE : R081 REF DOCUMENT NUMBER : 69535018 COUNTRY OF REF DOCUMENT : DE OLDPARTY : FORMER OWNER: MERCK SHARP & DOHME CORP., 07065-0900 RAHWAY, NEW JERSEY, US EFFECTIVE DATE : 20121213
EP0757717 B1	20130419	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : FR OWNER : SCHERING CORPORATION, US REF LEGAL EVENT CODE : CD EFFECTIVE DATE : 20130319
EP0757717 B1	20130419	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : FR OWNER : SCHERING CORPORATION, US REF LEGAL EVENT CODE : TP EFFECTIVE DATE : 20130318
EP0757717 B1	20130615	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : AT OWNER : MERCK SHARP & DOHME CORP., US REF LEGAL EVENT CODE : PC REF DOCUMENT NUMBER : 328068 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) :

					EFFECTIVE DATE : 20130508
EP0757717 B1	20130704	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : DE OWNER : MERCK SHARP & DOHME CORP., US REF LEGAL EVENT CODE : R081 REF DOCUMENT NUMBER : 69535018 COUNTRY OF REF DOCUMENT : DE OLDPARTY : FORMER OWNER: SCHERING CORPORATION, RAHWAY, US EFFECTIVE DATE : 20130514
EP0757717 B1	20130704	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : DE OWNER : MERCK SHARP & DOHME CORP., RAHWAY, US REF LEGAL EVENT CODE : R081 REF DOCUMENT NUMBER : 69535018 COUNTRY OF REF DOCUMENT : DE OLDPARTY : FORMER OWNER: SCHERING CORPORATION, RAHWAY, US EFFECTIVE DATE : 20130514
EP0757717 B1	20140731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20140425 YEAR OF FEE PAYMENT : 20
EP0757717 B1	20140731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20140430 YEAR OF FEE PAYMENT : 20
EP0757717 B1	20140829	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20140523 YEAR OF FEE PAYMENT : 20
EP0757717 B1	20140829	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20140519 YEAR OF FEE PAYMENT : 20
EP0757717 B1	20140829	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20140424 YEAR OF FEE PAYMENT : 20
EP0757717 B1	20140829	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20140508 YEAR OF FEE PAYMENT : 20
EP0757717 B1	20140829	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20140425 YEAR OF FEE PAYMENT : 20
EP0757717 B1	20140829	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20140602 YEAR OF FEE PAYMENT : 20
EP0757717 B1	20140829	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20140425 YEAR OF FEE PAYMENT : 20
EP0757717 B1	20140829	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20140513 YEAR OF FEE PAYMENT : 20
EP0757717 B1	20140829	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20140606 YEAR OF FEE PAYMENT : 20
EP0757717 B1	20140829	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20140429

				NATIONAL OFFICE TO EPO]	YEAR OF FEE PAYMENT : 20
EP0757717 B1	20140829	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20140430 YEAR OF FEE PAYMENT : 20
EP0757717 B1	20140930	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20140425 YEAR OF FEE PAYMENT : 20
EP0757717 B1	20140930	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20140515 YEAR OF FEE PAYMENT : 20
EP0757717 B1	20150515	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R071 REF DOCUMENT NUMBER : 69535018 COUNTRY OF REF DOCUMENT : DE
EP0757717 B1	20150518	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DK REF LEGAL EVENT CODE : EUP EFFECTIVE DATE : 20150515
EP0757717 B1	20150520	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : V4 EFFECTIVE DATE : 20150515
EP0757717 B1	20150522	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : PT REF LEGAL EVENT CODE : MM4A TEXT : MAXIMUM VALIDITY LIMIT REACHED EFFECTIVE DATE : 20150515
EP0757717 B1	20150529	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP0757717 B1	20150603	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : PE20 EXPIRY DATE : 20150514
EP0757717 B1	20150630	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SE REF LEGAL EVENT CODE : EUG
EP0757717 B1	20150701	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MK9A
EP0757717 B1	20150715	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MK07 REF DOCUMENT NUMBER : 328068 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20150515
EP0757717 B1	20150729	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : MA REF DOCUMENT NUMBER : 20060402685 COUNTRY OF REF DOCUMENT : GR EFFECTIVE DATE : 20150516
EP0757717 B1	20150731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF EXPIRATION OF PROTECTION LAPSED DATE : 20150514
EP0757717 B1	20150731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF EXPIRATION OF PROTECTION LAPSED DATE : 20150522
EP0757717 B1	20150826	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A

					EFFECTIVE DATE : 20150826
EP0757717 B1	20150831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF EXPIRATION OF PROTECTION LAPSED DATE : 20150515
EP0757717 B1	20151030	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF EXPIRATION OF PROTECTION LAPSED DATE : 20150516
EP0757717 B1	20150514	PEXP		Calculated Patent Term Expiry	
EP0757717 B1	20150515	PEXP		Calculated Patent Term Expiry	
ES2264126 T3	20061216	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2264126 T3	20150515	PEXP		Calculated Patent Term Expiry	
FI119815 B	20090331	LSPB	+	published / reissued	
FI119815 B	20090331	LSGT	+FG	PATENT GRANTED	REF DOCUMENT NUMBER : 119815 COUNTRY OF REF DOCUMENT : FI
FI119815 B	20100316	LSAS	PC	TRANSFER OF ASSIGNMENT OF PATENT	PARTYTYPE : OWNER OWNER : MERCK SHARP & DOHME CORP. OLDPARTY : MERCK SHARP & DOHME CORP.
FI119815 B	20150622	LSLE	-MA	PATENT EXPIRED	
FI119815 B	20161115	PEXP		Calculated Patent Term Expiry	
FI964592 A	19961115	LSPB	+	published / reissued	
HU76354 A2	19970828	LSPB	+	published / reissued	
HU9603155 A0	20020628	LSRV	DFC4	CANCELLATION OF TEMPORARY PROT. DUE TO REFUSAL	
JP10500847 T2	19980127	LSPB	+	published / reissued	
JP10500847 T2	20050531	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20050531
JP10500847 T2	20051222	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20051129
JP10500847 T2	20060124	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20060124
JP10500847 T2	20060901	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP10500847 T2	20060912	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20060912
JP10500847 T2	20061005	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20060929
JP10500847 T2	20061006	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP3863559 B2	20061227	LSGT	+	granted / extensions (spc, cpc, pte)	
JP3863559 B2	20060914	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP3863559 B2	20061003	LSFE	R100	特許料納付書 (Patent fee	

				payment form)	
JP3863559 B2	20091001	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP3863559 B2	20091013	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 4
JP3863559 B2	20100311	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 4
JP3863559 B2	20100311	LSAS	S533	WRITTEN REQUEST FOR REGISTRATION OF CHANGE OF NAME	TEXT : JAPANESE INTERMEDIATE CODE: R313533
JP3863559 B2	20100319	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 4
JP3863559 B2	20100319	LSAS	R350	WRITTEN NOTIFICATION OF REGISTRATION OF TRANSFER	TEXT : JAPANESE INTERMEDIATE CODE: R350
JP3863559 B2	20100930	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 4
JP3863559 B2	20101015	LSLE	R280	納付書補充指令書 (Payment refilling order form)	
JP3863559 B2	20101021	LSFE	R21	特許料納付書 (補充) (Patent fee payment form (replenishment))	
JP3863559 B2	20101102	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 5
JP3863559 B2	20110929	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP3863559 B2	20111004	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 6
JP3863559 B2	20121004	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 6
JP3863559 B2	20121009	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 7
JP3863559 B2	20130404	LSAS	S111	REQUEST FOR CHANGE OF OWNERSHIP OR PART OF OWNERSHIP	TEXT : JAPANESE INTERMEDIATE CODE: R313111
JP3863559 B2	20130412	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 7
JP3863559 B2	20130412	LSAS	R350	WRITTEN NOTIFICATION OF REGISTRATION OF TRANSFER	TEXT : JAPANESE INTERMEDIATE CODE: R350
JP3863559 B2	20131003	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP3863559 B2	20131021	LSLE	R280	納付書補充指令書 (Payment refilling order form)	
JP3863559 B2	20131024	LSFE	R21	特許料納付書 (補充) (Patent fee payment form (replenishment))	
JP3863559 B2	20131105	LSFE	+R250	年金領収書, 年金領収書 (分納) (Pension receipt, annuity receipt (scheduled))	
JP3863559 B2	20141002	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP3863559 B2	20141007	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250

JP3863559 B2	20150515	LSLE	-EXPY	CANCELLATION BECAUSE OF COMPLETION OF TERM	
JP3863559 B2	20150515	PEXP		Calculated Patent Term Expiry	
KR19977003417 A	19970703	LSPB	+	published / reissued	
MXPA96005662 A1	20040819	LSPB	+	published / reissued	
MXPA96005662 A1	20060801	LSGT	+FG	GRANT OR REGISTRATION	
MXPA96005662 A1	20101206	LSAS	HC	CHANGE OF COMPANY NAME OR JURIDICAL STATUS	
MXPA96005662 A1	20120914	LSAS	GB	TRANSFER OR ASSIGNMENT	
MXPA96005662 A1	20120914	LSAS	HC	CHANGE OF COMPANY NAME OR JURIDICAL STATUS	
NO322133 B1	20060821	LSGT	+	granted / extensions (spc, cpc, pte)	
NO322133 B1	20150526	LSLE	-MK1K	PATENT EXPIRED	
NO322133 B1	20161115	PEXP		Calculated Patent Term Expiry	
NO964862 A	19970116	LSPB	+	published / reissued	
NZ285941 A	19980527	LSPB	+	published / reissued	
NZ285941 A	20020426	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	
NZ285941 A	20050429	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	
NZ285941 A	20080430	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	
NZ285941 A	20120831	LSAS	ASS	CHANGE OF OWNERSHIP	PARTYTYPE : OWNER OWNER : SCHERING CORPORATION, US OLDPARTY : OLD OWNER(S): MERCK SHARP AND DOHME CORP.
NZ285941 A	20150529	LSLE	-EXPY	PATENT EXPIRED	
PL183781 B1	20020731	LSGT	+	granted / extensions (spc, cpc, pte)	
PL317234 A1	19970317	LSPB	+	published / reissued	
PT757717 T	20060929	LSGT	+	granted / extensions (spc, cpc, pte)	
PT757717 T	20210929	PEXP		Calculated Patent Term Expiry	
RO117541 B1	20020430	LSGT	+	granted / extensions (spc, cpc, pte)	
RO117541 B1	20150515	PEXP		Calculated Patent Term Expiry	
RU2206608 C2	20030620	LSGT	+	granted / extensions (spc, cpc, pte)	
RU2206608 C2	20100420	LSAS	PD4A	CORRECTION OF NAME OF PATENT OWNER	
RU2206608 C2	20130710	LSLI	PC43	OFFICIAL REGISTRATION OF THE TRANSFER OF THE EXCLUSIVE RIGHT WITHOUT CONTRACT FOR INVENTIONS	EFFECTIVE DATE : 20130530
RU2206608 C2	20130820	LSAS	PD4A	CORRECTION OF NAME OF PATENT OWNER	
RU2206608 C2	20150515	PEXP		Calculated Patent Term Expiry	
RU96123707 A	19990510	LSPB	+	published / reissued	
SI0757717 T1	20060831	LSGT	+	granted / extensions (spc, cpc, pte)	
SI0757717 T1	20150515	PEXP		Calculated Patent Term Expiry	

SK147696 A3	19970806	LSPB	+	published / reissued	
US5888516 A	19990330	LSGT	+	granted / extensions (spc, cpc, pte)	
US5888516 A	19980630	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MERCK & CO., INC., NEW JERSEY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:JANSEN, KATHRIN U.; COOK, JAMES C.III; GEORGE, HUGH A.; AND OTHERS; REEL/FRAME:009304/0021; SIGNING DATES FROM 19971031 TO 19971105
US5888516 A	19990303	LSGT	PAT1	Patented Case	
US5888516 A	19990303	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5888516 A	20020814	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5888516 A	20060823	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5888516 A	20100127	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MERCK SHARP & DOHME CORP., NEW JERSEY OLDPARTY : CHANGE OF NAME; ASSIGNOR:MERCK & CO., INC.; REEL/FRAME:023854/0563 EFFECTIVE DATE : 20091102
US5888516 A	20100127	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MERCK SHARP & DOHME CORP.,NEW JERSEY OLDPARTY : CHANGE OF NAME; ASSIGNOR:MERCK & CO., INC.; REEL/FRAME:023854/0563 EFFECTIVE DATE : 20091102
US5888516 A	20100824	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5888516 A	20120827	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SCHERING CORPORATION, NEW JERSEY OLDPARTY : MERGER; ASSIGNOR:MERCK SHARP & DOHME CORP.; REEL/FRAME:028850/0515 EFFECTIVE DATE : 20120426
US5888516 A	20120829	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MERCK SHARP & DOHME CORP., NEW JERSEY OLDPARTY : CHANGE OF NAME; ASSIGNOR:SCHERING CORPORATION; REEL/FRAME:028866/0511 EFFECTIVE DATE : 20120502
US5888516 A	20171022	PEXP		Calculated Patent Term Expiry	
WO9531532 A1	19951123	LSPB	+	published / reissued	
WO9531532 A1	19950515	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 95194158.5 COUNTRY OF REF DOCUMENT : CN
WO9531532 A1	19961021	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 285941 COUNTRY OF REF DOCUMENT : NZ
WO9531532 A1	19961031	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1995919820 COUNTRY OF REF DOCUMENT : EP
WO9531532 A1	19961107	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2189882 COUNTRY OF REF DOCUMENT : CA
WO9531532 A1	19961115	LSNP	+WWE	WIPO INFORMATION:	REF DOCUMENT NUMBER :

				ENTRY INTO NATIONAL PHASE	964592 COUNTRY OF REF DOCUMENT : FI
WO9531532 A1	19961115	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : PV1996-3366 COUNTRY OF REF DOCUMENT : CZ
WO9531532 A1	19961115	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 147696 COUNTRY OF REF DOCUMENT : SK
WO9531532 A1	19961115	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 96-02165 COUNTRY OF REF DOCUMENT : RO
WO9531532 A1	19970212	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1995919820 COUNTRY OF REF DOCUMENT : EP
WO9531532 A1	19970716	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : PV1996-3366 COUNTRY OF REF DOCUMENT : CZ
WO9531532 A1	20021203	LSWD	-WWW	WIPO INFORMATION: WITHDRAWN IN NATIONAL OFFICE	REF DOCUMENT NUMBER : PV1996-3366 COUNTRY OF REF DOCUMENT : CZ
WO9531532 A1	20060531	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1995919820 COUNTRY OF REF DOCUMENT : EP

55) Family number: 2128085 (US4760054A)

Title: Milbemycin 5-carbonate derivatives and compositions containing them

Abstract: 5-Carbonate derivatives of milbemycins A3, A4 and A5 have valuable acaricidal, anthelmintic and other activities, especially against endo- and exoparasites.

Classifications:
International (IPC 8-9): A01N43/90 A01N47/06 C07D493/22 C07H17/08 C07H19/01 (Advanced/Invention);
A01N43/90 (Advanced/Non-invention);
A01N43/90 A01N47/02 C07D493/00 C07H19/00 (Core/Invention)
International (IPC 1-7): A01N43/24 A01N43/32 A01N43/90 A01N55/00 A61K31/355 A61K31/365 A61K31/695 A61K31/70 A61K31/71 C07D295/22 C07D307/00 C07D311/00 C07D313/00 C07D313/06 C07D493/22 C07F7/18 C07H13/12 C07H15/26 C07H17/04 C07H17/08
CPC: C07H19/01 A01N47/06
European: A01N47/06 C07H19/01
US: 504/193 504/248 504/251 504/287 504/289 504/292 514/30 536/7.1 549/268



Family:

Publication number	Publication date	Application number	Application date
AU198435409 A1	19850523	AU19840035409	19841114
AU573766 B2	19880623	AU19840035409	19841114
CA1235693 A1	19880426	CA19840467778	19841114
DE3478438 D1	19890706	DE19843478438	19841109
DK164912 B	19920907	DK19840005415	19841114
DK164912 C	19930125	DK19840005415	19841114
DK541584 A	19850515	DK19840005415	19841114
DK541584 A0	19841114	DK19840005415	19841114
EP0142969 A1	19850529	EP19840307785	19841109
EP0142969 B1	19890531	EP19840307785	19841109
ES537650 A0	19860516	ES19840537650	19841114
ES8607266 A1	19860516	ES19840537650	19841114
IL73508 A0	19850228	IL19840073508	19841114
IL73508 A1	19890131	IL19840073508	19841114
JP60126289 A2	19850705	JP19830213588	19831114
KR19850003539 A	19850620	KR19840007147	19841114
KR850003539 A	19850620	KR19840007147	19841114
KR910006443 B1	19910824	KR19840007147	19841114
NZ210210 A	19870430	NZ19840210210	19841114
US4760054 A	19880726	US19850780391	19850926
ZA8408826 A	19850731	ZA19840008826	19841113

Priority:

JP19830213588 19831114 US19840670337 19841109 CA19840467778 19841114

Probable Assignee: SANKYO CO

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Inventor(s): (std): IDE JIYUNYA ; IDE JUNYA ; IDE JUNYA C O CHEMICAL RESEARC ; KITANO KUNITOSHI ; JUNYA IDE ; KITANO NORITOSHI ; KITANO NORITOSHI BIOLOGICAL RE ; NORITOSHI KITANO

Inventor(s): KITANO NORITOSHI BIOLOGICAL RESEARCH LAB ; IDE JUNYA C O CHEMICAL RESEARCH LABORATORIES

Agent(s): GRIFFITH HACK; MARKS AND CLERK; REINHOLD COHN AND PARTNERS

Designated states: BE CH DE FR GB IT LI NL SE

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
AU198435409 A1	19850523	LSPB	+	published / reissued	
AU573766 B2	19880623	LSGT	+	granted / extensions (spc, cpc, pte)	
AU573766 B2	20040617	LSLE	-MK14	PATENT CEASED SECTION 143(A) (ANNUAL FEES NOT PAID) OR EXPIRED	
DE3478438 D1	19900705	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
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DK164912 B	19920907	LSPB	+	published / reissued	
DK164912 C	19930125	LSGT	+	granted / extensions (spc, cpc, pte)	
DK164912 C	20040712	LSLE	-PBP	PATENT LAPSED	TEXT : DK
DK164912 C	20041114	PEXP		Calculated Patent Term Expiry	
DK541584 A	19850515	LSPB	+	published / reissued	
EP0142969 A1	19850529	LSPB	+	published / reissued	
EP0142969 A1	19851113	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19850905
EP0142969 A1	19861210	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 19861028
EP0142969 B1	19890531	LSGT	+	granted / extensions (spc, cpc, pte)	
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EP0142969 B1	19911130	LSFE	ITTA	IT: LAST PAID ANNUAL FEE	REF COUNTRY CODE : EP
EP0142969 B1	19950131	LSGT	+EAL	SE: EUROPEAN PATENT IN FORCE IN SWEDEN	REF COUNTRY CODE : EP TEXT : 84307785.0
EP0142969 B1	20021106	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20021106 YEAR OF FEE PAYMENT : 19
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EP0142969 B1	20040630	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20031109
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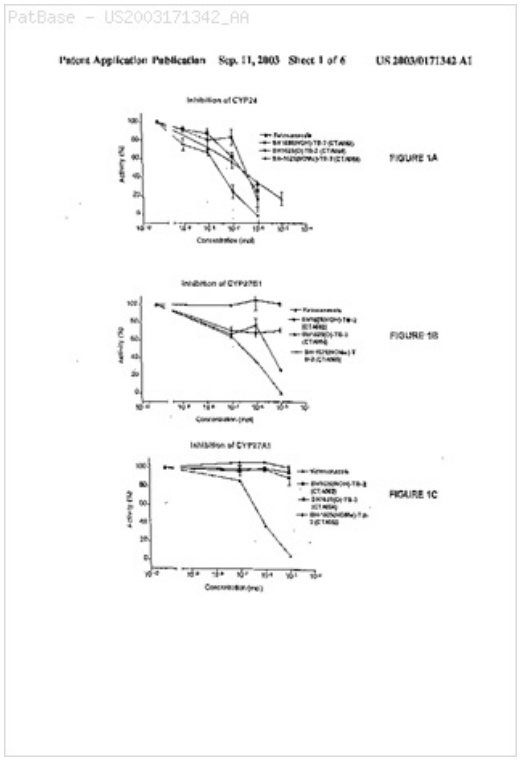
EP0142969 B1	20040730	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20040730
EP0142969 B1	20040802	LSLE	-NLV4	NL: LAPSED OR ANULLED DUE TO NON-PAYMENT OF THE ANNUAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20040601
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ES8607266 A1	19860516	LSGT	+	granted / extensions (spc, cpc, pte)	
ES8607266 A1	20060516	PEXP		Calculated Patent Term Expiry	
IL73508 A1	19890131	LSPB	+	published / reissued	
IL73508 A1	19990411	LSFE	+KB	PATENT RENEWED	
IL73508 A1	20030112	LSFE	+KB	PATENT RENEWED	
IL73508 A1	20050725	LSLE	-EXP	PATENT EXPIRED	
JP60126289 A2	19850705	LSPB	+	published / reissued	
KR19850003539 A	19850620	LSPB	+	published / reissued	
KR850003539 A	19850620	LSPB	+	published / reissued	
KR850003539 A	19891110	LSES	A201	REQUEST FOR EXAMINATION	
KR850003539 A	19910725	LSPB	G160	DECISION TO PUBLISH PATENT APPLICATION	
KR910006443 B1	19910824	LSGT	+	granted / extensions (spc, cpc, pte)	
KR910006443 B1	19911118	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
KR910006443 B1	19920120	LSGT	+GRNT	WRITTEN DECISION TO GRANT	
KR910006443 B1	20020731	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20020731 YEAR OF FEE PAYMENT : 12
KR910006443 B1	20030825	LSLE	-LAPS	LAPSE DUE TO UNPAID ANNUAL FEE	
KR910006443 B1	19991114	PEXP		Calculated Patent Term Expiry	
NZ210210 A	19870430	LSPB	+	published / reissued	
US4760054 A	19880726	LSGT	+	granted / extensions (spc, cpc, pte)	
US4760054 A	19880524	LSGT	PAT1	Patented Case	
US4760054 A	19880524	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US4760054 A	19911001	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US4760054 A	19930518	LSRE	CC	CERTIFICATE OF CORRECTION	
US4760054 A	19950824	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US4760054 A	19990729	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
ZA8408826 A	19850731	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA8408826 A	20041112	PEXP		Calculated Patent Term Expiry	

56) Family number: 29993085 (US2003171342A)

Title: Low-calcemic oxime analogs of 1alpha,25-dihydroxy vitamin D3

Abstract: The present invention provides novel 16-ene-C25-oxime and 16-ene-C-25-oxime ether analogs of 1alpha,25-dihydroxy vitamin D3, compositions comprising these compounds and methods of using these compounds as inhibitors of CYP24. In particular, the compound of Formula I are useful for treating diseases which benefit from a modulation of the levels of 1alpha,25-dihydroxy vitamin D3, for example, cell-proliferative disorders.

Classifications:
International (IPC 8-9): A61K31/59 A61K31/593 A61K45/00 A61P13/08 A61P17/00 A61P17/02 A61P17/06 A61P19/08 A61P19/10 A61P3/02 A61P3/10 A61P3/14 A61P31/06 A61P35/00 A61P43/00 A61P5/00 A61P5/14 C07C401/00 (Advanced/Invention)
International (IPC 1-7): A61K31/59 A61K31/593 A61K45/00 A61P13/08 A61P17/00 A61P17/02 A61P17/06 A61P19/08 A61P19/10 A61P3/02 A61P3/10 A61P3/14 A61P31/06 A61P35/00 A61P43/00 A61P5/00 A61P5/14 C07C401/00
CPC: C07C401/00
European: C07C401/00
US: 514/167 552/653 552/653S 564/259 564/259S



Family:

Publication number	Publication date	Application number	Application date
AT360000 E	20070515	AT20020767010T	20021011
CA2463505 AA	20040413	CA20022463505	20021011
CA2463505 C	20110712	CA20022463505	20021011
DE60219655 D1	20070531	DE20026019655	20021011
DE60219655 D1	20070531	DE20026019655T	20021011
DE60219655 T2	20071227	DE20026019655T	20021011
DK1436257 T3	20070625	DK20020767010T	20021011
EP1436257 A1	20040714	EP20020767010	20021011
EP1436257 B1	20070418	EP20020767010	20021011
ES2283593 T3	20071101	ES20020767010T	20021011
JP2005536444 T2	20051202	JP20030534384T	20021011
JP4436674 B2	20100324	JP20030534384T	20021011
PT1436257 T	20070531	PT20020767010T	20021011
US2003171342 AA	20030911	US20020270158	20021015
US6982258 BB	20060103	US20020270158	20021015
WO03031400 A1	20030417	WO2002CA01519	20021011

Priority:

US20010328428P 20011012 WO2002CA01519 20021011 US20020270158 20021015

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Inventor(s): GARY H POSNER ; JAY A WHITE ; HEUNG BAE JEON ; BETHANY HALFORD ; MEHMET KAHRAMAN ; GLENVILLE JONES

Agent(s): BERESKIN AND PARR LLP SENCRL SRL; SHIMIZU HATSUSHI; ROTHWELL FIGG ERNST AND MANBECK

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PL PT RO RU SD SE SG SI

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT360000 E	20070515	LSGT	+	granted / extensions (spc, cpc, pte)	
AT360000 E	20071015	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	REF DOCUMENT NUMBER : 1436257 COUNTRY OF REF DOCUMENT : EP
AT360000 E	20221011	PEXP		Calculated Patent Term Expiry	
CA2463505 AA	20040413	LSPB	+	published / reissued	
CA2463505 AA	20070831	LSES	+EEER	EXAMINATION REQUEST	
CA2463505 C	20110712	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2463505 C	20221011	PEXP		Calculated Patent Term Expiry	
DE60219655 D1	20080508	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE60219655 D1	20080508	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE60219655 D1	20190501	LSDW	-R119	APPLICATION DEEMED WITHDRAWN, OR IP RIGHT LAPSED, DUE TO NON-PAYMENT OF RENEWAL FEE	
DE60219655 D1	20190501	LSDW	-R119	APPLICATION DEEMED WITHDRAWN, OR IP RIGHT LAPSED, DUE TO NON-PAYMENT OF RENEWAL FEE	
DE60219655 T2	20071227	LSGT	+	granted / extensions (spc, cpc, pte)	
DE60219655 T2	20080508	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE60219655 T2	20190501	LSDW	-R119	APPLICATION DEEMED WITHDRAWN, OR IP RIGHT LAPSED, DUE TO NON-PAYMENT OF RENEWAL FEE	
DE60219655 T2	20221011	PEXP		Calculated Patent Term Expiry	
DK1436257 T3	20070625	LSGT	+	granted / extensions (spc, cpc, pte)	
DK1436257 T3	20221011	PEXP		Calculated Patent Term Expiry	
EP1436257 A1	20040714	LSPB	+	published / reissued	
EP1436257 A1	20040714	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20040511
EP1436257 A1	20050323	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : JOHNS HOPKINS UNIVERSITY
EP1436257 A1	20050323	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : CYTOCHROMA INC.

EP1436257 A1	20151231	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20151026 YEAR OF FEE PAYMENT : 14
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EP1436257 A1	20160129	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20151028 YEAR OF FEE PAYMENT : 14
EP1436257 A1	20160129	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20151027 YEAR OF FEE PAYMENT : 14
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EP1436257 B1	20080229	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20070418
EP1436257 B1	20080326	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20080121
EP1436257 B1	20090130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20070418
EP1436257 B1	20090930	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20070418
EP1436257 B1	20151019	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 14
EP1436257 B1	20161025	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP

					YEAR OF FEE PAYMENT : 15
EP1436257 B1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20160923 YEAR OF FEE PAYMENT : 15
EP1436257 B1	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20161026 YEAR OF FEE PAYMENT : 15
EP1436257 B1	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20161027 YEAR OF FEE PAYMENT : 15
EP1436257 B1	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20161028 YEAR OF FEE PAYMENT : 15
EP1436257 B1	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20161103 YEAR OF FEE PAYMENT : 15
EP1436257 B1	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20161027 YEAR OF FEE PAYMENT : 15
EP1436257 B1	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20161027 YEAR OF FEE PAYMENT : 15
EP1436257 B1	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20161027 YEAR OF FEE PAYMENT : 15
EP1436257 B1	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY PAYMENT DATE : 20160923 YEAR OF FEE PAYMENT : 15
EP1436257 B1	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20161025 YEAR OF FEE PAYMENT : 15
EP1436257 B1	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20161025 YEAR OF FEE PAYMENT : 15
EP1436257 B1	20170228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20161024 YEAR OF FEE PAYMENT : 15
EP1436257 B1	20170228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20161027 YEAR OF FEE PAYMENT : 15
EP1436257 B1	20170228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20161027 YEAR OF FEE PAYMENT : 15
EP1436257 B1	20170228	LSFE	+PGFP	ANNUAL FEE PAID	COUNTRY OF REF DOCUMENT : ES

				TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	PAYMENT DATE : 20161026 YEAR OF FEE PAYMENT : 15
EP1436257 B1	20170228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20161027 YEAR OF FEE PAYMENT : 15
EP1436257 B1	20170228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20160921 YEAR OF FEE PAYMENT : 15
EP1436257 B1	20171025	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 16
EP1436257 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20170921 YEAR OF FEE PAYMENT : 16
EP1436257 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20170922 YEAR OF FEE PAYMENT : 16
EP1436257 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20171025 YEAR OF FEE PAYMENT : 16
EP1436257 B1	20180131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20171027 YEAR OF FEE PAYMENT : 16
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EP1436257 B1	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20171027 YEAR OF FEE PAYMENT : 16
EP1436257 B1	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20171102 YEAR OF FEE PAYMENT : 16
EP1436257 B1	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20171027 YEAR OF FEE PAYMENT : 16
EP1436257 B1	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20171027 YEAR OF FEE PAYMENT : 16

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EP1436257 B1	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY PAYMENT DATE : 20170922 YEAR OF FEE PAYMENT : 16
EP1436257 B1	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20171026 YEAR OF FEE PAYMENT : 16
EP1436257 B1	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20171024 YEAR OF FEE PAYMENT : 16
EP1436257 B1	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20170920 YEAR OF FEE PAYMENT : 16
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EP1436257 B1	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20171031 YEAR OF FEE PAYMENT : 16
EP1436257 B1	20190501	LSDW	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R119 REF DOCUMENT NUMBER : 60219655 COUNTRY OF REF DOCUMENT : DE
EP1436257 B1	20190520	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DK REF LEGAL EVENT CODE : EBP EFFECTIVE DATE : 20181031
EP1436257 B1	20190528	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SE REF LEGAL EVENT CODE : EUG
EP1436257 B1	20190531	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP1436257 B1	20190615	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MM01 REF DOCUMENT NUMBER : 360000 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20181011
EP1436257 B1	20190626	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20181011
EP1436257 B1	20190628	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20181011
EP1436257 B1	20190628	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20181031
EP1436257 B1	20190724	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A

EP1436257 B1	20221011	PEXP		Calculated Patent Term Expiry	
ES2283593 T3	20071101	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2283593 T3	20221011	PEXP		Calculated Patent Term Expiry	
JP2005536444 T2	20051202	LSPB	+	published / reissued	
JP2005536444 T2	20080619	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20080618
JP2005536444 T2	20081114	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20081113
JP2005536444 T2	20081225	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20081224
JP2005536444 T2	20090605	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20090604
JP2005536444 T2	20090707	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20090706
JP2005536444 T2	20091022	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20091021
JP2005536444 T2	20091112	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A821 EFFECTIVE DATE : 20091021
JP2005536444 T2	20091118	LSAL	A911	TRANSFER OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A911 EFFECTIVE DATE : 20091117
JP2005536444 T2	20091211	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2005536444 T2	20091222	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20091221
JP2005536444 T2	20091224	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01
JP2005536444 T2	20100107	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20091228
JP2005536444 T2	20100108	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP2005536444 T2	20100114	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP4436674 B2	20100324	LSGT	+	granted / extensions (spc, cpc, pte)	
JP4436674 B2	20051001	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20050930
JP4436674 B2	20051001	LSES	+A621	WRITTEN REQUEST	TEXT : JAPANESE INTERMEDIATE

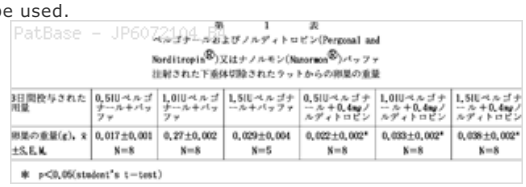
				FOR APPLICATION EXAMINATION	CODE: A621 EFFECTIVE DATE : 20050930
JP4436674 B2	20100105	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP4436674 B2	20121227	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP4436674 B2	20130108	LSFE	+R250	年金領収書, 年金領収書(分納) (Pension receipt, annuity receipt (scheduled))	
JP4436674 B2	20131226	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4436674 B2	20140107	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4436674 B2	20141225	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4436674 B2	20150106	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4436674 B2	20160104	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4436674 B2	20160112	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4436674 B2	20170105	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4436674 B2	20170110	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4436674 B2	20180108	LSLE	-LAPS	CANCELLATION BECAUSE OF NO PAYMENT OF ANNUAL FEES	
JP4436674 B2	20221011	PEXP		Calculated Patent Term Expiry	
PT1436257 T	20070531	LSGT	+	granted / extensions (spc, cpc, pte)	
PT1436257 T	20221011	PEXP		Calculated Patent Term Expiry	
US2003171342 AA	20030911	LSPB	+	published / reissued	
US2003171342 AA	20040112	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CYTOCHROMA INC., CANADA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:POSNER, GARY; KAHRAMAN, MEHMAT; JEON, HEUNG BAE; AND OTHERS; REEL/FRAME:014252/0925; SIGNING DATES FROM 20021203 TO 20030901
US2003171342 AA	20040112	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : JOHN HOPKINS UNIVERSITY, MARYLAND OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:POSNER, GARY; KAHRAMAN, MEHMAT; JEON, HEUNG BAE; AND OTHERS; REEL/FRAME:014252/0925; SIGNING DATES FROM 20021203 TO 20030901
US2003171342 AA	20051214	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US6982258 BB	20060103	LSGT	+	granted / extensions (spc, cpc, pte)	
US6982258 BB	20051214	LSGT	PAT1	Patented Case	
US6982258 BB	20090603	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4

US6982258 BB	20120816	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COMERICA BANK, A TEXAS BANKING ASSOCIATION AND AUT OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:CYTOCHROMA INC., A CORPORATION EXISTING UNDER THE LAWS OF ONTARIO; REEL/FRAME:028801/0539 EFFECTIVE DATE : 20120731
US6982258 BB	20130304	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CYTOCHROMA INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:COMERICA BANK, A TEXAS BANKING ASSOCIATION AND AUTHORIZED FOREIGN BANK UNDER THE BANK ACT (CANADA); REEL/FRAME:029914/0404 EFFECTIVE DATE : 20130227
US6982258 BB	20130311	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US6982258 BB	20150731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OPKO IP HOLDINGS II, INC., CAYMAN ISLANDS OLDPARTY : NUNC PRO TUNC ASSIGNMENT; ASSIGNOR:CYTOCHROMA CAYMAN ISLANDS LTD.; REEL/FRAME:036224/0163 EFFECTIVE DATE : 20130304
US6982258 BB	20150731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CYTOCHROMA CAYMAN ISLANDS LTD., CAYMAN ISLANDS OLDPARTY : NUNC PRO TUNC ASSIGNMENT; ASSIGNOR:CYTOCHROMA INC.; REEL/FRAME:036238/0359 EFFECTIVE DATE : 20130227
US6982258 BB	20150731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OPKO IRELAND GLOBAL HOLDINGS, LTD., CAYMAN ISLANDS OLDPARTY : CONFIRMATORY PATENT RIGHTS AGREEMENT; ASSIGNOR:OPKO IP HOLDINGS II, INC.; REEL/FRAME:036238/0486 EFFECTIVE DATE : 20150721
US6982258 BB	20170703	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US6982258 BB	20230213	PEXP		Calculated Patent Term Expiry (PTA 121 days)	
WO03031400 A1	20030417	LSPB	+	published / reissued	
WO03031400 A1	20040412	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2003534384 COUNTRY OF REF DOCUMENT : JP
WO03031400 A1	20040413	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2463505 COUNTRY OF REF DOCUMENT : CA
WO03031400 A1	20040511	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2002767010 COUNTRY OF REF DOCUMENT : EP
WO03031400 A1	20040714	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2002767010 COUNTRY OF REF DOCUMENT : EP
WO03031400 A1	20070418	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2002767010 COUNTRY OF REF DOCUMENT : EP

57) Family number: 48452086 (US5063204A)

Title: PROCESS FOR TREATING INFERTILITY

Abstract: A combination of gonadotrophins and growth hormone is useful for treating infertility in higher mammals and humans since the probability of pregnancy is enhanced. In the treatment, gonadotrophins and growth hormone are injected separately, or a combined preparation containing both of these active substances may be used.



第 1 表
ペルゴナールおよびノルディトロピン(Personal and Norditropin®)又はナノルモン(Nanormon®)バッファ注射された下垂体切除されたラットからの卵巣の重量

3日間投与された用量	0.5IUペルゴナール+バッファ	1.0IUペルゴナール+バッファ	1.5IUペルゴナール+バッファ	0.5IUペルゴナール+0.4mgノルディトロピン	1.0IUペルゴナール+0.4mgノルディトロピン	1.5IUペルゴナール+0.4mgノルディトロピン
卵巣の重量(g), x ±S.E.M.	0.017±0.001 N=8	0.27±0.002 N=8	0.029±0.004 N=5	0.022±0.002* N=8	0.033±0.002* N=8	0.038±0.002* N=8

* p<0.05(student's t-test)

Classifications:
International (IPC 8-9): A61K38/00 A61K38/24 A61K38/27 A61P13/02 A61P15/00 (Advanced/Invention);
A61K38/00 A61K38/24 A61K38/27 A61P13/00 A61P15/00 (Core/Invention)
International (IPC 1-7): A61K37/24 A61K37/36 A61K37/38 A61K38/08 A61K38/22 A61K38/24 A61K38/27 C07K14/59 C07K14/61
CPC: A61K38/24
European: A61K38/24
US: 514/10.1 514/10.2 514/10.3 514/10.4 514/11.3 514/11.4 514/12 514/21 514/8 514/9.8 514/9.9 530/399

Family:

Publication number	Publication date	Application number	Application date
AT77961 E	19920715	AT19880901571T	19880129
AU198812902 A1	19880824	AU19880012902	19880129
AU611130 B2	19910606	AU19880012902	19880129
DE3872614 D1	19920813	DE19883872614	19880129
DE3872614 T2	19921217	DE19883872614T	19880129
DE3872614 T3	20021205	DE19883872614T	19880129
DK158542 B	19900605	DK19880005439	19880929
DK158542 C	19901105	DK19880005439	19880929
DK49987 A	19880731	DK19870000499	19870130
DK49987 A0	19870130	DK19870000499	19870130
DK543988 A	19880930	DK19880005439	19880929
DK543988 A0	19880929	DK19880005439	19880929
EP0300021 A1	19890125	EP19880901571	19880129
EP0300021 B1	19920708	EP19880901571	19880129
EP0300021 B2	20020529	EP19880901571	19880129
JP1502665 T2	19890914	JP19880501636	19880129
JP2137126 C3	19980703	JP19880501636	19880129
JP6072104 B4	19940914	JP19880501636T	19880129
US5063204 A	19911105	US19900488490	19900302
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US5610138 A	19970311	US19950430513	19950427
WO8805662 A1	19880811	WO1988DK00012	19880129

Priority:

DK19870000499 19870130 US19870064846 19870619 EP19880901571 19880129
WO1988DK00012 19880129 DK19890002729 19890602 US19900488490 19900302
US19910709900 19910604 US19910777395 19911203 US19930017958 19930212
US19940299958 19940901 US19940328970 19941024 US19950430513 19950427

Probable Assignee: NOVO NORDISK AS

Assignee(s): (std): NORDISK GENTOFTE ; NOVO NORDISK AS

Assignee(s): NOVONORDISK AS ; NORDISK GENTOFTE A S ; NOVO NORDISK A S ; NOVO NORDISK A S BAGSVAERD ; NOVO NORDISK A S BAGSVAERD DK

Inventor(s): (std): JACOBS HOWARD ; JACOBS HOWARD S

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Agent(s): PHILLIPS ORMONDE FITZPATRICK

Designated states: AT AU BE CH DE DK FI FR GB IT JP LI LU NL NO SE US

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
AT77961 E	19920715	LSGT	+	granted / extensions (spc, cpc, pte)	
AT77961 E	19930215	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	
AT77961 E	20030115	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	
AT77961 E	20041015	LSLE	-REN	CEASED DUE TO NON-PAYMENT OF THE ANNUAL FEE	
AT77961 E	20080129	PEXP		Calculated Patent Term Expiry	

AU198812902 A1	19880824	LSPB	+	published / reissued	
AU611130 B2	19910606	LSGT	+	granted / extensions (spc, cpc, pte)	
AU611130 B2	20040923	LSLE	-MK14	PATENT CEASED SECTION 143(A) (ANNUAL FEES NOT PAID) OR EXPIRED	
AU611130 B2	20080129	PEXP		Calculated Patent Term Expiry	
DE3872614 D1	19930701	LSOP	-8363	OPPOSITION AGAINST THE PATENT	
DE3872614 D1	20020801	LSOP	+8366	RESTRICTED MAINTAINED AFTER OPPOSITION PROCEEDINGS	
DE3872614 D1	20041111	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
DE3872614 T2	19921217	LSGT	+	granted / extensions (spc, cpc, pte)	
DE3872614 T3	20021205	LSGT	+	granted / extensions (spc, cpc, pte)	
DK158542 B	19900605	LSPB	+	published / reissued	
DK158542 C	19901105	LSGT	+	granted / extensions (spc, cpc, pte)	
DK158542 C	20040906	LSLE	-PBP	PATENT LAPSED	TEXT : DK
DK158542 C	20080929	PEXP		Calculated Patent Term Expiry	
DK49987 A	19880731	LSPB	+	published / reissued	
DK49987 A	19900319	LSWD	-AHS	APPLICATION SHELVED FOR OTHER REASONS THAN NON-PAYMENT	
DK543988 A	19880930	LSPB	+	published / reissued	
EP0300021 A1	19890125	LSPB	+	published / reissued	
EP0300021 A1	19890125	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19880927
EP0300021 A1	19900926	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 19900809
EP0300021 A1	19920311	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : NOVO NORDISK A/S
EP0300021 B1	19920708	LSGT	+	granted / extensions (spc, cpc, pte)	
EP0300021 B1	19930526	LSOP	-26	OPPOSITION FILED	PARTYTYPE : OPPONENT OPPONENT : KABI PHARMACIA AB EFFECTIVE DATE : 19930407
EP0300021 B1	19930609	LSOP	-26	OPPOSITION FILED	PARTYTYPE : OPPONENT OPPONENT : KABI PHARMACIA AB EFFECTIVE DATE : 19930407
EP0300021 B1	19930609	LSOP	-26	OPPOSITION FILED	PARTYTYPE : OPPONENT OPPONENT : APPLIED RESEARCH SYSTEMS ARS HOLDING NV EFFECTIVE DATE : 19930407
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EP0300021 B1	19940307	LSFE	+EPTA	LU: LAST PAID ANNUAL FEE	REF COUNTRY CODE : EP
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				(CORRECTED)	OPPONENT : PHARMACIA AKTIEBOLAG * 930407 APPLIED RESEARCH SYS EFFECTIVE DATE : 19930407
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EP0300021 B2	20020801	LSOP	NLR2	NL: DECISION OF OPPOSITION	REF COUNTRY CODE : EP
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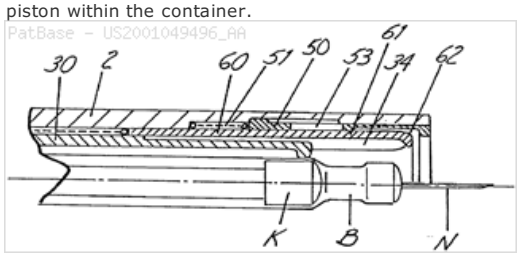
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EP0300021 B2	20080129	PEXP		Calculated Patent Term Expiry	
JP1502665 T2	19890914	LSPB	+	published / reissued	
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JP2137126 C3	20080129	PEXP		Calculated Patent Term Expiry	
JP6072104 B4	19940914	LSPB	+	published / reissued	
JP6072104 B4	20040914	LSLE	-LAPS	CANCELLATION BECAUSE OF NO PAYMENT OF ANNUAL FEES	
US5063204 A	19911105	LSGT	+	granted / extensions (spc, cpc, pte)	
US5063204 A	19910905	LSGT	PAT1	Patented Case	
US5063204 A	19910905	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5063204 A	19950412	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5063204 A	19990413	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5063204 A	20030418	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5063204 A	20100302	PEXP		Calculated Patent Term Expiry	
US5538948 A	19960723	LSGT	+	granted / extensions (spc, cpc, pte)	
US5538948 A	19960712	LSGT	PAT1	Patented Case	
US5538948 A	19990816	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5538948 A	20040723	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5538948 A	20040921	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20040723
US5538948 A	20180125	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US5538948 A	20180125	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US5538948 A	20141024	PEXP		Calculated Patent Term Expiry	
US5610138 A	19970311	LSGT	+	granted / extensions (spc, cpc, pte)	
US5610138 A	20000828	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5610138 A	20050311	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5610138 A	20050413	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US5610138 A	20050413	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US5610138 A	20050510	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20050311

US5610138 A	20150427	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
WO8805662 A1	19880811	LSPB	+	published / reissued	
WO8805662 A1	19880927	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1988901571 COUNTRY OF REF DOCUMENT : EP
WO8805662 A1	19890125	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1988901571 COUNTRY OF REF DOCUMENT : EP
WO8805662 A1	19900920	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 3891187 COUNTRY OF REF DOCUMENT : DE
WO8805662 A1	19920708	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1988901571 COUNTRY OF REF DOCUMENT : EP

58) Family number: 32194087 (US2001049496A)

Title: AUTOMATIC INJECTION DEVICE

Abstract: The present invention provides an auto-injection device including a housing, a container from which a product is dispensed by advancing a piston, the container shiftably accommodated by the housing and carrying a needle, and a drive unit including a driven member, wherein the driven member is shiftably accommodated by the housing and, during an auto-injection, is adapted for inserting the needle and advancing the container to a predetermined frontal position in relation to the housing and advancing the piston within the container for dispensing of the product, wherein the driven member remains uncoupled with the piston until the container reaches its frontal position, and upon the container reaching its frontal position, the driven member detaches from the container and couples with the piston for advancing the piston within the container.



Classifications:
International (IPC 8-9): A61M5/20 A61M5/31 A61M5/315 A61M5/32 A61M5/46 (Advanced/Invention);
A61M5/24 A61M5/315 (Advanced/Non-invention);
A61M5/20 A61M5/31 A61M5/315 A61M5/32 A61M5/46 (Core/Invention);
A61M5/24 A61M5/315 (Core/Non-invention)
International (IPC 1-7): A61M37/00 A61M5/19 A61M5/20 A61M5/315 A61M5/32
CPC: A61M2005/206 A61M5/46 A61M5/2033 A61M5/2066 A61M5/24 A61M5/2448 A61M5/3155 A61M5/31595 A61M5/3202 A61M5/326 A61M2005/2086 A61M2005/3247 A61M2205/14
European: A61M5/20C A61M5/32E A61M5/46 K61M205/14 K61M5/20M K61M5/20R K61M5/24 K61M5/24M K61M5/315E2B1 K61M5/315F3B2 K61M5/32B K61M5/32C2H1D K61M5/32C2H2F
US: 604/154 604/154P 604/187 604/198 604/198S 604/207 604/218

Family:

Publication number	Publication date	Application number	Application date
AT302034 E	20050915	AT19990810407T	19990507
AT376849 E	20071115	AT19990010294T	19990507
AT455568 E	20100215	AT19990119407T	19990507
DE19822031 A1	19991118	DE19981022031	19980515
DE19822031 C2	20000323	DE19981022031	19980515
DE59912414 D1	20050922	DE19995012414	19990507
DE59914542 D1	20071213	DE19995014542	19990507
DE59915128 D1	20100311	DE19995015128	19990507
DK0956873 T3	20060102	DK19990810407T	19990507
DK1568388 T3	20080310	DK19990010294T	19990507
DK1568388 T4	20101122	DK19990010294T	19990507
DK1875935 T3	20100517	DK19990119407T	19990507
EP0956873 A2	19991117	EP19990810407	19990507
EP0956873 A3	20000726	EP19990810407	19990507
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EP1568388 A1	20050831	EP20050010294	19990507
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EP1568388 B2	20100728	EP20050010294	19990507
EP1568388 B9	20110323	EP20050010294	19990507
EP1875935 A2	20080109	EP20070119407	19990507
EP1875935 A3	20080521	EP20070119407	19990507
EP1875935 B1	20100120	EP20070119407	19990507
ES2248975 T3	20060316	ES19990810407T	19990507
ES2294594 T3	20080401	ES20050010294T	19990507
ES2294594 T5	20101223	ES20050010294T	19990507
JP11347121 A2	19991221	JP19990135819	19990517
JP4306873 B2	20090805	JP19990135819	19990517
PT1568388 T	20071224	PT20050010294T	19990507
US2001049496 AA	20011206	US20010924048	20010807
US6280421 BA	20010828	US19990311435	19990514
US6620137 BB	20030916	US20010924048	20010807

Priority:

DE19981022031 19980515 DE19995012414 19990507 DE19995014542 19990507
EP20050010294 19990507 EP19990810407 19990507 US19990311435 19990514
US20010924048 20010807

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Inventor(s): (std): STECK J UUML RG ; STECK JURG ; JOST STEPHAN ; HOSTETTLER PETER ; STECK JUERG ; KIRCHHOFER FRITZ

Inventor(s): FRITZ KIRCHHOFER ; PETER HOSTETTLER ; JUERG STECK ; STEPHAN JOST

Agent(s): SCHWABE SANDMAIR MARX; MASUI CHUJI; SHAMOTO ICHIO; KOBAYASHI YASUSHI; TOMITA HIROYUKI; CHIBA AKIO

Designated states: AL AT BA BE CH CY DE DK ES FI FR GB GR HR IE IT LI LU MC MK NL PT RS SE YU

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
AT302034 E	20050915	LSGT	+	granted / extensions (spc, cpc, pte)	
AT302034 E	20190507	PEXP		Calculated Patent Term Expiry	
AT376849 E	20071115	LSGT	+	granted / extensions (spc, cpc, pte)	
AT376849 E	20190507	PEXP		Calculated Patent Term Expiry	
AT455568 E	20100215	LSGT	+	granted / extensions (spc, cpc, pte)	
AT455568 E	20110815	LSLE	-REN	CEASED DUE TO NON-PAYMENT OF THE ANNUAL FEE	
AT455568 E	20190507	PEXP		Calculated Patent Term Expiry	
DE19822031 A1	19991118	LSPB	+	published / reissued	
DE19822031 A1	19991118	LSES	+OP8	REQUEST FOR EXAMINATION AS TO PARAGRAPH 44 PATENT LAW	
DE19822031 C2	20000323	LSGT	+	granted / extensions (spc, cpc, pte)	
DE19822031 C2	20000323	LSGT	+D2	GRANT AFTER EXAMINATION	
DE19822031 C2	20000921	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE19822031 C2	20040519	LSAS	8327	CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER	PARTYTYPE : OWNER OWNER : TECPHARMA LICENSING AG, BURGDORF, CH
DE19822031 C2	20180515	LSLE	-R071	EXPIRY OF RIGHT	
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DE59912414 D1	20190507	LSLE	-R071	EXPIRY OF RIGHT	
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DK1875935 T3	20100517	LSGT	+	granted / extensions (spc, cpc, pte)	
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EP0956873 A2	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20160519 YEAR OF FEE PAYMENT : 18
EP0956873 A2	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20160504 YEAR OF FEE PAYMENT : 18
EP0956873 A2	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20160523 YEAR OF FEE PAYMENT : 18
EP0956873 A2	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20160524 YEAR OF FEE PAYMENT : 18
EP0956873 A2	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20160523 YEAR OF FEE PAYMENT : 18
EP0956873 A3	20010404	LSFE	+AKX	DESIGNATION FEES PAID	
EP0956873 A3	20010425	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20010126
EP0956873 A3	20031112	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : TECPHARMA LICENSING AG
EP0956873 A3	20040506	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20040322
EP0956873 B1	20050817	LSGT	+	granted / extensions (spc, cpc, pte)	
EP0956873 B1	20050817	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20050817
EP0956873 B1	20050817	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20050817
EP0956873 B1	20050817	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20050817
EP0956873 B1	20050817	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D TEXT : NOT ENGLISH

EP0956873 B1	20050831	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP0956873 B1	20050921	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D TEXT : LANGUAGE OF EP DOCUMENT: GERMAN
EP0956873 B1	20051117	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20051117
EP0956873 B1	20060201	LSLE	-NLV1	NL: LAPSED OR ANNULLED DUE TO FAILURE TO FULFILL THE REQUIREMENTS OF ART. 29P AND 29M OF THE PATENTS ACT	REF COUNTRY CODE : EP
EP0956873 B1	20060316	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2248975 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP0956873 B1	20060322	LSWD	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FD4D
EP0956873 B1	20060531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20060531
EP0956873 B1	20060531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20060531
EP0956873 B1	20060705	LSOP	-26	OPPOSITION FILED	PARTYTYPE : OPPONENT OPPONENT : ABBOTT LABORATORIES EFFECTIVE DATE : 20060517
EP0956873 B1	20071231	LSLE	-BERE	BE: LAPSED	PARTYTYPE : OWNER REF COUNTRY CODE : EP OWNER : TECPHARMA LICENSING A.G. EFFECTIVE DATE : 20060531
EP0956873 B1	20080731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20060507
EP0956873 B1	20080820	LSRE	+27C	OPPOSITION PROCEEDINGS TERMINATED	EFFECTIVE DATE : 20080417
EP0956873 B1	20081128	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20050817
EP0956873 B1	20150519	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 17

EP0956873 B1	20160523	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 18
EP0956873 B1	20170522	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 19
EP0956873 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170522 YEAR OF FEE PAYMENT : 19
EP0956873 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20170524 YEAR OF FEE PAYMENT : 19
EP0956873 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20170523 YEAR OF FEE PAYMENT : 19
EP0956873 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20170524 YEAR OF FEE PAYMENT : 19
EP0956873 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170522 YEAR OF FEE PAYMENT : 19
EP0956873 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20170524 YEAR OF FEE PAYMENT : 19
EP0956873 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20170519 YEAR OF FEE PAYMENT : 19
EP0956873 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20170523 YEAR OF FEE PAYMENT : 19
EP0956873 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20170601 YEAR OF FEE PAYMENT : 19
EP0956873 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20170427 YEAR OF FEE PAYMENT : 19
EP0956873 B1	20180523	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 20
EP0956873 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180524 YEAR OF FEE PAYMENT : 20
EP0956873 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20180626 YEAR OF FEE PAYMENT : 20
EP0956873 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20180523 YEAR OF FEE PAYMENT : 20
EP0956873 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20180424 YEAR OF FEE PAYMENT : 20
EP0956873 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : DK

				[ANNOUNCED FROM NATIONAL OFFICE TO EPO]	PAYMENT DATE : 20180523 YEAR OF FEE PAYMENT : 20
EP0956873 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20180517 YEAR OF FEE PAYMENT : 20
EP0956873 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20180518 YEAR OF FEE PAYMENT : 20
EP0956873 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20180523 YEAR OF FEE PAYMENT : 20
EP0956873 B1	20180928	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20180523 YEAR OF FEE PAYMENT : 20
EP0956873 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20180523 YEAR OF FEE PAYMENT : 20
EP0956873 B1	20190507	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R071 REF DOCUMENT NUMBER : 59912414 COUNTRY OF REF DOCUMENT : DE
EP0956873 B1	20190513	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DK REF LEGAL EVENT CODE : EUP EFFECTIVE DATE : 20190507
EP0956873 B1	20190515	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP0956873 B1	20190529	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : PE20 EXPIRY DATE : 20190506
EP0956873 B1	20190615	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MK07 REF DOCUMENT NUMBER : 302034 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20190507
EP0956873 B1	20190702	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SE REF LEGAL EVENT CODE : EUG
EP0956873 B1	20190506	PEXP		Calculated Patent Term Expiry	
EP0956873 B1	20190507	PEXP		Calculated Patent Term Expiry	
EP1568388 A1	20050831	LSPB	+	published / reissued	
EP1568388 A1	20050831	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20050512
EP1568388 A1	20060517	LSFE	+AKX	DESIGNATION FEES PAID	COUNTRY OF REF DOCUMENT : AT COUNTRY OF REF DOCUMENT : BE COUNTRY OF REF DOCUMENT : CH COUNTRY OF REF DOCUMENT : CY COUNTRY OF REF DOCUMENT : DE COUNTRY OF REF DOCUMENT : DK COUNTRY OF REF DOCUMENT : ES COUNTRY OF REF DOCUMENT : FI COUNTRY OF REF DOCUMENT : FR COUNTRY OF REF DOCUMENT : GB

					COUNTRY OF REF DOCUMENT : GR COUNTRY OF REF DOCUMENT : IE COUNTRY OF REF DOCUMENT : IT COUNTRY OF REF DOCUMENT : LI COUNTRY OF REF DOCUMENT : LU COUNTRY OF REF DOCUMENT : MC COUNTRY OF REF DOCUMENT : NL COUNTRY OF REF DOCUMENT : PT COUNTRY OF REF DOCUMENT : SE
EP1568388 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20160523 YEAR OF FEE PAYMENT : 18
EP1568388 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20160523 YEAR OF FEE PAYMENT : 18
EP1568388 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20160525 YEAR OF FEE PAYMENT : 18
EP1568388 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20160526 YEAR OF FEE PAYMENT : 18
EP1568388 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20160524 YEAR OF FEE PAYMENT : 18
EP1568388 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20160523 YEAR OF FEE PAYMENT : 18
EP1568388 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20160519 YEAR OF FEE PAYMENT : 18
EP1568388 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20160523 YEAR OF FEE PAYMENT : 18
EP1568388 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20160504 YEAR OF FEE PAYMENT : 18
EP1568388 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20160523 YEAR OF FEE PAYMENT : 18
EP1568388 B1	20071031	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1568388 B1	20071031	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D TEXT : NOT ENGLISH
EP1568388 B1	20071128	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D TEXT : LANGUAGE OF EP DOCUMENT: GERMAN
EP1568388 B1	20071130	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1568388 B1	20080401	LSLE	-NLV1	NL: LAPSED OR ANNULLED DUE TO FAILURE TO FULFILL THE REQUIREMENTS OF ART. 29P AND 29M OF THE PATENTS ACT	REF COUNTRY CODE : EP

EP1568388 B1	20080401	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2294594 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP1568388 B1	20080430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20071031
EP1568388 B1	20080611	LSWD	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FD4D
EP1568388 B1	20080910	LSOP	-26	OPPOSITION FILED	PARTYTYPE : OPPONENT OPPONENT : SANOFI-AVENTIS DEUTSCHLAND GMBH EFFECTIVE DATE : 20080731
EP1568388 B1	20081031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20071031
EP1568388 B1	20081130	LSLE	-BERE	BE: LAPSED	PARTYTYPE : OWNER REF COUNTRY CODE : EP OWNER : TECPHARMA LICENSING A.G. EFFECTIVE DATE : 20080531
EP1568388 B1	20081231	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20080531
EP1568388 B1	20090130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20080201
EP1568388 B1	20090227	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20071031
EP1568388 B1	20090331	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20080531
EP1568388 B1	20090731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20071031
EP1568388 B1	20190507	PEXP		Calculated Patent Term Expiry	
EP1568388 B2	20100728	LSGT	+	granted / extensions	

				(spc, cpc, pte)	
EP1568388 B2	20100728	LSRE	27A	PATENT MAINTAINED IN AMENDED FORM	EFFECTIVE DATE : 20100728
EP1568388 B2	20100730	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20080507
EP1568388 B2	20100730	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : AEN TEXT : AUFRECHTERHALTUNG DES PATENTES IN GEAENDERTER FORM
EP1568388 B2	20101109	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SE REF LEGAL EVENT CODE : RPEO
EP1568388 B2	20101223	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : DC2A EFFECTIVE DATE : 20101213
EP1568388 B2	20190506	PEXP		Calculated Patent Term Expiry	
EP1568388 B2	20190507	PEXP		Calculated Patent Term Expiry	
EP1568388 B9	20150519	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 17
EP1568388 B9	20160523	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 18
EP1568388 B9	20170522	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 19
EP1568388 B9	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170522 YEAR OF FEE PAYMENT : 19
EP1568388 B9	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170522 YEAR OF FEE PAYMENT : 19
EP1568388 B9	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20170524 YEAR OF FEE PAYMENT : 19
EP1568388 B9	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20170523 YEAR OF FEE PAYMENT : 19
EP1568388 B9	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20170524 YEAR OF FEE PAYMENT : 19
EP1568388 B9	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20170519 YEAR OF FEE PAYMENT : 19
EP1568388 B9	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20170601 YEAR OF FEE PAYMENT : 19
EP1568388 B9	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20170427 YEAR OF FEE PAYMENT : 19
EP1568388 B9	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20170523 YEAR OF FEE PAYMENT : 19

EP1568388 B9	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20170524 YEAR OF FEE PAYMENT : 19
EP1568388 B9	20180523	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 20
EP1568388 B9	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20180626 YEAR OF FEE PAYMENT : 20
EP1568388 B9	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20180424 YEAR OF FEE PAYMENT : 20
EP1568388 B9	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20180523 YEAR OF FEE PAYMENT : 20
EP1568388 B9	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20180523 YEAR OF FEE PAYMENT : 20
EP1568388 B9	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180524 YEAR OF FEE PAYMENT : 20
EP1568388 B9	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20180517 YEAR OF FEE PAYMENT : 20
EP1568388 B9	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20180523 YEAR OF FEE PAYMENT : 20
EP1568388 B9	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20180518 YEAR OF FEE PAYMENT : 20
EP1568388 B9	20180928	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20180523 YEAR OF FEE PAYMENT : 20
EP1568388 B9	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20180523 YEAR OF FEE PAYMENT : 20
EP1568388 B9	20190507	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R071 REF DOCUMENT NUMBER : 59914542 COUNTRY OF REF DOCUMENT : DE
EP1568388 B9	20190513	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DK REF LEGAL EVENT CODE : EUP EFFECTIVE DATE : 20190507
EP1568388 B9	20190515	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP1568388 B9	20190529	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : PE20 EXPIRY DATE : 20190506
EP1568388 B9	20190615	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MK07 REF DOCUMENT NUMBER : 376849 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT :

					T DESIGNATED STATE(S) : EFFECTIVE DATE : 20190507
EP1568388 B9	20190702	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SE REF LEGAL EVENT CODE : EUG
EP1875935 A2	20080109	LSPB	+	published / reissued	
EP1875935 A2	20080109	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20071026
EP1875935 A3	20080910	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20080807
EP1875935 A3	20090128	LSFE	+AKX	DESIGNATION FEES PAID	COUNTRY OF REF DOCUMENT : AT COUNTRY OF REF DOCUMENT : BE COUNTRY OF REF DOCUMENT : CH COUNTRY OF REF DOCUMENT : CY COUNTRY OF REF DOCUMENT : DE COUNTRY OF REF DOCUMENT : DK COUNTRY OF REF DOCUMENT : ES COUNTRY OF REF DOCUMENT : FI COUNTRY OF REF DOCUMENT : FR COUNTRY OF REF DOCUMENT : GB COUNTRY OF REF DOCUMENT : GR COUNTRY OF REF DOCUMENT : IE COUNTRY OF REF DOCUMENT : IT COUNTRY OF REF DOCUMENT : LI COUNTRY OF REF DOCUMENT : LU COUNTRY OF REF DOCUMENT : MC COUNTRY OF REF DOCUMENT : NL COUNTRY OF REF DOCUMENT : PT COUNTRY OF REF DOCUMENT : SE
EP1875935 B1	20100120	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1875935 B1	20100120	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D TEXT : NOT ENGLISH
EP1875935 B1	20100129	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1875935 B1	20100303	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP1875935 B1	20100526	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : VDEP EFFECTIVE DATE : 20100120
EP1875935 B1	20100630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20100324 YEAR OF FEE PAYMENT : 12
EP1875935 B1	20100730	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20100501
EP1875935 B1	20100730	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20100120

EP1875935 B1	20100730	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20100520
EP1875935 B1	20100730	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20100525 YEAR OF FEE PAYMENT : 12
EP1875935 B1	20100730	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20100608 YEAR OF FEE PAYMENT : 12
EP1875935 B1	20100818	LSWD	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FD4D
EP1875935 B1	20100831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20100120
EP1875935 B1	20101029	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20100120
EP1875935 B1	20101029	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20100421
EP1875935 B1	20101029	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20100120
EP1875935 B1	20101029	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20100525 YEAR OF FEE PAYMENT : 12
EP1875935 B1	20101130	LSLE	-BERE	BE: LAPSED	PARTYTYPE : OWNER REF COUNTRY CODE : EP OWNER : TECPHARMA LICENSING A.G. EFFECTIVE DATE : 20100531
EP1875935 B1	20101130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20100726 YEAR OF FEE PAYMENT : 12
EP1875935 B1	20101130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20100521 YEAR OF FEE PAYMENT : 12
EP1875935 B1	20101229	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20101021
EP1875935 B1	20101231	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF

				INFORMATION FROM NATIONAL OFFICE TO EPO]	DUE FEES LAPSED DATE : 20100531
EP1875935 B1	20110331	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20100531
EP1875935 B1	20110331	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20100120
EP1875935 B1	20110831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20100507
EP1875935 B1	20111230	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP1875935 B1	20120109	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DK REF LEGAL EVENT CODE : EBP
EP1875935 B1	20120110	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SE REF LEGAL EVENT CODE : EUG
EP1875935 B1	20120125	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20110507
EP1875935 B1	20120131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20110531
EP1875935 B1	20120131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20110531
EP1875935 B1	20120217	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20120131
EP1875935 B1	20120315	LSDW	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R119 REF DOCUMENT NUMBER : 59915128 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20111201
EP1875935 B1	20120430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20110531
EP1875935 B1	20120629	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20110531
EP1875935 B1	20120629	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20110507

EP1875935 B1	20120928	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20100507
EP1875935 B1	20130430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20110508
EP1875935 B1	20130628	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20111201
EP1875935 B1	20190507	PEXP		Calculated Patent Term Expiry	
ES2248975 T3	20060316	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2248975 T3	20190507	PEXP		Calculated Patent Term Expiry	
ES2294594 T3	20080401	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2294594 T3	20190507	PEXP		Calculated Patent Term Expiry	
ES2294594 T5	20101223	LSGT	+	granted / extensions (spc, cpc, pte)	
JP11347121 A2	19991221	LSPB	+	published / reissued	
JP11347121 A2	20050131	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20050128
JP11347121 A2	20071207	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20071206
JP11347121 A2	20080607	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20080606
JP11347121 A2	20080828	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20080827
JP11347121 A2	20090228	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20090227
JP11347121 A2	20090327	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP11347121 A2	20090401	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20090331
JP11347121 A2	20090402	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01
JP11347121 A2	20090511	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20090428
JP11347121 A2	20090515	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP11347121 A2	20090518	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP4306873 B2	20090805	LSGT	+	granted / extensions (spc, cpc, pte)	

JP4306873 B2	20090501	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP4306873 B2	20120510	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4306873 B2	20120515	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 4
JP4306873 B2	20130509	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4306873 B2	20130521	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4306873 B2	20140515	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4306873 B2	20140520	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4306873 B2	20150521	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4306873 B2	20150526	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4306873 B2	20160512	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4306873 B2	20160517	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4306873 B2	20170511	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4306873 B2	20170516	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4306873 B2	20180517	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4306873 B2	20180522	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4306873 B2	20190517	PEXP		Calculated Patent Term Expiry	
PT1568388 T	20071224	LSGT	+	granted / extensions (spc, cpc, pte)	
PT1568388 T	20190507	PEXP		Calculated Patent Term Expiry	
US2001049496 AA	20011206	LSPB	+	published / reissued	
US2001049496 AA	20030828	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US6280421 BA	20010828	LSGT	+	granted / extensions (spc, cpc, pte)	
US6280421 BA	19990913	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : DISETRONIC LICENSING AG, SWITZERLAND OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:KIRCHHOFER, FRITZ; STECK, JURG; HOSTETTLER, PETER; AND OTHERS; REEL/FRAME:010223/0858 EFFECTIVE DATE : 19990820
US6280421 BA	20010809	LSGT	PAT1	Patented Case	
US6280421 BA	20010809	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US6280421 BA	20031208	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : TECPHARMA LICENSING AG, SWITZERLAND OLDPARTY : CHANGE OF NAME; ASSIGNOR:DISETRONIC SERVICES AG; REEL/FRAME:015401/0884 EFFECTIVE DATE : 20031113
US6280421 BA	20031208	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER

					OWNER : TECPHARMA LICENSING AG,SWITZERLAND OLDPARTY : CHANGE OF NAME; ASSIGNOR:DISETRONIC SERVICES AG; REEL/FRAME:015401/0884 EFFECTIVE DATE : 20031113
US6280421 BA	20031210	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : DISETRONIC SERVICES AG, SWITZERLAND OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:DISETRONIC LICENSING AG; REEL/FRAME:014243/0598 EFFECTIVE DATE : 20031112
US6280421 BA	20050201	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6280421 BA	20090217	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US6280421 BA	20130220	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US6280421 BA	20190514	PEXP		Calculated Patent Term Expiry	
US6620137 BB	20030916	LSGT	+	granted / extensions (spc, cpc, pte)	
US6620137 BB	20030828	LSGT	PAT1	Patented Case	
US6620137 BB	20031208	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : TECPHARMA LICENSING AG, SWITZERLAND OLDPARTY : CHANGE OF NAME; ASSIGNOR:DISETRONIC SERVICES AG; REEL/FRAME:015401/0884 EFFECTIVE DATE : 20031113
US6620137 BB	20031208	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : TECPHARMA LICENSING AG,SWITZERLAND OLDPARTY : CHANGE OF NAME; ASSIGNOR:DISETRONIC SERVICES AG; REEL/FRAME:015401/0884 EFFECTIVE DATE : 20031113
US6620137 BB	20031210	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : DISETRONIC SERVICES AG, SWITZERLAND OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:DISETRONIC LICENSING AG; REEL/FRAME:014243/0598 EFFECTIVE DATE : 20031112
US6620137 BB	20070316	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6620137 BB	20110309	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US6620137 BB	20150309	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US6620137 BB	20211219	PEXP		Calculated Patent Term Expiry (PTA 134 days)	

59) Family number: 50439092 (US2013164736A)

Title: METHOD FOR DETECTING MOLECULAR INTERACTIONS

Abstract: The present invention relates to a method for detecting molecular interactions in a solution. In particular, the present invention relates to a method for detecting interactions between two substances that are likely to interact with one another. The present invention can be used in particular in the field of scientific research and in the field of **medical** analysis.

Classifications:
International (IPC 8-9): A61M1/16 A61M1/36 G01N G01N11/10 G01N24/08 G01N33/543 G01N33/558 G01N33/569 G01N33/80 (Advanced/Invention);
G01N (Subclass/Invention)
CPC: G01N33/558 G01N33/80 G01N33/56938 G01N11/10 G01N33/54326
European: G01N11/10 G01N33/543D4
US: 435/5 435/7.1 435/7.2 435/7.25 436/501

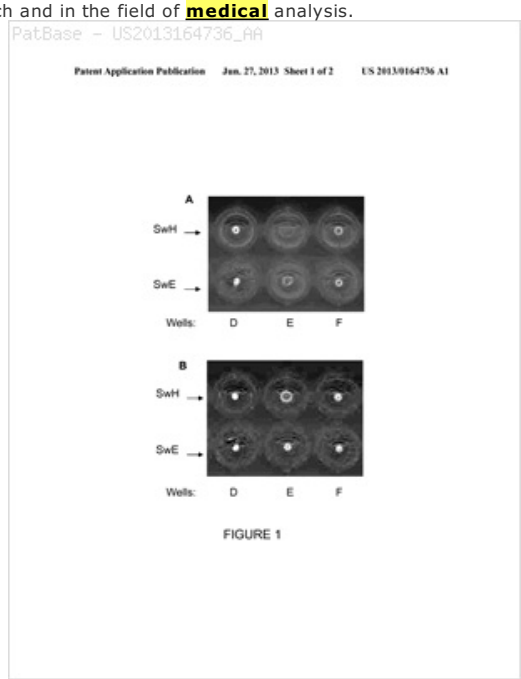


FIGURE 1

Family:

Publication number	Publication date	Application number	Application date
AP201306701 A0	20130131	AP20130006701	20110630
AP3750 A	20160731	AP20130006701	20110630
AU2011273229 AA	20120105	AU20110273229	20110630
AU2011273229 BB	20140918	AU20110273229	20110630
BR112012033591 A2	20161129	BR20121133591	20110630
CA2803743 AA	20121221	CA20112803743	20110630
CA2803743 C	20180403	CA20112803743	20110630
CN103069264 A	20130424	CN201180039692	20110630
CN103069264 B	20161102	CN201180039692	20110630
DE602011026191 D1	20160623	DE201160026191T	20110630
EA028391 B1	20171130	EA20120091396	20110630
EA201291396 A1	20130430	EA20120091396	20110630
EP2588845 A1	20130508	EP20110743272	20110630
EP2588845 B1	20160504	EP20110743272	20110630
ES2585394 T3	20161005	ES20110743272T	20110630
FR2962221 A1	20120106	FR20100002810	20100702
FR2962222 A1	20120106	FR20100056678	20100819
FR2962222 B1	20180330	FR20100056678	20100819
IL223809 A0	20130228	IL20110223809	20110630
IL223809 A1	20170330	IL20110223809	20110630
IN00340DN2013 A	20141010	IN2013DN00340	20130111
JP2013530404 T2	20130725	JP20130517458T	20110630
JP5937586 B2	20160622	JP20130517458T	20110630
KR20140002597 A	20140108	KR20137002866	20110630
MA34341 B1	20130601	MA20120035503	20121226
MX2013000142 A1	20130605	MX20130000142	20110630
NZ605706 A	20140725	NZ20110605706	20110630
US2013164736 AA	20130627	US20110808077	20110630
US9746407 BB	20170829	US20110808077	20110630
WO12001312 A1	20120105	WO2011FR51528	20110630
ZA201300043 A	20130925	ZA20130000043	20130102

Priority:

FR20100002810 20100702 FR20100056678 20100819 EP20110743272 20110630 WO2011FR51528 20110630

Probable Assignee: BIOFILM CONTROL

Assignee(s): (std): BERNARDI THIERRY ; BIOFILM CONTROL ; GROELLY JEROME ; MAYER PASCAL

Inventor(s): (std): MAYER PASCAL ; GROELLY JEROME ; BERNARDI THIERRY

Inventor(s): PASCAL MAYER ; THIERRY BERNARDI ; JEROME GROELLY

Agent(s): PIZZEYS PATENT AND TRADE MARK ATTORNEYS; PIZZEYS PATENT AND TRADE MARK ATTORNEYS PTY LTD; GOWLING LAFLEUR HENDERSON LLP; GOWLING WLG CANADA LLP; NOVAGRAAF TECHNOLOGIES; SANFORD TCOLB AND CO; OHNUKI SHINSUKE; ITOH TADAHIKO; ITOH TADASHIGE; PATTERSON THUENTE PEDERSEN PA; ENDERLIN ERIC

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AP3750 A	20160731	LSGT	+	granted / extensions (spc, cpc, pte)	
AP3750 A	20310630	PEXP		Calculated Patent Term Expiry	
AU2011273229 AA	20120105	LSPB	+	published / reissued	
AU2011273229 BB	20140918	LSGT	+	granted / extensions (spc, cpc, pte)	
AU2011273229 BB	20150122	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU2011273229 BB	20310630	PEXP		Calculated Patent Term Expiry	
CA2803743 AA	20121221	LSPB	+	published / reissued	
CA2803743 AA	20160526	LSES	+EEER	EXAMINATION REQUEST	EFFECTIVE DATE : 20160519
CA2803743 C	20180403	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2803743 C	20310630	PEXP		Calculated Patent Term Expiry	
CN103069264 A	20130424	LSPB	+	published / reissued	
CN103069264 A	20130424	LSPB	+C06	PUBLICATION	
CN103069264 B	20161102	LSGT	+	granted / extensions (spc, cpc, pte)	
CN103069264 B	20161102	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN103069264 B	20310630	PEXP		Calculated Patent Term Expiry	
EA028391 B1	20171130	LSGT	+	granted / extensions (spc, cpc, pte)	
EA028391 B1	20190329	LSLE	-MM4A	LAPSE OF A EURASIAN PATENT DUE TO NON-PAYMENT OF RENEWAL FEES WITHIN THE TIME LIMIT IN THE FOLLOWING DESIGNATED STATE(S)	COUNTRY OF REF DOCUMENT : AM COUNTRY OF REF DOCUMENT : AZ COUNTRY OF REF DOCUMENT : BY COUNTRY OF REF DOCUMENT : KG COUNTRY OF REF DOCUMENT : KZ COUNTRY OF REF DOCUMENT : MD COUNTRY OF REF DOCUMENT : TJ COUNTRY OF REF DOCUMENT : TM
EA028391 B1	20310630	PEXP		Calculated Patent Term Expiry	
EA201291396 A1	20130430	LSPB	+	published / reissued	
EP2588845 A1	20130508	LSPB	+	published / reissued	
EP2588845 A1	20130508	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20121221
EP2588845 A1	20150909	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20150811
EP2588845 A1	20160316	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20160219
EP2588845 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO	COUNTRY OF REF DOCUMENT :

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EP2588845 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20160622 YEAR OF FEE PAYMENT : 6
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EP2588845 B1	20160504	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D TEXT : NOT ENGLISH
EP2588845 B1	20160513	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
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EP2588845 B1	20160601	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D TEXT : LANGUAGE OF EP DOCUMENT: FRENCH
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EP2588845 B1	20160912	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : LT REF LEGAL EVENT CODE : MG4D
EP2588845 B1	20161005	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2585394 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) : EFFECTIVE DATE : 20161005
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EP2588845 B1	20161031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NO NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160804
EP2588845 B1	20161031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160504
EP2588845 B1	20161115	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MK05 REF DOCUMENT NUMBER : 797348 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20160504
EP2588845 B1	20161130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160504
EP2588845 B1	20161130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LV NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160504
EP2588845 B1	20161130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160905

EP2588845 B1	20161130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160805
EP2588845 B1	20161130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RS NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160504
EP2588845 B1	20161130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160504
EP2588845 B1	20170131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160504
EP2588845 B1	20170131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160504
EP2588845 B1	20170131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160504
EP2588845 B1	20170131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160504
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EP2588845 B1	20170207	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 602011026191 COUNTRY OF REF DOCUMENT : DE
EP2588845 B1	20170223	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP

					YEAR OF FEE PAYMENT : 7
EP2588845 B1	20170228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SM NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160504
EP2588845 B1	20170228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160504
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EP2588845 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170223 YEAR OF FEE PAYMENT : 7
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EP2588845 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20170627 YEAR OF FEE PAYMENT : 7
EP2588845 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20170622 YEAR OF FEE PAYMENT : 7
EP2588845 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20170628 YEAR OF FEE PAYMENT : 7
EP2588845 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20170627 YEAR OF FEE PAYMENT : 7
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EP2588845 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20170627 YEAR OF FEE PAYMENT : 7
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EP2588845 B1	20180308	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 8
EP2588845 B1	20180531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160504
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EP2588845 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20180308 YEAR OF FEE PAYMENT : 8
EP2588845 B1	20180629	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160504
EP2588845 B1	20180629	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IS NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160504
EP2588845 B1	20180629	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160504
EP2588845 B1	20180629	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160504
EP2588845 B1	20180731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160504

EP2588845 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20180629 YEAR OF FEE PAYMENT : 8
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EP2588845 B1	20310630	PEXP		Calculated Patent Term Expiry	
ES2585394 T3	20161005	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2585394 T3	20310630	PEXP		Calculated Patent Term Expiry	
FR2962221 A1	20120106	LSPB	+	published / reissued	
FR2962222 A1	20120106	LSPB	+	published / reissued	
FR2962222 A1	20160601	LSFE	+PLFP	FEE PAYMENT	YEAR OF FEE PAYMENT : 7
FR2962222 A1	20170427	LSFE	+PLFP	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
FR2962222 B1	20180330	LSGT	+	granted / extensions (spc, cpc, pte)	
FR2962222 B1	20180830	LSFE	+PLFP	FEE PAYMENT	YEAR OF FEE PAYMENT : 9
FR2962222 B1	20300819	PEXP		Calculated Patent Term Expiry	
IL223809 A1	20170330	LSPB	+	published / reissued	
IN00340DN2013 A	20141010	LSPB	+	published / reissued	

JP2013530404 T2	20130725	LSPB	+	published / reissued	
JP2013530404 T2	20140625	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20140624
JP2013530404 T2	20140625	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20140624
JP2013530404 T2	20150318	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20150317
JP2013530404 T2	20150616	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20150616
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JP2013530404 T2	20160328	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20160328
JP2013530404 T2	20160405	LSAL	A911	TRANSFER OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A911 EFFECTIVE DATE : 20160404
JP2013530404 T2	20160420	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2013530404 T2	20160426	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20160426
JP2013530404 T2	20160519	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20160512
JP2013530404 T2	20160520	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 5937586 COUNTRY OF REF DOCUMENT : JP
JP5937586 B2	20160622	LSGT	+	granted / extensions (spc, cpc, pte)	
JP5937586 B2	20160428	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP5937586 B2	20160517	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP5937586 B2	20160520	LSGT	+R150	特許証 (Patent certificate)	
JP5937586 B2	20190509	LSFE	R20	特許料納付書 (Patent fee payment form)	
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KR20140002597 A	20140108	LSPB	+	published / reissued	
KR20140002597 A	20160601	LSES	A201	REQUEST FOR EXAMINATION	
KR20140002597 A	20180604	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR20140002597 A	20180813	LSRV	-E601	DECISION TO REFUSE APPLICATION	
MA34341 B1	20130601	LSGT	+	granted / extensions (spc, cpc, pte)	
MA34341 B1	20321226	PEXP		Calculated Patent Term Expiry	
MX2013000142 A1	20130605	LSPB	+	published / reissued	
MX2013000142 A1	20140603	LSGT	+FG	GRANT OR REGISTRATION	

NZ605706 A	20140725	LSPB	+	published / reissued	
NZ605706 A	20141031	LSGT	+PSEA	PATENT SEALED	
NZ605706 A	20150529	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	TEXT : PATENT RENEWED FOR 1 YEAR UNTIL 30 JUN 2016 BY CPA GLOBAL EFFECTIVE DATE : 20150516
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US2013164736 AA	20130627	LSPB	+	published / reissued	
US2013164736 AA	20170605	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2013164736 AA	20170613	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2013164736 AA	20170718	LSFE	+PPR1	Publications -- Issue Fee Payment Received	
US2013164736 AA	20170724	LSFE	+PPV1	Publications -- Issue Fee Payment Verified	
US2013164736 AA	20170809	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US9746407 BB	20170829	LSGT	+	granted / extensions (spc, cpc, pte)	
US9746407 BB	20130508	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BIOFILM CONTROL, FRANCE OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BERNARDI, THIERRY; MEYER, PASCAL; GROELLY, JEROME; REEL/FRAME:030375/0609 EFFECTIVE DATE : 20130311
US9746407 BB	20170809	LSGT	PAT1	Patented Case	
US9746407 BB	20310630	PEXP		Calculated Patent Term Expiry	
WO12001312 A1	20120105	LSPB	+	published / reissued	
WO12001312 A1	20110630	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 201180039692.5 COUNTRY OF REF DOCUMENT : CN
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WO12001312 A1	20121221	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2011743272 COUNTRY OF REF DOCUMENT : EP
WO12001312 A1	20121223	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 223809 COUNTRY OF REF DOCUMENT : IL

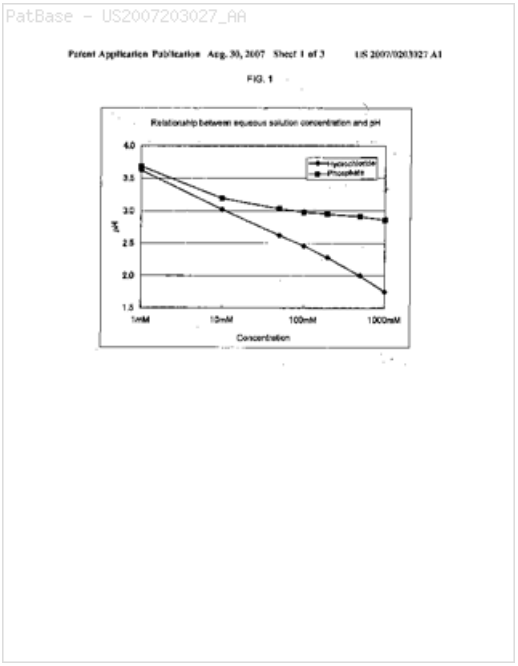
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ZA201300043 A	20130925	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA201300043 A	20330101	PEXP		Calculated Patent Term Expiry	

60) Family number: 32355095 (US2007203027A)

Title: 5-AMINOLEVULINIC ACID SALT, PROCESS FOR PRODUCING THE SAME AND USE THEREOF

Abstract: A 5-aminolevulinic acid salt which is useful in fields of microorganisms, fermentation, animals, medicaments, plants and the like; a process for producing the same; a **medical** composition comprising the same; and a plant activator composition comprising the same.

Classifications:
International (IPC 8-9): A01G7/06 A01N25/02 A01N37/42 A01N37/44 A01N41/04 A01N57/00 A01N57/12 A01P21/00 A61K31/195 A61K31/197 A61K31/205 A61K31/66 A61K31/661 A61K41/00 A61K49/00 C07C221/00 C07C225/06 C07C227/00 C07C227/16 C07C227/18 C07C227/40 C07C227/42 C07C229/22 C07C303/22 C07C303/32 C07C309/30 C07C51/347 C07C59/185 C07F9/02 C07F9/09 C07F9/11 (Advanced/Invention);
A01N25/02 A01N37/44 A01P21/00 C07C225/06 C07C229/22 C07C303/32 C07C309/30 (Advanced/Non-invention);
A01G7/06 A01N25/02 A01N37/42 A01N37/44 A01N41/00 A01N57/00 A01P21/00 A61K31/185 A61K31/66 A61K31/661 A61K41/00 A61K49/00 C07C221/00 C07C225/00 C07C227/00 C07C229/00 C07C303/00 C07C309/00 C07C51/347 C07C59/00 C07F9/00 (Core/Invention)
International (IPC 1-7): A01G7/06 A01N25/02 A01N37/42 A01N37/44 A01N41/04 A61K49/00 C07C221/00 C07C225/06 C07C227/40 C07C229/22 C07C303/22 C07C309/30 C07C51/347 C07C59/185 C07F9/11
CPC: A61K41/0061 A61K49/0021 C07C227/00 C07C309/30 C07F9/11 A01N37/44 C07C229/22
European: A01N37/44 A61K41/00W4 A61K49/00P4F4C C07C227/00 C07C229/22 C07C309/30 C07F9/11
US: 424/9.6 424/9.600S 504/194 504/320 504/320P 514/114 514/114S 514/555 514/555S 558/208 558/208S 562/567 562/85 562/85S



Family:

Publication number	Publication date	Application number	Application date
AT493382 E	20110115	AT20050727585T	20050328
AU2005232995 AA	20051027	AU20050232995	20050328
AU2005232995 BB	20100128	AU20050232995	20050328
CA2562170 AA	20060925	CA20052562170	20050328
CA2562170 C	20130423	CA20052562170	20050328
CN101863788 A	20101020	CN201010215390	20050328
CN101863788 B	20120530	CN201010215390	20050328
CN101885692 A	20101117	CN201010215465	20050328
CN101885692 B	20111102	CN201010215465	20050328
CN101885736 A	20101117	CN201010215364	20050328
CN101885736 B	20121003	CN201010215364	20050328
CN1942430 A	20070404	CN200580010706	20050328
CN1942430 B	20110420	CN200580010706	20050328
DE602005025614 D1	20110210	DE200560025614T	20050328
DK1731500 T3	20110207	DK20050727585T	20050328
EP1731500 A1	20061213	EP20050727585	20050328
EP1731500 A4	20070425	EP20050727585	20050328
EP1731500 B1	20101229	EP20050727585	20050328
ES2355978 T3	20110401	ES20050727585T	20050328
JP2005314360 A2	20051110	JP20050051216	20050225
JP2005314361 A2	20051110	JP20050051218	20050225
JP2006182753 A2	20060713	JP20050051217	20050225
JP4417865 B2	20100217	JP20050051217	20050225
JP4630087 B2	20110209	JP20050051218	20050225
JP4719483 B2	20110706	JP20050051216	20050225
KR101225462 B1	20130124	KR20067020140	20050328
KR101267893 B1	20130527	KR20117013838	20050328
KR101312982 B1	20131001	KR20127030026	20050328
KR20070015528 A	20070205	KR20067020140	20050328
KR20110074797 A	20110701	KR20117013838	20050328
KR20120130348 A	20121130	KR20127030026	20050328
NO20064373 A	20070102	NO20060004373	20060927
NO20064373 L	20070102	NO20060004373	20060927
NO335109 B1	20140915	NO20060004373	20060927
PT1731500 T	20110201	PT20050727585T	20050328
US2007203027 AA	20070830	US20050594923	20050328
US2012172227 AA	20120705	US20120418465	20120313
US8173839 BB	20120508	US20050594923	20050328

US8471061 BB	20130625	US20120418465	20120313
WO05100300 A1	20051027	WO2005JP05765	20050328

Priority:

JP20040099670 20040330
JP20040345661 20041130
JP20050051217 20050225
US20070594923 20070502
JP20040099671 20040330
JP20050051216 20050225
US20050594923 20050328
US20120418465 20120313
JP20040099672 20040330
JP20050051218 20050225
WO2005JP05765 20050328

Probable Assignee: COSMO ALA CO LTD

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Assignee(s): COSMO ALA CO LTD ; COSMO OIL CO

Inventor(s): (std): NAOHISA TATSUYA ; HIDEKI TATSUYA NAOHISA NISHIKA ; TANAKA TOHRU ; TOHRU TANAKA ; TORU TANAKA ; TANAKA TORU ; TACHIYA NAOHISA ; SEIJI NISHIKAWA ; OKADA HIDEKI ; NISHIKAWA SEIJI ; NAOHISA TACHIYA ; MASAHIRO ISHIZUKA ; MAI HIGO ; ISHIZUKA MASAHIRO ; HIGO MAI ; HIDEKI OKADA ; TATSUYA NAOHISA

Inventor(s): TATSUYA NAOHISA NISHIKAWA SEIJI HIGO MAI ; TATSUYA NAOHISA NISHIKAWA SEIJI HIGO MAI TANAKA TO ; TANAKA TOHRU C O COSMO OIL CO LTD ; HIGO MAI C O COSMO OIL CO LTD ; ISHIZUKA MASAHIRO C O COSMO OIL CO LTD ; NISHIKAWA SEIJI C O COSMO OIL CO LTD ; OKADA HIDEKI C O COSMO OIL CO LTD ; TACHIYA NAOHISA C O COSMO OIL CO LTD

Agent(s): SPRUSON AND FERGUSON; RICHES MCKENZIE AND HERBERT LLP; HOFFMANN EITLE; SUGHRUE MION PLLC

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT493382 E	20110115	LSGT	+	granted / extensions (spc, cpc, pte)	
AT493382 E	20110915	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	REF DOCUMENT NUMBER : 1731500 COUNTRY OF REF DOCUMENT : EP
AT493382 E	20250328	PEXP		Calculated Patent Term Expiry	
AU2005232995 AA	20051027	LSPB	+	published / reissued	
AU2005232995 BB	20100128	LSGT	+	granted / extensions (spc, cpc, pte)	
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AU2005232995 BB	20160623	LSAS	PC	ASSIGNMENT REGISTERED	PARTYTYPE : OWNER OWNER : COSMO ALA CO., LTD. OLDPARTY : FORMER OWNER WAS: COSMO OIL CO., LTD.
AU2005232995 BB	20250328	PEXP		Calculated Patent Term Expiry	
CA2562170 AA	20060925	LSPB	+	published / reissued	
CA2562170 AA	20091008	LSES	+EEER	EXAMINATION REQUEST	
CA2562170 C	20130423	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2562170 C	20250328	PEXP		Calculated Patent Term Expiry	
CN101863788 A	20101020	LSPB	+	published / reissued	
CN101863788 A	20101020	LSPB	+C06	PUBLICATION	
CN101863788 B	20120530	LSGT	+	granted / extensions (spc, cpc, pte)	
CN101863788 B	20120530	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN101863788 B	20160803	LSAS	C41	TRANSFER OF PATENT APPLICATION OR PATENT RIGHT OR UTILITY MODEL	
CN101863788 B	20250328	PEXP		Calculated Patent Term Expiry	
CN101885692 A	20101117	LSPB	+	published / reissued	

CN101885692 A	20101117	LSPB	+C06	PUBLICATION	
CN101885692 B	20111102	LSGT	+	granted / extensions (spc, cpc, pte)	
CN101885692 B	20111102	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN101885692 B	20160803	LSAS	C41	TRANSFER OF PATENT APPLICATION OR PATENT RIGHT OR UTILITY MODEL	
CN101885692 B	20250328	PEXP		Calculated Patent Term Expiry	
CN101885736 A	20101117	LSPB	+	published / reissued	
CN101885736 A	20101117	LSPB	+C06	PUBLICATION	
CN101885736 B	20121003	LSGT	+	granted / extensions (spc, cpc, pte)	
CN101885736 B	20121003	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN101885736 B	20160803	LSAS	C41	TRANSFER OF PATENT APPLICATION OR PATENT RIGHT OR UTILITY MODEL	
CN101885736 B	20250328	PEXP		Calculated Patent Term Expiry	
CN1942430 A	20070404	LSPB	+	published / reissued	
CN1942430 A	20070404	LSPB	+C06	PUBLICATION	
CN1942430 B	20110420	LSGT	+	granted / extensions (spc, cpc, pte)	
CN1942430 B	20110420	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN1942430 B	20160803	LSAS	C41	TRANSFER OF PATENT APPLICATION OR PATENT RIGHT OR UTILITY MODEL	
CN1942430 B	20250328	PEXP		Calculated Patent Term Expiry	
DE602005025614 D1	20160623	LSAS	R081	CHANGE OF APPLICANT/PATENTEE	PARTYTYPE : OWNER OWNER : COSMO ALA CO., LTD., TOKYO, JP OLDPARTY : COSMO OIL CO. LTD., TOKIO/TOKYO, JP
DK1731500 T3	20110207	LSGT	+	granted / extensions (spc, cpc, pte)	
DK1731500 T3	20250328	PEXP		Calculated Patent Term Expiry	
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EP1731500 A1	20061213	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20060928
EP1731500 A1	20160429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20160304 YEAR OF FEE PAYMENT : 12
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EP1731500 A1	20160429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : DE

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EP1731500 A1	20160531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20160328 YEAR OF FEE PAYMENT : 12
EP1731500 A1	20160531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20160212 YEAR OF FEE PAYMENT : 12
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EP1731500 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20160324 YEAR OF FEE PAYMENT : 12
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EP1731500 A4	20090325	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20090219
EP1731500 A4	20100818	LSRE	RTI1	TITLE (CORRECTION)	TEXT : 5-AMINOLEVULINIC ACID PHOSPHATE SALT, PROCESS FOR PRODUCING THE SAME AND USE THEREOF
EP1731500 B1	20101229	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1731500 B1	20101229	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP1731500 B1	20101231	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP

EP1731500 B1	20110202	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP1731500 B1	20110210	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602005025614 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20110210
EP1731500 B1	20110330	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : T3
EP1731500 B1	20110331	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : CH OWNER : COSMO OIL CO., LTD. REF LEGAL EVENT CODE : PFA OLDPARTY : COSMO OIL CO., LTD.#1-1, SHIBAURA 1-CHOME, MINATO-KU#TOKYO 105-8528 (JP) -TRANSFER TO- COSMO OIL CO., LTD.#1-1, SHIBAURA 1-CHOME, MINATO-KU#TOKYO 105-8528 (JP)
EP1731500 B1	20110401	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2355978 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) : EFFECTIVE DATE : 20110401
EP1731500 B1	20110429	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20101229
EP1731500 B1	20110525	LSRV	-LTIE	LT: INVALIDATION OF EUROPEAN PATENT OR PATENT EXTENSION	REF COUNTRY CODE : EP EFFECTIVE DATE : 20101229
EP1731500 B1	20110531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20101229
EP1731500 B1	20110531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20110329
EP1731500 B1	20110531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20101229
EP1731500 B1	20110729	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20101229
EP1731500 B1	20110831	LSLE	-PG25	LAPSED IN A	COUNTRY OF REF DOCUMENT :

				CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	SK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20101229
EP1731500 B1	20110831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20101229
EP1731500 B1	20111031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20110331
EP1731500 B1	20111207	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20110930
EP1731500 B1	20120126	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 602005025614 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20110930
EP1731500 B1	20130531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20110328
EP1731500 B1	20131031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20101229
EP1731500 B1	20160208	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 12
EP1731500 B1	20160229	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : PT OWNER : , JP REF LEGAL EVENT CODE : PC4A EFFECTIVE DATE : 20160208
EP1731500 B1	20160301	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : EP REF DOCUMENT NUMBER : 20110400136 COUNTRY OF REF DOCUMENT : GR EFFECTIVE DATE : 20110218
EP1731500 B1	20160429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20160224 YEAR OF FEE PAYMENT : 12
EP1731500 B1	20160531	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : CH OWNER : COSMO ALA CO., LTD., JP REF LEGAL EVENT CODE : PUE OLDPARTY : FORMER OWNER: COSMO OIL CO., LTD., JP
EP1731500 B1	20160623	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : DE OWNER : COSMO ALA CO., LTD., JP

					REF LEGAL EVENT CODE : R081 REF DOCUMENT NUMBER : 602005025614 COUNTRY OF REF DOCUMENT : DE OLDPARTY : FORMER OWNER: COSMO OIL CO. LTD., TOKIO/TOKYO, JP
EP1731500 B1	20160713	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : ES OWNER : COSMO ALA CO., LTD. REF LEGAL EVENT CODE : PC2A EFFECTIVE DATE : 20160707
EP1731500 B1	20160715	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : AT OWNER : COSMO ALA CO., LTD., JP REF LEGAL EVENT CODE : PC REF DOCUMENT NUMBER : 493382 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20160601
EP1731500 B1	20160916	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : FR OWNER : COSMO ALA CO., LTD., JP REF LEGAL EVENT CODE : TP EFFECTIVE DATE : 20160817
EP1731500 B1	20170322	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 13
EP1731500 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170322 YEAR OF FEE PAYMENT : 13
EP1731500 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20170321 YEAR OF FEE PAYMENT : 13
EP1731500 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20170313 YEAR OF FEE PAYMENT : 13
EP1731500 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20170321 YEAR OF FEE PAYMENT : 13
EP1731500 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20170314 YEAR OF FEE PAYMENT : 13
EP1731500 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20170322 YEAR OF FEE PAYMENT : 13
EP1731500 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170322 YEAR OF FEE PAYMENT : 13
EP1731500 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20170321 YEAR OF FEE PAYMENT : 13
EP1731500 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20170322 YEAR OF FEE PAYMENT : 13

EP1731500 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20170321 YEAR OF FEE PAYMENT : 13
EP1731500 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20170322 YEAR OF FEE PAYMENT : 13
EP1731500 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20170321 YEAR OF FEE PAYMENT : 13
EP1731500 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IS PAYMENT DATE : 20170216 YEAR OF FEE PAYMENT : 13
EP1731500 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20170327 YEAR OF FEE PAYMENT : 13
EP1731500 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20170323 YEAR OF FEE PAYMENT : 13
EP1731500 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20170322 YEAR OF FEE PAYMENT : 13
EP1731500 B1	20170630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20170315 YEAR OF FEE PAYMENT : 13
EP1731500 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20170323 YEAR OF FEE PAYMENT : 13
EP1731500 B1	20180323	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 14
EP1731500 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20180321 YEAR OF FEE PAYMENT : 14
EP1731500 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20180321 YEAR OF FEE PAYMENT : 14
EP1731500 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180322 YEAR OF FEE PAYMENT : 14
EP1731500 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20180321 YEAR OF FEE PAYMENT : 14
EP1731500 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20180322 YEAR OF FEE PAYMENT : 14
EP1731500 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20180321 YEAR OF FEE PAYMENT : 14
EP1731500 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20180327 YEAR OF FEE PAYMENT : 14
EP1731500 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO	COUNTRY OF REF DOCUMENT :

				NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	IE PAYMENT DATE : 20180323 YEAR OF FEE PAYMENT : 14
EP1731500 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20180322 YEAR OF FEE PAYMENT : 14
EP1731500 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20180322 YEAR OF FEE PAYMENT : 14
EP1731500 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20180321 YEAR OF FEE PAYMENT : 14
EP1731500 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20180316 YEAR OF FEE PAYMENT : 14
EP1731500 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20180321 YEAR OF FEE PAYMENT : 14
EP1731500 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20180323 YEAR OF FEE PAYMENT : 14
EP1731500 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20180323 YEAR OF FEE PAYMENT : 14
EP1731500 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IS PAYMENT DATE : 20180220 YEAR OF FEE PAYMENT : 14
EP1731500 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20180430 YEAR OF FEE PAYMENT : 14
EP1731500 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20180327 YEAR OF FEE PAYMENT : 14
EP1731500 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20190320 YEAR OF FEE PAYMENT : 15
EP1731500 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20190322 YEAR OF FEE PAYMENT : 15
EP1731500 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20190320 YEAR OF FEE PAYMENT : 15
EP1731500 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20190321 YEAR OF FEE PAYMENT : 15
EP1731500 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20190321 YEAR OF FEE PAYMENT : 15
EP1731500 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IS PAYMENT DATE : 20190218 YEAR OF FEE PAYMENT : 15

EP1731500 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20190322 YEAR OF FEE PAYMENT : 15
EP1731500 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20190327 YEAR OF FEE PAYMENT : 15
EP1731500 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20190325 YEAR OF FEE PAYMENT : 15
EP1731500 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20190322 YEAR OF FEE PAYMENT : 15
EP1731500 B1	20250328	PEXP		Calculated Patent Term Expiry	
ES2355978 T3	20110401	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2355978 T3	20250328	PEXP		Calculated Patent Term Expiry	
JP2005314360 A2	20051110	LSPB	+	published / reissued	
JP2005314360 A2	20071026	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20071025
JP2005314360 A2	20101215	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20101214
JP2005314360 A2	20110208	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20110207
JP2005314360 A2	20110322	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2005314360 A2	20110330	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20110329
JP2005314360 A2	20110331	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01
JP2005314360 A2	20110407	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20110404
JP2005314360 A2	20110408	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP2005314360 A2	20110411	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP2005314361 A2	20051110	LSPB	+	published / reissued	
JP2005314361 A2	20071026	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20071025
JP2005314361 A2	20100915	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20100914
JP2005314361 A2	20101019	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20101018
JP2005314361 A2	20101029	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	

JP2005314361 A2	20101110	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20101109
JP2005314361 A2	20101111	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01
JP2005314361 A2	20101118	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20101112
JP2005314361 A2	20101119	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP2005314361 A2	20101119	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP2006182753 A2	20060713	LSPB	+	published / reissued	
JP2006182753 A2	20080820	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20080819
JP2006182753 A2	20081017	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20081016
JP2006182753 A2	20091118	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2006182753 A2	20091125	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20091124
JP2006182753 A2	20091126	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01
JP2006182753 A2	20091203	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20091126
JP2006182753 A2	20091204	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP2006182753 A2	20091207	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP4417865 B2	20100217	LSGT	+	granted / extensions (spc, cpc, pte)	
JP4417865 B2	20091201	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP4417865 B2	20121115	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP4417865 B2	20121120	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 4
JP4417865 B2	20131114	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4417865 B2	20131119	LSFE	+R250	年金領収書, 年金領収書 (分納) (Pension receipt, annuity receipt (scheduled))	
JP4417865 B2	20141113	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4417865 B2	20141118	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250

JP4417865 B2	20151112	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4417865 B2	20151117	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4417865 B2	20151216	LSAS	S111	REQUEST FOR CHANGE OF OWNERSHIP OR PART OF OWNERSHIP	TEXT : JAPANESE INTERMEDIATE CODE: R313111
JP4417865 B2	20151225	LSAS	R350	WRITTEN NOTIFICATION OF REGISTRATION OF TRANSFER	TEXT : JAPANESE INTERMEDIATE CODE: R350
JP4417865 B2	20161124	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4417865 B2	20161129	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4417865 B2	20171130	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4417865 B2	20171205	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4417865 B2	20181129	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4417865 B2	20181204	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4417865 B2	20250225	PEXP		Calculated Patent Term Expiry	
JP4630087 B2	20110209	LSGT	+	granted / extensions (spc, cpc, pte)	
JP4630087 B2	20101116	LSFE	R100	特許料納付書 (Patent fee payment form)	
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NO335109 B1	20260927	PEXP		Calculated Patent Term Expiry	
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PT1731500 T	20250328	PEXP		Calculated Patent Term Expiry	
US2007203027 AA	20070830	LSPB	+	published / reissued	
US2007203027 AA	20070911	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COSMO OIL CO., LTD., JAPAN OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:TACHIYA, NAOHISA; NISHIKAWA, SEIJI; HIGO, MAI; AND OTHERS; REEL/FRAME:019808/0668 EFFECTIVE DATE : 20070205

US2007203027 AA	20120418	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2012172227 AA	20120705	LSPB	+	published / reissued	
US2012172227 AA	20130605	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US8173839 BB	20120508	LSGT	+	granted / extensions (spc, cpc, pte)	
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US8173839 BB	20151021	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
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US8471061 BB	20130625	LSGT	+	granted / extensions (spc, cpc, pte)	
US8471061 BB	20130605	LSGT	PAT1	Patented Case	
US8471061 BB	20160526	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COSMO ALA CO., LTD., JAPAN OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:COSMO OIL CO., LTD.; REEL/FRAME:038723/0661 EFFECTIVE DATE : 20151001
US8471061 BB	20161213	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8471061 BB	20320313	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
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WO05100300 A1	20061109	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2005232995 COUNTRY OF REF DOCUMENT : AU DATE OF REF DOCUMENT : 20050328 KIND CODE OF REF DOCUMENT : A

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WO05100300 A1	20070830	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 10594923 COUNTRY OF REF DOCUMENT : US
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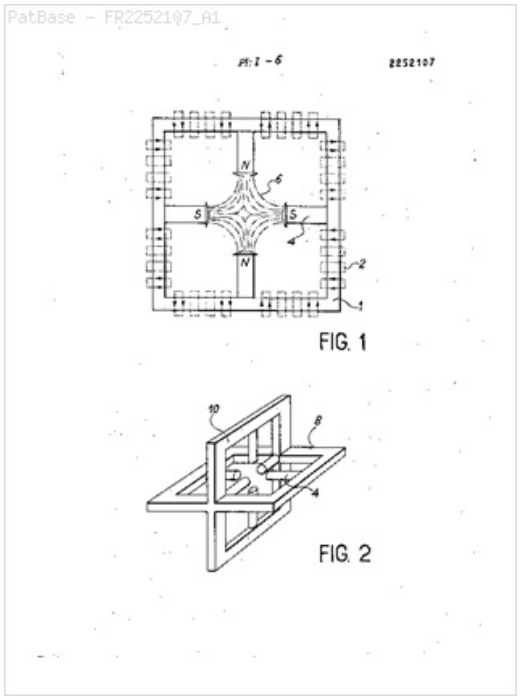
61) Family number: 3250096 (FR2252107A)

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Abstract: Source: FR2252107A [FR] (Claim 1) 1. procede de guidage et de propulsion par un champ magnetique variable dans l'espace et de gradient controle, d'un catheter magnetique a l'interieur-de vaisseaux sanguins, caracte rise en ce qu'on forme des impulsions de courant repetitives et de frequence controlable qui creent, en circulant dans des bobines, un champ magnetique pulse dont l'intensite, l'orientation et le gradient sont reglables, et en ce qu'on adapte la frequence de repetition desdites impulsions selon la courbure de la trajectoire du catheter magnetique dans ledit vaisseau sanguin.

Machine translation: (Claim 1) 1. process for guidance and propulsion by a magnetic field variable in space and gradient control, a catheter inside a magnetic-blood vessels, characterized in that rise form of repetitive pulses of current and frequency which create controllable by flowing through the coils, a magnetic field pulse with the intensity, direction and gradient are adjustable, and fits in that the repetition frequency of said pulses according to the curvature of the trajectory of the magnetic catheter in that blood vessel.

Classifications:
International (IPC 8-9): A61M25/01 (Advanced/Invention); A61M25/01 (Core/Invention)
International (IPC 1-7): A61B5/00 A61M25/00
CPC: A61M25/0127
European: A61M25/01C8



Family:

Publication number	Publication date	Application number	Application date
FR2252107 A1	19750620	FR19730042161	19731127
FR2252107 B1	19780804	FR19730042161	19731127

Priority:

FR19730042161 19731127

Probable Assignee: COMMISSARIAT A LENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES

Assignee(s): (std): COMMISSARIAT A LENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES ; COMMISSARIAT ENERGIE ATOMIQUE

Assignee(s): COMMISSARIAT A ENERGIE ATOMIQUE ; COMMISSARIAT A ENERGIE ATOMIQUE FR

Legal status (INPADOC)

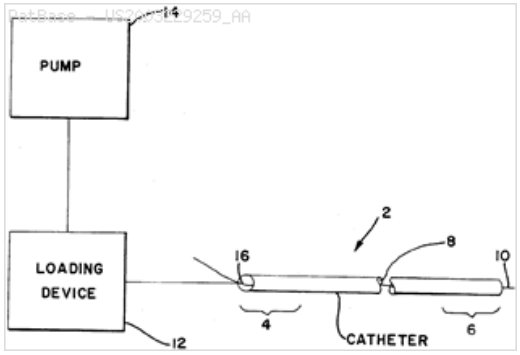
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Patent	Date recorded	Event group	Code	Event	Details
FR2252107 A1	19750620	LSPB	+	published / reissued	
FR2252107 A1	19751212	LSAS	TP	TRANSMISSION OF PROPERTY	
FR2252107 B1	19780804	LSGT	+	granted / extensions (spc, cpc, pte)	
FR2252107 B1	19790831	LSLE	-ST	NOTIFICATION OF LAPSE	
FR2252107 B1	19931127	PEXP		Calculated Patent Term Expiry	

62) Family number: 42104097 (US2003229259A)

Title: METHOD AND APPARATUS FOR TREATING A DESIRED AREA IN THE VASCULAR SYSTEM OF A PATIENT

Abstract: Apparatus and method are described for delivery of a treating element, such as a radiation source, through a catheter to a desired site in the vascular system of a patient, such as a coronary artery, for inhibiting the formation of scar tissue such as may occur in restenosis following balloon angioplasty. The apparatus includes an elongated flexible catheter tube having proximal and distal end portions, with a lumen extending therebetween, and a diameter sufficiently small for insertion in to a patient's vascular system. One or more treating elements, such as a capsule or pellet containing radioactive material, is positionable within the lumen and movable between the proximal and distal end portions under the force of **liquid** flowing through the lumen. A method for using such apparatus, including a method for using such apparatus simultaneously with a balloon angioplasty procedure, is disclosed.



Classifications:
International (IPC 8-9): A61F2/82 A61F2/958 A61M25/00 A61M25/10 A61M29/00 A61M29/02 A61M3/00 A61M31/00 A61M36/00 A61M36/04 A61M36/12 A61N A61N5/00 A61N5/10 G21F5/02 (Advanced/Invention); A61B17/22 A61F2/82 A61M25/00 A61M29/00 A61M29/02 A61M3/00 A61M31/00 A61M36/00 A61N5/00 (Advanced/Non-invention); A61F2/82 A61M25/00 A61M25/10 A61M29/00 A61M29/02 A61M3/00 A61M31/00 A61M36/00 A61N5/00 A61N5/10 G21F5/00 (Core/Invention); A61B A61M A61N (Subclass/Invention)
International (IPC 1-7): A61M25/00 A61M25/04 A61M29/00 A61M29/02 A61M3/00 A61M31/00 A61M36/00 A61M36/04 A61M36/12 A61N5/00 A61N5/01 A61N5/10 G21F5/02
CPC: A61M25/0029 A61M37/0069 A61M2025/0037 A61M2025/0039 A61M2025/004 A61N2005/1003 A61N2005/1005 A61N2005/1008 A61N2005/1023 A61M25/1002 A61M25/0028 A61M25/003 A61M25/0032 A61M25/1006 A61M2025/0034 A61N5/1002 A61N5/1007
European: A61M25/10A A61M37/00P A61N5/10B1 A61N5/10B2 K61M25/00R1M10 K61M25/00R1M16 K61M25/00R1M18 K61M25/00R1M2 K61M25/00R1M20 K61M25/00R1M4 K61M25/00R1M6 K61M25/00R1M8 K61M25/10B K61N5/10B1B K61N5/10B1E K61N5/10B2A K61N5/10B5R
US: 250/497.1 600/3 600/3P 600/4 600/4P 600/7 604/103.07 604/19 604/280 604/509 604/523 604/96

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Publication number	Publication date	Application number	Application date
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Priority:

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Probable Assignee: EMORY UNIV

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Inventor(s): (std): ROSEN JONATHAN J ; HILLSTEAD RICHARD A ; MELOUL RAPHAEL F ; LARSEN CHARLES E ; WAKSMAN RON ; CROCKER IAN R ; WELDON THOMAS D ; LARSON CHARLES E ; MELOUL F ; HILLSTEAD A ; LARSON E ; ROSEN J ; CROCKER R ; WELDON D ; BONNOITT GEORGE K JR ; HALPERN DAVID S ; BONNOITT GEORGE K ; HILLSTEAD RICHARD ; BONNOITT K ; HALPERN S ; LARSEN E

Inventor(s): GEORGE K BONNOITT ; KHILSTED RICHARD A. ; ROZEN DZHONATAN DZH. ; MELOUL RAFEJEL F. ; KHOLPERN DEJVID S. ; BONNOIT DZHORDZH K. ; KROKKER IAN R. ; UELDON TOMAS D. ; LARSEN CHARLZ EH. ; BONNOITT JR GEORGE K ; UAKSMAN RON ; CHARLES E LARSEN ; JR BONNOITT ; GEORGE K ; DAVID S HALPERN ; RON WAKSMAN ; THOMAS D WELDON ; RICHARD A HILLSTEAD ; JONATHAN J ROSEN ; CHARLES E LARSON ; RAPHAEL F MELOUL ; IAN R CROCKER

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Designated states: AT AU BE BR CA CH CN DE DK ES FI FR GB GR IE IT JP KR LI LU MC MX NL NO PT RO RU SE SG VN

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT293476 E	20050515	LSGT	+	granted / extensions (spc, cpc, pte)	
AT293476 E	20051015	LSLE	-RER	CEASED AS TO PARAGRAPH 5 LIT. 3 LAW INTRODUCING PATENT TREATIES	
AT293476 E	20151023	PEXP		Calculated Patent Term Expiry	
AT317715 E	20060315	LSGT	+	granted / extensions (spc, cpc, pte)	
AT317715 E	20060815	LSLE	-RER	CEASED AS TO PARAGRAPH 5 LIT. 3 LAW INTRODUCING PATENT TREATIES	
AT317715 E	20170404	PEXP		Calculated Patent Term Expiry	
AU199539680 A1	19960523	LSPB	+	published / reissued	
AU199728002 A1	19971029	LSPB	+	published / reissued	
AU710209 B2	19990916	LSGT	+	granted / extensions (spc, cpc, pte)	

AU710209 B2	20151023	PEXP		Calculated Patent Term Expiry	
AU716727 B2	20000302	LSGT	+	granted / extensions (spc, cpc, pte)	
AU716727 B2	20000629	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU716727 B2	20170404	PEXP		Calculated Patent Term Expiry	
BRPI9509138 A	19981103	LSPB	+	published / reissued	
BRPI9509138 A	20060530	LSRV	B09B	DECISION: REFUSAL	TEXT : INDEFERIDO COM BASE NO ARTIGO 8O COMBINADO COM O ARTIGO 13 E ART. 10INCISO VIII DA LPI.
BRPI9702360 A	19991228	LSPB	+	published / reissued	
BRPI9702360 A	20011218	LSES	-EG	TECHNICAL EXAMINATION (OPINION): PUBLICATION OF TECHNICAL EXAMINATION (OPINION)	
BRPI9702360 A	20020625	LSGT	+FF	DECISION: INTENTION TO GRANT	
BRPI9702360 A	20021001	LSGT	+FG9A	PATENT OR CERTIFICATE OF ADDITION GRANTED	
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BRPI9702360 A	20130521	LSLE	-B21F	LAPSE ACC. ART. 78, ITEM IV - ON NON-PAYMENT OF THE ANNUAL FEES IN TIME	TEXT : REFERENTE AO DESPACHO PUBLICADO NA RPI 2020 DE 22/09/2009 E AO NAO RECOLHIMENTO DA 13A, 14A, 15A E 16A ANUIDADES.
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CA2203362 AA	19980130	LSES	+EEER	EXAMINATION REQUEST	
CA2203362 C	20020122	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2203362 C	20131204	LSLE	-MKLA	LAPSED	EFFECTIVE DATE : 20131023
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CA2222706 AA	20020116	LSES	+EEER	EXAMINATION REQUEST	
CA2222706 C	20070605	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2222706 C	20140517	LSLE	-MKLA	LAPSED	EFFECTIVE DATE : 20140404
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CA2362530 AA	20011126	LSES	+EEER	EXAMINATION REQUEST	
CA2362530 C	20050426	LSGT	+	granted / extensions (spc, cpc, pte)	
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CN1136019 C	20040128	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN1136019 C	20051221	LSLE	-C19	LAPSE OF PATENT RIGHT DUE TO NON-PAYMENT OF THE ANNUAL FEE	
CN1136019 C	20151023	PEXP		Calculated Patent Term Expiry	
CN1167446 A	19971210	LSPB	+	published / reissued	
CN1167446 A	19971210	LSPB	+C06	PUBLICATION	
CN1524592 A	20040901	LSPB	+	published / reissued	
CN1524592 A	20040901	LSPB	+C06	PUBLICATION	
CN1524592 A	20080723	LSDW	-C02	DEEMED WITHDRAWAL OF PATENT APPLICATION AFTER PUBLICATION (PATENT LAW 2001)	
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DE69735263 T2	20170404	PEXP		Calculated Patent Term Expiry	
EP0790844 A1	19970827	LSPB	+	published / reissued	
EP0790844 A1	19970827	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19970417
EP0790844 A4	20000405	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND	EFFECTIVE DATE : 20000221

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EP0790844 A4	20041117	LSRE	RTI1	TITLE (CORRECTION)	TEXT : VASCULAR SYSTEM TREATING APPARATUS
EP0790844 B1	20050420	LSGT	+	granted / extensions (spc, cpc, pte)	
EP0790844 B1	20050420	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20050420
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EP0790844 B1	20050429	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP0790844 B1	20050518	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
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EP0790844 B1	20060616	LSAS	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : TP
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EP0790844 B1	20151023	PEXP		Calculated Patent Term Expiry	
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EP0836502 A1	19980422	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19971106
EP0836502 A1	20010418	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	EFFECTIVE DATE : 20010307
EP0836502 A1	20030521	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20030403
EP0836502 A1	20050525	LSRE	RTI1	TITLE (CORRECTION)	TEXT : RADIATION TREATMENT DEVICE FOR THE VASCULAR SYSTEM
EP0836502 A1	20050727	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : NOVOSTE CORPORATION
EP0836502 A1	20050727	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : EMORY UNIVERSITY
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EP0836502 A1	20060717	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20060717
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EP0836502 A1	20080430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20060516
EP0836502 A1	20080731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20060404
EP0836502 A1	20081128	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20060215
EP0836502 A1	20091130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20090429 YEAR OF FEE PAYMENT : 13
EP0836502 A1	20100831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20100428 YEAR OF FEE PAYMENT : 14
EP0836502 A1	20101229	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20100404
EP0836502 A1	20110331	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20100404
EP0836502 A1	20111031	LSDW	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R119 REF DOCUMENT NUMBER :

					69735263 COUNTRY OF REF DOCUMENT : DE
EP0836502 A1	20111101	LSDW	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R119 REF DOCUMENT NUMBER : 69735263 COUNTRY OF REF DOCUMENT : DE
EP0836502 A1	20130628	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20111031
EP0836502 B1	20060215	LSGT	+	granted / extensions (spc, cpc, pte)	
EP0836502 B1	20170404	PEXP		Calculated Patent Term Expiry	
EP1221324 A1	20020710	LSPB	+	published / reissued	
EP1221324 A1	20030108	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20021111
EP1221324 A1	20030402	LSFE	+AKX	DESIGNATION FEES PAID	COUNTRY OF REF DOCUMENT : AT COUNTRY OF REF DOCUMENT : BE COUNTRY OF REF DOCUMENT : CH COUNTRY OF REF DOCUMENT : DE COUNTRY OF REF DOCUMENT : DK COUNTRY OF REF DOCUMENT : ES COUNTRY OF REF DOCUMENT : FR COUNTRY OF REF DOCUMENT : GB COUNTRY OF REF DOCUMENT : GR COUNTRY OF REF DOCUMENT : IE COUNTRY OF REF DOCUMENT : IT COUNTRY OF REF DOCUMENT : LI COUNTRY OF REF DOCUMENT : LU COUNTRY OF REF DOCUMENT : MC COUNTRY OF REF DOCUMENT : NL COUNTRY OF REF DOCUMENT : PT COUNTRY OF REF DOCUMENT : SE
EP1221324 A1	20050119	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20041206
EP1221324 A1	20060614	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : BEST VASCULAR, INC.
EP1221324 A1	20060927	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20041206
EP1221324 A1	20110525	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20101201
HK1004381 A1	20040611	LSPB	+	published / reissued	
HK1004381 A1	20041215	LSFE	+PF	PATENT IN FORCE	
HK1004381 A1	20080530	LSLE	-PC	PATENT CEASED (I.E. PATENT HAS LAPSED DUE TO THE FAILURE TO PAY THE RENEWAL FEE)	EFFECTIVE DATE : 20071023
HK1004381 A1	20180504	PEXP		Calculated Patent Term Expiry	
HK1004381 B	20040611	LSGT	+	granted / extensions (spc, cpc, pte)	
HK1004381 B	20180504	PEXP		Calculated Patent Term Expiry	
JP10507951 T2	19980804	LSPB	+	published / reissued	
JP11506972 T2	19990622	LSPB	+	published / reissued	
JP11506972 T2	20040219	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20040128

JP11506972 T2	20060914	LSWD	-A762	WRITTEN ABANDONMENT OF APPLICATION	TEXT : JAPANESE INTERMEDIATE CODE: A762 EFFECTIVE DATE : 20060823
JP2003135606 A2	20030513	LSPB	+	published / reissued	
JP2003135606 A2	20050323	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20050322
JP2003135606 A2	20050623	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20050622
JP2003135606 A2	20050830	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20050829
JP2003135606 A2	20060302	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20060301
JP3391797 B2	20030331	LSGT	+	granted / extensions (spc, cpc, pte)	
JP3391797 B2	20060131	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP3391797 B2	20061226	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP3391797 B2	20080117	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 5
JP3391797 B2	20080122	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 6
JP3391797 B2	20090122	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 6
JP3391797 B2	20090127	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 7
JP3391797 B2	20100114	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 7
JP3391797 B2	20100119	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 8
JP3391797 B2	20110124	LSLE	-LAPS	CANCELLATION BECAUSE OF NO PAYMENT OF ANNUAL FEES	
JP3391797 B2	20151023	PEXP		Calculated Patent Term Expiry	
KR100258404 B1	20000601	LSGT	+	granted / extensions (spc, cpc, pte)	
KR100258404 B1	20170424	PEXP		Calculated Patent Term Expiry	
KR19970706865 A	19971201	LSPB	+	published / reissued	
KR19977006865 A	19971201	LSPB	+	published / reissued	
KR19990022294 A	19990325	LSPB	+	published / reissued	
KR19990022294 A	20020129	LSES	A201	REQUEST FOR EXAMINATION	
KR19990022294 A	20031230	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR19990022294 A	20040527	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
MX9702918 A1	19980628	LSPB	+	published / reissued	
NO314243 B1	20030224	LSGT	+	granted / extensions	

				(spc, cpc, pte)	
NO314243 B1	20051128	LSLE	-MM1K	LAPSED BY NOT PAYING THE ANNUAL FEES	
NO314243 B1	20171203	PEXP		Calculated Patent Term Expiry	
NO975588 A	19971203	LSPB	+	published / reissued	
RU2177350 C2	20011227	LSGT	+	granted / extensions (spc, cpc, pte)	
RU2177350 C2	20070127	LSLE	-MM4A	THE PATENT IS INVALID DUE TO NON-PAYMENT OF FEES	EFFECTIVE DATE : 20050405
RU2177350 C2	20170404	PEXP		Calculated Patent Term Expiry	
RU97106204 A	19990420	LSPB	+	published / reissued	
RU97119603 A	19990927	LSPB	+	published / reissued	
US2003229259 AA	20031211	LSPB	+	published / reissued	
US2003229259 AA	20060321	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BEST VASCULAR, INC., VIRGINIA OLDPARTY : ASSET PURCHASE AGREEMENT; ASSIGNOR:NOVOSTE CORPORATION; REEL/FRAME:017696/0077 EFFECTIVE DATE : 20060309
US2004192999 AA	20040930	LSPB	+	published / reissued	
US5683345 A	19971104	LSGT	+	granted / extensions (spc, cpc, pte)	
US5683345 A	19941114	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : NOVOSTE CORPORATION, GEORGIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:WAKSMAN, RON, M.D.; WELDON, THOMAS D.; HILLSTEAD, RICHARD A.; AND OTHERS; REEL/FRAME:007207/0701 EFFECTIVE DATE : 19941027
US5683345 A	19970929	LSGT	PAT1	Patented Case	
US5683345 A	19970929	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5683345 A	20001208	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5683345 A	20050427	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5683345 A	20060321	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BEST VASCULAR, INC., VIRGINIA OLDPARTY : ASSET PURCHASE AGREEMENT; ASSIGNOR:NOVOSTE CORPORATION; REEL/FRAME:017696/0077 EFFECTIVE DATE : 20060309
US5683345 A	20090504	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5683345 A	20141104	PEXP		Calculated Patent Term Expiry	
US5899882 A	19990504	LSGT	+	granted / extensions (spc, cpc, pte)	
US5899882 A	19961009	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : NOVOSTE CORPORATION, GEORGIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:WELDON, THOMAS D.; HILLSTEAD, RICHARD A.; ROSEN, JONATHAN J.; AND OTHERS; REEL/FRAME:008227/0743; SIGNING DATES FROM 19960617 TO 19960814
US5899882 A	19961009	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : EMORY UNIVERSITY, GEORGIA

					OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:WELDON, THOMAS D.; HILLSTEAD, RICHARD A.; ROSEN, JONATHAN J.; AND OTHERS; REEL/FRAME:008227/0743; SIGNING DATES FROM 19960617 TO 19960814
US5899882 A	19991004	LSGT	PAT1	Patented Case	
US5899882 A	19991004	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5899882 A	19991026	LSRE	CC	CERTIFICATE OF CORRECTION	
US5899882 A	20021007	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5899882 A	20060321	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BEST VASCULAR, INC., VIRGINIA OLDPARTY : ASSET PURCHASE AGREEMENT; ASSIGNOR:NOVOSTE CORPORATION; REEL/FRAME:017696/0077 EFFECTIVE DATE : 20060309
US5899882 A	20061017	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5899882 A	20101029	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5899882 A	20160404	PEXP		Calculated Patent Term Expiry	
US6306074 BA	20011023	LSGT	+	granted / extensions (spc, cpc, pte)	
US6306074 BA	20011004	LSGT	PAT1	Patented Case	
US6306074 BA	20011004	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US6306074 BA	20050321	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6306074 BA	20060321	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BEST VASCULAR, INC., VIRGINIA OLDPARTY : ASSET PURCHASE AGREEMENT; ASSIGNOR:NOVOSTE CORPORATION; REEL/FRAME:017696/0077 EFFECTIVE DATE : 20060309
US6306074 BA	20090423	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US6306074 BA	20131017	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US6306074 BA	20190504	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
US6458070 BA	20021001	LSGT	+	granted / extensions (spc, cpc, pte)	
US6458070 BA	20020912	LSGT	PAT1	Patented Case	
US6458070 BA	20020912	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US6458070 BA	20060303	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6458070 BA	20060321	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BEST VASCULAR, INC., VIRGINIA OLDPARTY : ASSET PURCHASE AGREEMENT; ASSIGNOR:NOVOSTE CORPORATION; REEL/FRAME:017696/0077 EFFECTIVE DATE : 20060309
US6458070 BA	20091120	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US6458070 BA	20140402	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12

US6458070 BA	20191221	PEXP		Calculated Patent Term Expiry	
US6503185 BA	20030107	LSGT	+	granted / extensions (spc, cpc, pte)	
US6503185 BA	20021219	LSGT	PAT1	Patented Case	
US6503185 BA	20021219	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US6503185 BA	20060321	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BEST VASCULAR, INC., VIRGINIA OLDPARTY : ASSET PURCHASE AGREEMENT; ASSIGNOR:NOVOSTE CORPORATION; REEL/FRAME:017696/0077 EFFECTIVE DATE : 20060309
US6503185 BA	20060626	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6503185 BA	20100604	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US6503185 BA	20140912	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US6503185 BA	20191221	PEXP		Calculated Patent Term Expiry	
US6821242 BA	20041123	LSGT	+	granted / extensions (spc, cpc, pte)	
US6821242 BA	20041104	LSGT	PAT1	Patented Case	
US6821242 BA	20041104	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US6821242 BA	20060321	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BEST VASCULAR, INC., VIRGINIA OLDPARTY : ASSET PURCHASE AGREEMENT; ASSIGNOR:NOVOSTE CORPORATION; REEL/FRAME:017696/0077 EFFECTIVE DATE : 20060309
US6821242 BA	20080312	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6821242 BA	20120807	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US6821242 BA	20160505	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US6821242 BA	20191221	PEXP		Calculated Patent Term Expiry	
US6994665 BB	20060207	LSGT	+	granted / extensions (spc, cpc, pte)	
US6994665 BB	20060118	LSGT	PAT1	Patented Case	
US6994665 BB	20060321	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BEST VASCULAR, INC., VIRGINIA OLDPARTY : ASSET PURCHASE AGREEMENT; ASSIGNOR:NOVOSTE CORPORATION; REEL/FRAME:017696/0077 EFFECTIVE DATE : 20060309
US6994665 BB	20090803	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6994665 BB	20140207	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US6994665 BB	20170918	LSFE	FEPP	FEE PAYMENT PROCEDURE	TEXT : MAINTENANCE FEE REMINDER MAILED (ORIGINAL EVENT CODE: REM.)
US6994665 BB	20180305	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	TEXT : PATENT EXPIRED FOR FAILURE TO PAY MAINTENANCE FEES (ORIGINAL EVENT CODE: EXP.)
US6994665 BB	20180305	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees	

				Under 37 CFR 1.362	
US6994665 BB	20180305	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US6994665 BB	20180327	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20180207
US6994665 BB	20240402	PEXP		Calculated Patent Term Expiry	
US7066872 BB	20060627	LSGT	+	granted / extensions (spc, cpc, pte)	
US7066872 BB	20091120	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US7066872 BB	20140627	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US7066872 BB	20140627	LSRE	+REIN	REINSTATEMENT AFTER MAINTENANCE FEE PAYMENT CONFIRMED	
US7066872 BB	20140819	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20140627
US7066872 BB	20140908	LSRE	+PRDP	PATENT REINSTATED DUE TO THE ACCEPTANCE OF A LATE MAINTENANCE FEE	EFFECTIVE DATE : 20140912
US7066872 BB	20140912	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US7066872 BB	20140912	LSGT	PAT1	Patented Case	
US7066872 BB	20180205	LSFE	FEPP	FEE PAYMENT PROCEDURE	TEXT : MAINTENANCE FEE REMINDER MAILED (ORIGINAL EVENT CODE: REM.)
US7066872 BB	20180723	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	TEXT : PATENT EXPIRED FOR FAILURE TO PAY MAINTENANCE FEES (ORIGINAL EVENT CODE: EXP.)
US7066872 BB	20180723	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US7066872 BB	20180723	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US7066872 BB	20180814	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20180627
US7066872 BB	20230411	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
US7160238 BA	20070109	LSGT	+	granted / extensions (spc, cpc, pte)	
US7160238 BA	20060321	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BEST VASCULAR, INC., VIRGINIA OLDPARTY : ASSET PURCHASE AGREEMENT; ASSIGNOR:NOVOSTE CORPORATION; REEL/FRAME:017696/0077 EFFECTIVE DATE : 20060309
US7160238 BA	20100604	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US7160238 BA	20150109	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US7160238 BA	20150109	LSRE	+REIN	REINSTATEMENT AFTER MAINTENANCE FEE PAYMENT CONFIRMED	
US7160238 BA	20150302	LSRE	+PRDP	PATENT REINSTATED DUE TO THE ACCEPTANCE OF A LATE MAINTENANCE FEE	EFFECTIVE DATE : 20150304
US7160238 BA	20150303	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY	EFFECTIVE DATE : 20150109

				MAINTENANCE FEE	
US7160238 BA	20150304	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US7160238 BA	20150304	LSGT	PAT1	Patented Case	
US7160238 BA	20180827	LSFE	FEPP	FEE PAYMENT PROCEDURE	TEXT : MAINTENANCE FEE REMINDER MAILED (ORIGINAL EVENT CODE: REM.); ENTITY STATUS OF PATENT OWNER: SMALL ENTITY
US7160238 BA	20190211	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	TEXT : PATENT EXPIRED FOR FAILURE TO PAY MAINTENANCE FEES (ORIGINAL EVENT CODE: EXP.); ENTITY STATUS OF PATENT OWNER: SMALL ENTITY
US7160238 BA	20190211	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US7160238 BA	20190211	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US7160238 BA	20190305	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20190109
US7160238 BA	20191221	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
WO9613303 A1	19960509	LSPB	+	published / reissued	
WO9613303 A1	19951023	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 95196486.0 COUNTRY OF REF DOCUMENT : CN
WO9613303 A1	19970417	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1995937621 COUNTRY OF REF DOCUMENT : EP
WO9613303 A1	19970422	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2203362 COUNTRY OF REF DOCUMENT : CA
WO9613303 A1	19970422	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2203362 COUNTRY OF REF DOCUMENT : CA KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO9613303 A1	19970422	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : PA/A/1997/002918 COUNTRY OF REF DOCUMENT : MX
WO9613303 A1	19970424	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1019970702708 COUNTRY OF REF DOCUMENT : KR
WO9613303 A1	19970827	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1995937621 COUNTRY OF REF DOCUMENT : EP
WO9613303 A1	19971201	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1019970702708 COUNTRY OF REF DOCUMENT : KR
WO9613303 A1	19991209	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1019970702708 COUNTRY OF REF DOCUMENT : KR
WO9613303 A1	20050420	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1995937621 COUNTRY OF REF DOCUMENT : EP

WO9737715 A1	19971016	LSPB	+	published / reissued	
WO9737715 A1	19970404	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 97190300.X COUNTRY OF REF DOCUMENT : CN
WO9737715 A1	19971106	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1997922288 COUNTRY OF REF DOCUMENT : EP
WO9737715 A1	19971128	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2222706 COUNTRY OF REF DOCUMENT : CA
WO9737715 A1	19971128	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2222706 COUNTRY OF REF DOCUMENT : CA KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO9737715 A1	19971202	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 1997 536319 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO9737715 A1	19971203	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1019970708773 COUNTRY OF REF DOCUMENT : KR
WO9737715 A1	19980422	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1997922288 COUNTRY OF REF DOCUMENT : EP
WO9737715 A1	19990325	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1019970708773 COUNTRY OF REF DOCUMENT : KR
WO9737715 A1	20040527	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1019970708773 COUNTRY OF REF DOCUMENT : KR
WO9737715 A1	20060215	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1997922288 COUNTRY OF REF DOCUMENT : EP
ZA9509028 A	19960814	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA9509028 A	20151024	PEXP		Calculated Patent Term Expiry	
ZA9702789 A	19971114	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA9702789 A	20170401	PEXP		Calculated Patent Term Expiry	

63) Family number: 29554102 (US2004048779A)

Title: USE OF ROTIGOTINE FOR TREATING THE RESTLESS LEG SYNDROME

Abstract: This invention relates to the use of rotigotine for the effective treatment of Restless Leg Syndrome (RLS) as well as to a rotigotine-containing transepicutaneous pharmaceutical composition, provided in particular in the form of an acrylate- or silicone-based Transdermal Therapeutic System (TTS) having a surface area of 2.5 to 20 cm<2>and containing 0.1 to 3.15 mg/cm<2>rotigotine as its active component against the Restless Leg Syndrome, said system leading in the human Restless Leg Syndrome condition to an improvement, compared to a placebo treatment, by 2 or more units on the International Restless Leg Syndrome Study Group (IRLSSG) scale after administration over a period of eight days.

Classifications:
International (IPC 8-9): A61K A61K31/045 A61K31/381 A61K31/45 A61K47/02 A61K47/04 A61K47/10 A61K47/12 A61K47/14 A61K47/16 A61K47/22 A61K47/32 A61K47/34 A61K9/70 A61P21/00 A61P25/00 A61P25/02 A61P25/08 A61P25/14 A61P43/00 (Advanced/Invention); C07D333/20 C09D133/00 C09D183/04 (Advanced/Non-invention); A61K31/00 A61K31/045 A61K31/381 A61K31/45 A61K47/02 A61K47/10 A61K47/12 A61K47/14 A61K47/16 A61K47/22 A61K47/32 A61K47/34 A61K9/70 A61P21/00 A61P25/00 A61P43/00 (Core/Invention); C07D333/00 (Core/Non-invention); A61K (Subclass/Invention)
International (IPC 1-7): A61K31/045 A61K31/381 A61K38/17 A61K47/04 A61K47/10 A61K47/12 A61K47/14 A61K47/16 A61K47/22 A61K47/32 A61K47/34 A61K9/70 A61P25/02 A61P25/14
CPC: A61K9/7061 A61K9/7069 A61K31/381
European: A61K31/381 A61K9/70E2B6B2 A61K9/70E2B6D
US: 424/449 514/2



Family:

Publication number	Publication date	Application number	Application date
AT387912 E	20080315	AT20030727432T	20030505
AU2003233233 AA	20031117	AU20030233233	20030505
AU2003233233 BB	20080306	AU20030233233	20030505
BRPI0309837 A	20050301	BR2003PI09837	20030505
CA2483120 AA	20041022	CA20032483120	20030505
CA2483120 C	20130716	CA20032483120	20030505
CA2787384 AA	20031113	CA20032787384	20030505
CN100396281 C	20080625	CN20038016025	20030505
CN1665497 A	20050907	CN20038016025	20030505
CY1107452 T1	20121219	CY20081100471T	20080502
DE10220230 A1	20031127	DE20021020230	20020506
DE50309318 D1	20080417	DE20035009318	20030505
DK1501499 T3	20080623	DK20030727432T	20030505
EP1501499 A1	20050202	EP20030727432	20030505
EP1501499 B1	20080305	EP20030727432	20030505
ES2301795 T3	20080701	ES20030727432T	20030505
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HK1072541 A1	20050902	HK20050105199	20050622
HK1072541 A3	20050902	HK20050105199	20050622
HK1072541 B	20080627	HK20050105199	20050622
IL164861 A0	20051218	IL20030164861	20030505
IL164861 A1	20110630	IL20030164861	20030505
JP2005528413 T2	20050922	JP20040500861T	20030505
JP2010159302 A2	20100722	JP20100098924	20100422
JP5253707 B2	20130731	JP20040500861T	20030505
KR20040104697 A	20041210	KR20047017685	20030505
MXPA04010687 A1	20050608	MX2004PA10687	20030505
NO20045240 A	20041130	NO20040005240	20041130
NO20045240 L	20041130	NO20040005240	20041130
NO333619 B1	20130722	NO20040005240	20041130
NZ536533 A	20100226	NZ20030536533	20030505
PL218549 B1	20141231	PL20030373276	20030505
PL373276 A1	20050822	PL20030373276	20030505
PT1501499 T	20080520	PT20030727432T	20030505

RU2004131866 A	20050610	RU20040131866	20030505
RU2301063 C2	20070620	RU20040131866	20030505
RU2301063 C9	20071127	RU20040131866	20030505
SI1501499 T1	20080630	SI20030031195T	20030505
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US2004048779 AA	20040311	US20030429283	20030502
US2017151215 AA	20170601	US20170428614	20170209
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ZA200408862 A	20050707	ZA20040008862	20041102
ZA200408862 A	20050928	ZA20040008862	20041102

Priority:

DE20021020230 20020506 US20020381509P 20020517 US20030429283 20030502
CA20032483120 20030505 CA20032787384 20030505 EP20030727432 20030505
WO2003EP04685 20030505 JP20040500861 20030505 US20170428614 20170209

Probable Assignee: UCB SA

Assignee(s): (std): SANOL ARZNEI SCHWARZ GMBH ; SCHOLLMAYER ERWIN ; SCHWARZ PHARMA AG ; UCB PHARMA GMBH ; UCB SA

Assignee(s): LAUTERBACH THOMAS ; SCHWARZ PHARMA AKTIENGESELLSCHAFT ; SCHWARZ PHARMA ALFRED NOBEL STRASSE 10 D 40789 MONHEIM RHLD AG ; SHVARTS FARMA AG

Inventor(s): (std): SCHOLLMAYER ERWIN ; LAUTERBACH THOMAS ; THOMAS LAUTERBACH ; SHOLL MAJER EHRVIN ; LAUTERBAKH TOMAS ; ERWIN SCHOLLMAYER

Inventor(s): SHOLL'MAJER EHRVIN

Agent(s): DAVIES COLLISON CAVE PTY LTD; DAVIES COLLISON CAVE; KIRBY EADES GALE BAKER; HOFFMANN EITLE; CHINA PATENT AGENT HK LTD 22 F GREAT EAGLE CENTRE 23 HARBOUR ROAD; CHINA PATENT AGENT HK LTD; REINHOLD COHN AND PARTNERS

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NI NL NO NZ OM PH PL PT RO RU SC SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT387912 E	20080315	LSGT	+	granted / extensions (spc, cpc, pte)	
AT387912 E	20110115	LSAS	EEIH	CHANGE IN THE PERSON OF PATENT OWNER	
AT387912 E	20230505	PEXP		Calculated Patent Term Expiry	
AU2003233233 AA	20031117	LSPB	+	published / reissued	
AU2003233233 BB	20080306	LSGT	+	granted / extensions (spc, cpc, pte)	
AU2003233233 BB	20080703	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU2003233233 BB	20230505	PEXP		Calculated Patent Term Expiry	
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BRPI0309837 A	20110712	LSAS	B25D	REQUESTED CHANGE OF NAME OF APPLICANT APPROVED	PARTYTYPE : OWNER OWNER : UCB PHARMA GMBH (DE) OLDPARTY : NOME ALTERADO DE: SCHWARZ PHARMA AG
BRPI0309837 A	20160112	LSES	B07D	TECHNICAL EXAMINATION (OPINION) RELATED TO ARTICLE 229 OF INDUSTRIAL PROPERTY LAW	
BRPI0309837 A	20181002	LSES	B07A	TECHNICAL EXAMINATION (OPINION): PUBLICATION OF TECHNICAL EXAMINATION (OPINION)	
BRPI0309837 A	20190129	LSRV	B09B	DECISION: REFUSAL	
BRPI0309837 A	20190416	LSRV	B09B	DECISION: REFUSAL	TEXT : MANTIDO O INDEFERIMENTO UMA VEZ QUE NAO FOI APRESENTADO RECURSO DENTRO DO PRAZO LEGAL

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CA2483120 AA	20071203	LSES	+EEER	EXAMINATION REQUEST	
CA2483120 C	20130716	LSGT	+	granted / extensions (spc, cpc, pte)	
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CA2787384 AA	20031113	LSPB	+	published / reissued	
CA2787384 AA	20120817	LSES	+EEER	EXAMINATION REQUEST	
CA2787384 AA	20160615	LSLE	-FZDE	DEAD	EFFECTIVE DATE : 20160504
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CN100396281 C	20101124	LSAS	C56	CHANGE IN THE NAME OR ADDRESS OF THE PATENTEE	PARTYTYPE : OWNER OWNER : UCB PHARMA. CO., LTD. OLDPARTY : FORMER NAME: SCHWARZ PHARMA AG
CN100396281 C	20230505	PEXP		Calculated Patent Term Expiry	
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DE10220230 A1	20031127	LSPB	+	published / reissued	
DE10220230 A1	20031127	LSES	+OP8	REQUEST FOR EXAMINATION AS TO PARAGRAPH 44 PATENT LAW	
DE10220230 A1	20090528	LSRV	-8131	REJECTION	
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DE50309318 D1	20100805	LSAS	8327	CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER	PARTYTYPE : OWNER OWNER : UCB PHARMA GMBH, 40789 MONHEIM, DE
DE50309318 D1	20140827	LSRV	-R064	EPO'S REVOCATION DECISION NOW FINAL	
DE50309318 D1	20140827	LSRV	-R103	PATENT REVOKED BY EPO	
DK1501499 T3	20080623	LSGT	+	granted / extensions (spc, cpc, pte)	
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EP1501499 A1	20080331	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
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ES2301795 T3	20080701	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2301795 T3	20230505	PEXP		Calculated Patent Term Expiry	
HK1072541 A1	20050902	LSPB	+	published / reissued	
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JP2005528413 T2	20090527	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20090526
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JP2005528413 T2	20130131	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20130130
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JP5253707 B2	20130423	LSFE	R100	特許料納付書 (Patent fee payment form)	
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				payment form)	
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RU2301063 C9	20110820	LSLI	PC43	OFFICIAL REGISTRATION OF THE TRANSFER OF THE EXCLUSIVE RIGHT WITHOUT CONTRACT FOR INVENTIONS	EFFECTIVE DATE : 20110713
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US2004048779 AA	20071108	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SCHWARZ PHARMA AG, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:LAUTERBACH, THOMAS; REEL/FRAME:020084/0205 EFFECTIVE DATE : 20071025
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WO03092677 A1	20050106	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 20038160250 COUNTRY OF REF DOCUMENT : CN
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ZA200408862 A	20050928	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA200408862 A	20241101	PEXP		Calculated Patent Term Expiry	
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64) Family number: 41083103 (US2008039465A)

Title: TRIAZOLYL PHENYL BENZENESULFONAMIDES

Abstract: Compounds are provided that act as potent antagonists of the CCR2 or CCR9 receptor. Animal testing demonstrates that these compounds are useful for treating inflammation, a hallmark disease for CCR2 and CCR9. The compounds are generally aryl sulfonamide derivatives and are useful in pharmaceutical compositions, methods for the treatment of CCR2-mediated diseases, CCR9-mediated diseases, as controls in assays for the identification of CCR2 antagonists and as controls in assays for the identification of CCR9 antagonists.



Classifications:
International (IPC 8-9): A61K A61K31/397 A61K31/41 A61K31/4196 A61K31/422 A61K31/437 A61K31/44 A61K31/4439 A61K31/444 A61K31/454 A61K31/496 A61K31/497 A61K31/50 A61K31/519 A61K31/5377 A61K45/00 A61P A61P1/00 A61P1/04 A61P1/16 A61P11/00 A61P13/12 A61P15/02 A61P17/00 A61P17/04 A61P17/06 A61P19/02 A61P19/06 A61P21/00 A61P25/00 A61P25/04 A61P25/28 A61P27/14 A61P27/16 A61P29/00 A61P3/00 A61P3/04 A61P3/10 A61P31/04 A61P31/12 A61P35/00 A61P37/00 A61P37/02 A61P37/06 A61P37/08 A61P43/00 A61P9/00 A61P9/10 C07D C07D207/00 C07D207/04 C07D249/00 C07D249/08 C07D401/00 C07D401/04 C07D401/14 C07D403/04 C07D403/06 C07D405/04 C07D405/12 C07D405/14 C07D413/04 C07D413/06 C07D413/14 C07D487/04 C07D491/052 (Advanced/Invention);
A61K31/4196 A61K31/422 A61K31/4439 A61K31/444 A61K31/454 A61K31/496 A61K31/519 A61K31/5377 A61P1/00 A61P11/00 A61P13/12 A61P19/02 A61P25/00 A61P25/04 A61P29/00 A61P3/04 A61P3/10 A61P35/00 A61P37/06 A61P43/00 A61P9/10 (Advanced/Non-invention);
A61K31/397 A61K31/41 A61K31/4196 A61K31/422 A61K31/4353 A61K31/44 A61K31/4427 A61K31/4523 A61K31/496 A61K31/4965 A61K31/519 A61K31/5375 A61K45/00 A61P1/00 A61P11/00 A61P13/00 A61P15/00 A61P17/00 A61P19/00 A61P21/00 A61P25/00 A61P27/00 A61P29/00 A61P3/00 A61P31/00 A61P35/00 A61P37/00 A61P43/00 A61P9/00 C07D249/00 C07D401/00 C07D403/00 C07D405/00 C07D413/00 C07D487/00 C07D491/00 (Core/Invention);
A61K A61P C07D (Subclass/Invention)
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European: C07D249/08 C07D401/04 C07D401/14 C07D403/04 C07D405/04 C07D405/12 C07D413/04
US: 514/210.2 514/210.200P 514/236.2 514/236.200P 514/236.200S 514/254.05 514/254.050S 514/259.1 514/259.100S 514/259.31 514/259.310S 514/300 514/300S 514/318 514/318S 514/326 514/326S 514/333 514/333S 514/338 514/338S 514/340 514/340S 514/374 514/374S 514/383 514/383S 514/405 514/408 544/131 544/131S 544/132 544/132S 544/263 544/263S 544/366 544/366S 546/117 546/117S 546/194 546/194S 546/208 546/208S 546/210 546/210S 546/256 546/256S 546/272.4 546/272.400S 548/215 548/215S 548/262.2 548/266.2 548/266.200S 548/267.2 548/267.200S 548/267.6 548/267.600S 548/267.8 548/267.800S 548/268.2 548/268.200S 548/268.6 548/268.600S 548/269.4 548/269.400S 548/400

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Priority:

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WO2007US15808 20070710 US20100708900 20100219 US20100753342 20100402
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Assignee(s): (std): CHARVAT TREVOR T ; CHEMOCENTRYX INC ; HU CHENG ; JIN JEFF ; LI YANDONG ; PUNNA SREENIVAS ; PENNELL ANDREW M K ; UNGASHE SOLOMON ; MELIKIAN ANITA ; TAN XUEFEI ; NOVACK AARON ; SULLIVAN EDWARD J ; THOMAS WILLIAM D ; PENNELL ANDREW M ; ZENG YIBIN

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Inventor(s): PENNELL ENDREW MK ; PENNELL ANDREW MK ; TREVOR CHARVAT ; ANDREW MK PENNELL ; EDWARD SULLIVAN ; TREVOR T CHARVAT ; ANDREW M K PENNELL ; WILLIAM D THOMAS ; EDWARD J SULLIVAN

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Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT496905 E	20110215	LSGT	+	granted / extensions (spc, cpc, pte)	
AT496905 E	20110715	LSLE	-RER	CEASED AS TO PARAGRAPH 5 LIT. 3 LAW INTRODUCING PATENT TREATIES	
AT496905 E	20270710	PEXP		Calculated Patent Term Expiry	
AT498615 E	20110315	LSGT	+	granted / extensions (spc, cpc, pte)	

AT498615 E	20110915	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	REF DOCUMENT NUMBER : 2046762 COUNTRY OF REF DOCUMENT : EP
AT498615 E	20270710	PEXP		Calculated Patent Term Expiry	
AU2007272972 AA	20080117	LSPB	+	published / reissued	
AU2007272972 BB	20111201	LSGT	+	granted / extensions (spc, cpc, pte)	
AU2007272972 BB	20120329	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU2007272972 BB	20270710	PEXP		Calculated Patent Term Expiry	
AU2007275873 AA	20080124	LSPB	+	published / reissued	
AU2007275873 BB	20120614	LSGT	+	granted / extensions (spc, cpc, pte)	
AU2007275873 BB	20121011	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU2007275873 BB	20270710	PEXP		Calculated Patent Term Expiry	
BRPI0714407 A2	20180327	LSES	B07D	TECHNICAL EXAMINATION (OPINION) RELATED TO ARTICLE 229 OF INDUSTRIAL PROPERTY LAW	
CA2657670 AA	20090108	LSPB	+	published / reissued	
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CA2657670 C	20120417	LSGT	+	granted / extensions (spc, cpc, pte)	
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CA2657776 AA	20090112	LSPB	+	published / reissued	
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CA2657776 C	20130827	LSGT	+	granted / extensions (spc, cpc, pte)	
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CN101511800 A	20090819	LSPB	+	published / reissued	
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CN101511800 B	20130227	LSGT	+	granted / extensions (spc, cpc, pte)	
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CO6180465 A2	20100719	LSPB	+	published / reissued	
CO6180465 A2	20130405	LSGT	+FG	APPLICATION GRANTED	
DK2046762 T3	20110509	LSGT	+	granted / extensions (spc, cpc, pte)	
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EA015710 B1	20111031	LSGT	+	granted / extensions (spc, cpc, pte)	
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EA015710 B1	20270710	PEXP		Calculated Patent Term Expiry	
EA200900168 A1	20090630	LSPB	+	published / reissued	
EP2046762 A2	20090415	LSPB	+	published / reissued	
EP2046762 A2	20090415	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20090115
EP2046762 A2	20091014	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20090915
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EP2046762 B1	20110228	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
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EP2046762 B1	20120315	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 602007012552 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20111117
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EP2046762 B1	20160621	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 10
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EP2046762 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20180808 YEAR OF FEE PAYMENT : 12
EP2046762 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20180710 YEAR OF FEE PAYMENT : 12
EP2046762 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20180719 YEAR OF FEE PAYMENT : 12
EP2046762 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20180709 YEAR OF FEE PAYMENT : 12
EP2046762 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20180726 YEAR OF FEE PAYMENT : 12
EP2046762 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20180702 YEAR OF FEE PAYMENT : 12
EP2046762 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20180726 YEAR OF FEE PAYMENT : 12
EP2046762 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20180727 YEAR OF FEE PAYMENT : 12
EP2046762 B1	20181231	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20180702 YEAR OF FEE PAYMENT : 12
EP2046762 B1	20190131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180206
EP2046762 B1	20270710	PEXP		Calculated Patent Term Expiry	
EP2049515 A2	20090422	LSPB	+	published / reissued	
EP2049515 A2	20090422	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20090114
EP2049515 A2	20100217	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20100113
EP2049515 A2	20151030	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20150714 YEAR OF FEE PAYMENT : 9
EP2049515 A2	20151130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20150708 YEAR OF FEE PAYMENT : 9
EP2049515 A2	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20160624 YEAR OF FEE PAYMENT : 10
EP2049515 A2	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20160621 YEAR OF FEE PAYMENT : 10
EP2049515 A2	20160930	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20160708

				[ANNOUNCED FROM NATIONAL OFFICE TO EPO]	YEAR OF FEE PAYMENT : 10
EP2049515 A2	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20160721 YEAR OF FEE PAYMENT : 10
EP2049515 A2	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20160801 YEAR OF FEE PAYMENT : 10
EP2049515 A2	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20160725 YEAR OF FEE PAYMENT : 10
EP2049515 A2	20161230	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20160708 YEAR OF FEE PAYMENT : 10
EP2049515 B1	20110126	LSGT	+	granted / extensions (spc, cpc, pte)	
EP2049515 B1	20110126	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP2049515 B1	20110131	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP2049515 B1	20110223	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : T3
EP2049515 B1	20110302	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP2049515 B1	20110310	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602007012261 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20110310
EP2049515 B1	20110512	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2358618 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) : EFFECTIVE DATE : 20110429
EP2049515 B1	20110627	LSRV	-LTIE	LT: INVALIDATION OF EUROPEAN PATENT OR PATENT EXTENSION	REF COUNTRY CODE : EP EFFECTIVE DATE : 20110126
EP2049515 B1	20110729	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20110526
EP2049515 B1	20110729	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IS NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20110526
EP2049515 B1	20110729	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LV NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20110126
EP2049515 B1	20110729	LSLE	-PG25	LAPSED IN A	COUNTRY OF REF DOCUMENT : LT

				CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20110126
EP2049515 B1	20110729	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20110427
EP2049515 B1	20110819	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HK REF LEGAL EVENT CODE : GR REF DOCUMENT NUMBER : 1131134 COUNTRY OF REF DOCUMENT : HK
EP2049515 B1	20110831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20110126
EP2049515 B1	20110831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20110126
EP2049515 B1	20110831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20110126
EP2049515 B1	20110831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20110126
EP2049515 B1	20110831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20110426
EP2049515 B1	20110831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20110126
EP2049515 B1	20111031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20110126
EP2049515 B1	20111031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM	COUNTRY OF REF DOCUMENT : DK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE

				NATIONAL OFFICE TO EPO]	WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20110126
EP2049515 B1	20111130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20110126
EP2049515 B1	20111130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20110126
EP2049515 B1	20111130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20110126
EP2049515 B1	20111230	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20110126
EP2049515 B1	20120104	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20111027
EP2049515 B1	20120223	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 602007012261 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20111027
EP2049515 B1	20120229	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20110731
EP2049515 B1	20130531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20110710
EP2049515 B1	20130930	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20110126
EP2049515 B1	20131031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20110126
EP2049515 B1	20160621	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 10
EP2049515 B1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20160627 YEAR OF FEE PAYMENT : 10

				EPO]	
EP2049515 B1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20160708 YEAR OF FEE PAYMENT : 10
EP2049515 B1	20161230	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20160714 YEAR OF FEE PAYMENT : 10
EP2049515 B1	20170725	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 11
EP2049515 B1	20170929	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20170724 YEAR OF FEE PAYMENT : 11
EP2049515 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170731 YEAR OF FEE PAYMENT : 11
EP2049515 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170725 YEAR OF FEE PAYMENT : 11
EP2049515 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20170726 YEAR OF FEE PAYMENT : 11
EP2049515 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20170725 YEAR OF FEE PAYMENT : 11
EP2049515 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20170731 YEAR OF FEE PAYMENT : 11
EP2049515 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20170811 YEAR OF FEE PAYMENT : 11
EP2049515 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20170726 YEAR OF FEE PAYMENT : 11
EP2049515 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20170728 YEAR OF FEE PAYMENT : 11
EP2049515 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20170728 YEAR OF FEE PAYMENT : 11
EP2049515 B1	20180718	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 12
EP2049515 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180731 YEAR OF FEE PAYMENT : 12
EP2049515 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20180710 YEAR OF FEE PAYMENT : 12
EP2049515 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20180810 YEAR OF FEE PAYMENT : 12

EP2049515 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20180718 YEAR OF FEE PAYMENT : 12
EP2049515 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20180730 YEAR OF FEE PAYMENT : 12
EP2049515 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20180726 YEAR OF FEE PAYMENT : 12
EP2049515 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20180726 YEAR OF FEE PAYMENT : 12
EP2049515 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20180719 YEAR OF FEE PAYMENT : 12
EP2049515 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20180808 YEAR OF FEE PAYMENT : 12
EP2049515 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20180730 YEAR OF FEE PAYMENT : 12
EP2049515 B1	20270710	PEXP		Calculated Patent Term Expiry	
ES2358618 T3	20110512	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2358618 T3	20270710	PEXP		Calculated Patent Term Expiry	
ES2360741 T3	20110608	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2360741 T3	20270710	PEXP		Calculated Patent Term Expiry	
HK1131134 A1	20100115	LSPB	+	published / reissued	
HK1131134 A1	20110819	LSPB	+	published / reissued	
HK1131134 A1	20291020	PEXP		Calculated Patent Term Expiry	
HK1131134 A1	20291020	PEXP		Calculated Patent Term Expiry	
HK1131134 B	20110819	LSGT	+	granted / extensions (spc, cpc, pte)	
HK1131134 B	20291020	PEXP		Calculated Patent Term Expiry	
HK1135091 A1	20100528	LSPB	+	published / reissued	
HK1135091 A1	20131122	LSPB	+	published / reissued	
HK1135091 A1	20300210	PEXP		Calculated Patent Term Expiry	
HK1135091 A1	20300210	PEXP		Calculated Patent Term Expiry	
HK1135091 B	20131122	LSGT	+	granted / extensions (spc, cpc, pte)	
HK1135091 B	20300210	PEXP		Calculated Patent Term Expiry	
IL196409 A0	20160731	LSGT	+FF	PATENT GRANTED	
IL196409 A0	20160831	LSFE	+KB	PATENT RENEWED	
IL196409 A1	20160331	LSPB	+	published / reissued	
IL196409 A1	20160731	LSGT	+FF	PATENT GRANTED	
IL196409 A1	20160831	LSFE	+KB	PATENT RENEWED	
IL196409 A1	20170430	LSFE	+KB	PATENT RENEWED	

IN00221CN2009 A	20090605	LSPB	+	published / reissued	
IN275729 B	20160923	LSGT	+	granted / extensions (spc, cpc, pte)	
IN275729 B	20290113	PEXP		Calculated Patent Term Expiry	
JP2010504280 T2	20100212	LSPB	+	published / reissued	
JP2010504280 T2	20100713	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20100712
JP2010504280 T2	20110713	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20110712
JP2010504280 T2	20111221	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20111220
JP2010504280 T2	20121023	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20121022
JP2010504280 T2	20130122	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20130121
JP2010504280 T2	20130612	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2010504280 T2	20130617	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20130614
JP2010504280 T2	20130718	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20130712
JP2010504280 T2	20130719	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP2010504908 T2	20100218	LSPB	+	published / reissued	
JP2010504908 T2	20100630	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20100629
JP2010504908 T2	20100630	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20100629
JP2010504908 T2	20120328	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20120327
JP2010504908 T2	20120911	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20120910
JP2010504908 T2	20130111	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20130110
JP2010504908 T2	20130402	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2010504908 T2	20130408	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20130405
JP2010504908 T2	20130509	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20130502
JP2010504908 T2	20130510	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150

JP5266219 B2	20130821	LSGT	+	granted / extensions (spc, cpc, pte)	
JP5266219 B2	20130411	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP5266219 B2	20130507	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP5266219 B2	20160428	LSFE	R20	特許料納付書 (Patent fee payment form)	
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US2008039504 AA	20080214	LSPB	+	published / reissued	
US2008039504 AA	20100303	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2010152186 AA	20100617	LSPB	+	published / reissued	
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US2010190762 AA	20100729	LSPB	+	published / reissued	
US2010190762 AA	20120321	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2012165303 AA	20120628	LSPB	+	published / reissued	

US2012165303 AA	20130619	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
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US7683176 BB	20071031	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CHEMOCENTRYX, INC.,CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:CHARVAT, TREVOR T.; HU, CHENG; JIN, JEFF; AND OTHERS; SIGNING DATES FROM 20070924 TO 20071003; REEL/FRAME:020040/0137
US7683176 BB	20100303	LSGT	PAT1	Patented Case	
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US7683176 BB	20170829	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 8
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US7718683 BB	20280118	PEXP		Calculated Patent Term Expiry (PTA 192 days)	
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US8153818 BB	20150924	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
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US8445518 BB	20310228	PEXP		Calculated Patent Term Expiry (PTA 374 days)	
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US8481579 BB	20320302	PEXP		Calculated Patent Term Expiry	
VN9516 A1	20110927	LSPB	+	published / reissued	
WO08008375 A2	20080117	LSPB	+	published / reissued	
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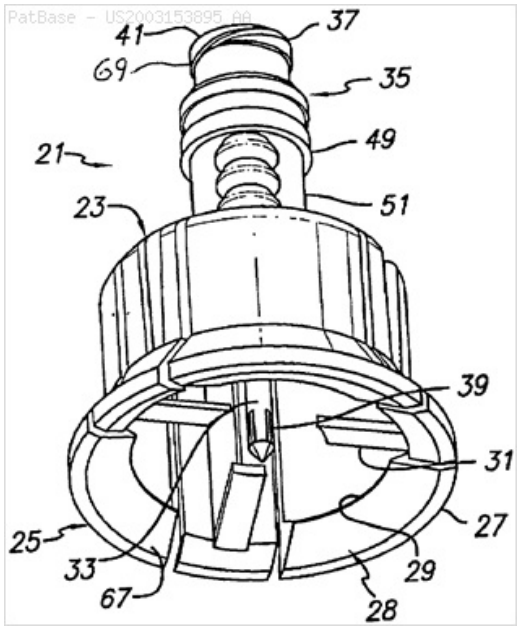
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WO08010934 A3	20090212	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2007275873 COUNTRY OF REF DOCUMENT : AU DATE OF REF DOCUMENT : 20070710 KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
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ZA200900281 A	20100224	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA200900281 A	20290112	PEXP		Calculated Patent Term Expiry	

65) Family number: 28928105 (US2003153895A)

Title: VIAL ADAPTER HAVING A NEEDLE-FREE VALVE FOR USE WITH VIAL CLOSURES OF DIFFERENT SIZES

Abstract: A vial adapter having a needle-free valve, a sharpened cannula used to perforate a vial's rubber stopper, and a circular array of claws of different lengths to engage vial closures of different diameters. The array of claws includes a first set of claws each having a first length extending inwardly from the periphery of the housing of the adapter and a second set of claws alternating with the first set of claws and each having a longer length. The second set of claws are mounted so that they deflect and plastically deform out of the way in the case where the adapter is engaged with a vial that exceeds a predetermined size. The housing includes a shroud that is at least as long as the sharpened cannula to protect **medical** personnel who use the adapter from inadvertent punctures. The needle-free valve includes a resiliently deformable piston element with a naturally open bore. The interior of the piston provides a fluid flow path through the adapter. In one embodiment, the first set of claws of the adapter may be used with a vial closure of at approximately 20 mm in diameter and the second set of claws may be used with a vial closure of approximately 13 to 17 mm in diameter.

Classifications:
International (IPC 8-9): A61J A61J1/00 A61J1/20 A61J3/00 A61M A61M39/00 A61M39/02 A61M39/10 A61M5/32 B01L3/00 B01L3/14 (Advanced/Invention);
A61M39/04 A61M39/26 (Advanced/Non-invention);
A61M39/00 A61M39/02 (Core/Non-invention);
A61J A61M (Subclass/Invention)
International (IPC 1-7): A61B19/00 A61J1/00 A61J1/20 A61M39/00 A61M39/02 A61M5/32 B01L3/14 B65D45/32 B65D75/00
CPC: Y10S206/828 Y10S215/03 Y10S604/905 A61J1/2089 A61J1/2096 A61M39/045 A61M39/10 A61M39/26 B01L3/50825 B01L2200/023 B01L2200/026 B01L2300/049 A61J1/201 A61J1/2044 A61J1/2055
European: A61J1/00M2 A61J1/20B A61M39/10 B01L3/50825 K61J1/00M6 K61J1/20A2A K61J1/20A4G K61J1/20A6B K61J1/20F K61M39/04B K61M39/26 L01L200/02B L01L200/02D L01L300/04B6
US: 206/828 215/272 215/DIG.3 604/403 604/403P 604/411 604/412 604/414 604/414P 604/905



Family:

Publication number	Publication date	Application number	Application date
AT359100 E	20070515	AT20030713385T	20030207
AT478649 E	20100915	AT20030007340T	20030207
AT539730 E	20120115	AT20030008236T	20030207
AU2003217342 AA	20030902	AU20030217342	20030207
AU2003217342 BB	20090618	AU20030217342	20030207
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US2005148994 AA	20050707	US20050061290	20050218
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US8177768 BB	20120515	US20050061290	20050218
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WO03066152 A3	20040318	WO2003US03684	20030207
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Priority:

US20020072052 20020208 EP20030713385 20030207 EP20070007340 20030207
EP20100008236 20030207 WO2003US03684 20030207 US20050061290 20050218
HK20050103941 20050510

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Assignee(s): (std): ALARIS MEDICAL SYST INC ; ALARIS MEDICAL SYSTEMS ; ALARIS MEDICAL SYSTEMS INC ; ALARY THERAPEUTICAL EQUIPMENT ; CARDINAL HEALTH 303 INC ; KARDINAL KHELS ZOZ INK ; CAREFUSION 303 INC ; LEINSING KARL R ; CARDINAL HEALTH 303

Assignee(s): CAREFUSION 303 INC SAN DIEGO ; ALARIS MEDICAL INC ; ALARY THERAPEUTICAL EQUIPMENT INC ; CITICORP NORTH AMERICA INC ; ALARIS MEDICAL SYSTEMS INC 10221 WATERIDGE CIRCLE BUILDING A SAN

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Inventor(s): K R LEINSNIN ; LEINSING KARL ; RUNK THOMAS A ; LEINSING KARL R HAMPTON

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Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PL PT RO RU SC SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT359100 E	20070515	LSGT	+	granted / extensions (spc, cpc, pte)	
AT359100 E	20071015	LSLE	-RER	CEASED AS TO PARAGRAPH 5 LIT. 3 LAW INTRODUCING PATENT TREATIES	
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AT478649 E	20110315	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	REF DOCUMENT NUMBER : 1797857 COUNTRY OF REF DOCUMENT : EP
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AT539730 E	20120115	LSGT	+	granted / extensions (spc, cpc, pte)	
AT539730 E	20230207	PEXP		Calculated Patent Term Expiry	
AU2003217342 AA	20030902	LSPB	+	published / reissued	
AU2003217342 AA	20040506	LSAS	PC1	ASSIGNMENT BEFORE GRANT (SECT. 113)	PARTYTYPE : OWNER OWNER : ALARIS MEDICAL SYSTEMS, INC. OLDPARTY : FORMER APPLICANT(S): ALARIS MEDICAL SYSTEMS, INC.

AU2003217342 AA	20060216	LSAS	TC	CHANGE OF APPLICANT'S NAME (SEC. 104)	PARTYTYPE : OWNER OWNER : CARDINAL HEALTH 303, INC OLDPARTY : FORMER NAME: ALARIS MEDICAL SYSTEMS, INC
AU2003217342 BB	20090618	LSGT	+	granted / extensions (spc, cpc, pte)	
AU2003217342 BB	20230207	PEXP		Calculated Patent Term Expiry	
AU2003217342 BH	20091015	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU2003217342 BH	20100211	LSRE	DA3	AMENDMENTS MADE SECTION 104	TEXT : THE NATURE OF THE AMENDMENT IS: AMEND THE PATENTEE NAME FROM CARDINAL HEALTH 303, INC. TO CAREFUSION 303, INC.
CA2442086 AA	20030923	LSPB	+	published / reissued	
CA2442086 AA	20030923	LSES	+EEER	EXAMINATION REQUEST	
CA2442086 C	20090929	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2442086 C	20230207	PEXP		Calculated Patent Term Expiry	
CN1294889 C	20070117	LSGT	+	granted / extensions (spc, cpc, pte)	
CN1294889 C	20070117	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN1294889 C	20100901	LSAS	C56	CHANGE IN THE NAME OR ADDRESS OF THE PATENTEE	
CN1294889 C	20100901	LSAS	C56	CHANGE IN THE NAME OR ADDRESS OF THE PATENTEE	PARTYTYPE : OWNER OWNER : CAREFUSION 303 CO.,LTD OLDPARTY : FORMER NAME: ALARIS MEDICAL SYST INC.
CN1294889 C	20230207	PEXP		Calculated Patent Term Expiry	
CN1507338 A	20040623	LSPB	+	published / reissued	
CN1507338 A	20040623	LSPB	+C06	PUBLICATION	
CY1111274 T1	20150805	LSGT	+	granted / extensions (spc, cpc, pte)	
DE60313129 D1	20080430	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE60313129 D1	20080430	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE60313129 D1	20110203	LSAS	8327	CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER	PARTYTYPE : OWNER OWNER : CAREFUSION 303, INC. (N.D.GES.D. STAATES DELAW, US
DE60313129 D1	20110203	LSAS	8327	CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER	PARTYTYPE : OWNER OWNER : CAREFUSION 303, INC. (N.D.GES.D. STAATES DELAW, US
DE60313129 T2	20080103	LSGT	+	granted / extensions (spc, cpc, pte)	
DE60313129 T2	20080430	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE60313129 T2	20110203	LSAS	8327	CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER	PARTYTYPE : OWNER OWNER : CAREFUSION 303, INC. (N.D.GES.D. STAATES DELAW, US
DE60313129 T2	20230207	PEXP		Calculated Patent Term Expiry	
DK1474201 T3	20070813	LSGT	+	granted / extensions (spc, cpc, pte)	
DK1474201 T3	20230207	PEXP		Calculated Patent Term Expiry	

DK1797857 T3	20101220	LSGT	+	granted / extensions (spc, cpc, pte)	
DK1797857 T3	20230207	PEXP		Calculated Patent Term Expiry	
EP1474201 A2	20041110	LSPB	+	published / reissued	
EP1474201 A2	20041110	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20031007
EP1474201 A2	20041222	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20041108
EP1474201 A2	20060412	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : CARDINAL HEALTH 303, INC.
EP1474201 A2	20160429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20160113 YEAR OF FEE PAYMENT : 14
EP1474201 A2	20160429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20160222 YEAR OF FEE PAYMENT : 14
EP1474201 A2	20160429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20160211 YEAR OF FEE PAYMENT : 14
EP1474201 A2	20160429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20160202 YEAR OF FEE PAYMENT : 14
EP1474201 A2	20160531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20160210 YEAR OF FEE PAYMENT : 14
EP1474201 A2	20160531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20160203 YEAR OF FEE PAYMENT : 14
EP1474201 A2	20160531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20160108 YEAR OF FEE PAYMENT : 14
EP1474201 B1	20070411	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1474201 B1	20070411	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20070411
EP1474201 B1	20070411	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP1474201 B1	20070430	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1474201 B1	20070516	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP1474201 B1	20071116	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2285106 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP1474201 B1	20071124	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM	COUNTRY OF REF DOCUMENT : AT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE

				NATIONAL OFFICE TO EPO]	DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20070411
EP1474201 B1	20080102	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20070411
EP1474201 B1	20080131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20070711
EP1474201 B1	20080229	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20070411
EP1474201 B1	20080319	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20080114
EP1474201 B1	20080430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20070712
EP1474201 B1	20081031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20080228
EP1474201 B1	20090130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20070411
EP1474201 B1	20090731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20070411
EP1474201 B1	20100215	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : CH OWNER : CAREFUSION 303, INC. REF LEGAL EVENT CODE : PFA OLDPARTY : CARDINAL HEALTH 303, INC.#10221 WATERIDGE CIRCLE BUILDING A#SAN DIEGO, CA 92121 (US) -TRANSFER TO- CAREFUSION 303, INC.#3750 TORREY VIEW COURT#SAN DIEGO, CA 92130 (US)
EP1474201 B1	20100528	LSAS	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : CD
EP1474201 B1	20100623	LSAS	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : TD

					EFFECTIVE DATE : 20100610
EP1474201 B1	20100730	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20071012
EP1474201 B1	20100730	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20080207
EP1474201 B1	20110531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20110114 YEAR OF FEE PAYMENT : 9
EP1474201 B1	20110923	LSWD	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HK REF LEGAL EVENT CODE : WD REF DOCUMENT NUMBER : 1072016 COUNTRY OF REF DOCUMENT : HK
EP1474201 B1	20120430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20120210 YEAR OF FEE PAYMENT : 10
EP1474201 B1	20120531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20120207 YEAR OF FEE PAYMENT : 10
EP1474201 B1	20120531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20120111 YEAR OF FEE PAYMENT : 10
EP1474201 B1	20120629	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20120210 YEAR OF FEE PAYMENT : 10
EP1474201 B1	20120629	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20120215 YEAR OF FEE PAYMENT : 10
EP1474201 B1	20120629	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20120213 YEAR OF FEE PAYMENT : 10
EP1474201 B1	20130814	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : PT REF LEGAL EVENT CODE : MM4A TEXT : LAPSE DUE TO NON-PAYMENT OF FEES EFFECTIVE DATE : 20130807
EP1474201 B1	20130923	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DK REF LEGAL EVENT CODE : EBP
EP1474201 B1	20131001	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SE REF LEGAL EVENT CODE : EUG
EP1474201 B1	20131031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20130207
EP1474201 B1	20131031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO	COUNTRY OF REF DOCUMENT : FI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20130207

				EPO]	
EP1474201 B1	20131031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20130208
EP1474201 B1	20131031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20130807
EP1474201 B1	20131204	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP1474201 B1	20131213	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : CH OWNER : CAREFUSION 303, INC., US REF LEGAL EVENT CODE : PFA OLDPARTY : FORMER OWNER: CAREFUSION 303, INC., US
EP1474201 B1	20140131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20130207
EP1474201 B1	20140131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20130228
EP1474201 B1	20140228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20130207
EP1474201 B1	20160108	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 14
EP1474201 B1	20170124	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 15
EP1474201 B1	20170331	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20170123 YEAR OF FEE PAYMENT : 15
EP1474201 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170124 YEAR OF FEE PAYMENT : 15
EP1474201 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20170125 YEAR OF FEE PAYMENT : 15
EP1474201 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170119 YEAR OF FEE PAYMENT : 15
EP1474201 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20170124 YEAR OF FEE PAYMENT : 15
EP1474201 B1	20170630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : ES

				[ANNOUNCED FROM NATIONAL OFFICE TO EPO]	PAYMENT DATE : 20170123 YEAR OF FEE PAYMENT : 15
EP1474201 B1	20170630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20170120 YEAR OF FEE PAYMENT : 15
EP1474201 B1	20180123	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 16
EP1474201 B1	20180330	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20180125 YEAR OF FEE PAYMENT : 16
EP1474201 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20180301 YEAR OF FEE PAYMENT : 16
EP1474201 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20180122 YEAR OF FEE PAYMENT : 16
EP1474201 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20180129 YEAR OF FEE PAYMENT : 16
EP1474201 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180122 YEAR OF FEE PAYMENT : 16
EP1474201 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20180123 YEAR OF FEE PAYMENT : 16
EP1474201 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20180122 YEAR OF FEE PAYMENT : 16
EP1474201 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20190125 YEAR OF FEE PAYMENT : 17
EP1474201 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20190128 YEAR OF FEE PAYMENT : 17
EP1474201 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20190122 YEAR OF FEE PAYMENT : 17
EP1474201 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20190122 YEAR OF FEE PAYMENT : 17
EP1474201 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20190125 YEAR OF FEE PAYMENT : 17
EP1474201 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20190123 YEAR OF FEE PAYMENT : 17
EP1474201 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20190301 YEAR OF FEE PAYMENT : 17
EP1474201 B1	20230207	PEXP		Calculated Patent Term Expiry	

EP1797857 A1	20070620	LSPB	+	published / reissued	
EP1797857 A1	20071212	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20071102
EP1797857 A1	20080116	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20071218
EP1797857 A1	20080227	LSFE	+AKX	DESIGNATION FEES PAID	COUNTRY OF REF DOCUMENT : AT COUNTRY OF REF DOCUMENT : BE COUNTRY OF REF DOCUMENT : BG COUNTRY OF REF DOCUMENT : CH COUNTRY OF REF DOCUMENT : CY COUNTRY OF REF DOCUMENT : CZ COUNTRY OF REF DOCUMENT : DE COUNTRY OF REF DOCUMENT : DK COUNTRY OF REF DOCUMENT : EE COUNTRY OF REF DOCUMENT : ES COUNTRY OF REF DOCUMENT : FI COUNTRY OF REF DOCUMENT : FR COUNTRY OF REF DOCUMENT : GB COUNTRY OF REF DOCUMENT : GR COUNTRY OF REF DOCUMENT : HU COUNTRY OF REF DOCUMENT : IE COUNTRY OF REF DOCUMENT : IT COUNTRY OF REF DOCUMENT : LI COUNTRY OF REF DOCUMENT : LU COUNTRY OF REF DOCUMENT : MC COUNTRY OF REF DOCUMENT : NL COUNTRY OF REF DOCUMENT : PT COUNTRY OF REF DOCUMENT : SE COUNTRY OF REF DOCUMENT : SI COUNTRY OF REF DOCUMENT : SK COUNTRY OF REF DOCUMENT : TR
EP1797857 A1	20100324	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : CAREFUSION 303, INC.
EP1797857 A1	20160429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20160202 YEAR OF FEE PAYMENT : 14
EP1797857 A1	20160429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20160222 YEAR OF FEE PAYMENT : 14
EP1797857 A1	20160429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20160211 YEAR OF FEE PAYMENT : 14
EP1797857 A1	20160429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20160113 YEAR OF FEE PAYMENT : 14
EP1797857 A1	20160531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20160210 YEAR OF FEE PAYMENT : 14
EP1797857 A1	20160531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20160203 YEAR OF FEE PAYMENT : 14
EP1797857 A1	20160531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20160108 YEAR OF FEE PAYMENT : 14
EP1797857 B1	20100825	LSGT	+	granted / extensions	

				(spc, cpc, pte)	
EP1797857 B1	20100825	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP1797857 B1	20100831	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1797857 B1	20100915	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP1797857 B1	20101208	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : T3
EP1797857 B1	20101221	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : EP REF DOCUMENT NUMBER : 20100402727 COUNTRY OF REF DOCUMENT : GR
EP1797857 B1	20110228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20101125
EP1797857 B1	20110228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20100825
EP1797857 B1	20110428	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HU REF LEGAL EVENT CODE : AG4A REF DOCUMENT NUMBER : E009777 COUNTRY OF REF DOCUMENT : HU
EP1797857 B1	20110506	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HK REF LEGAL EVENT CODE : GR REF DOCUMENT NUMBER : 1105549 COUNTRY OF REF DOCUMENT : HK
EP1797857 B1	20110520	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2359339 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) : EFFECTIVE DATE : 20110520
EP1797857 B1	20110531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20100825
EP1797857 B1	20110531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20100825
EP1797857 B1	20110531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT	COUNTRY OF REF DOCUMENT : EE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE

				INFORMATION FROM NATIONAL OFFICE TO EPO]	DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20100825
EP1797857 B1	20110803	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20110526
EP1797857 B1	20110915	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 60333956 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20110526
EP1797857 B1	20120330	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20120216 YEAR OF FEE PAYMENT : 10
EP1797857 B1	20120430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20120210 YEAR OF FEE PAYMENT : 10
EP1797857 B1	20120430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20120130 YEAR OF FEE PAYMENT : 10
EP1797857 B1	20120430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20120113 YEAR OF FEE PAYMENT : 10
EP1797857 B1	20120531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20120112 YEAR OF FEE PAYMENT : 10
EP1797857 B1	20120531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20120207 YEAR OF FEE PAYMENT : 10
EP1797857 B1	20120629	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20120214 YEAR OF FEE PAYMENT : 10
EP1797857 B1	20120629	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20120113 YEAR OF FEE PAYMENT : 10
EP1797857 B1	20120629	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20120210 YEAR OF FEE PAYMENT : 10
EP1797857 B1	20120629	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20120213 YEAR OF FEE PAYMENT : 10
EP1797857 B1	20120928	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY PAYMENT DATE : 20120123 YEAR OF FEE PAYMENT : 10
EP1797857 B1	20130329	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20120126 YEAR OF FEE PAYMENT : 10
EP1797857 B1	20130430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20130212 YEAR OF FEE PAYMENT : 11
EP1797857 B1	20130814	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : PT REF LEGAL EVENT CODE : MM4A TEXT : LAPSE DUE TO NON-PAYMENT OF FEES EFFECTIVE DATE : 20130807

EP1797857 B1	20130831	LSLE	-BERE	BE: LAPSED	PARTYTYPE : OWNER REF COUNTRY CODE : EP OWNER : CAREFUSION 303, INC. EFFECTIVE DATE : 20130228
EP1797857 B1	20130923	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DK REF LEGAL EVENT CODE : EBP
EP1797857 B1	20130930	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20130228
EP1797857 B1	20131015	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MM01 REF DOCUMENT NUMBER : 478649 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20130228
EP1797857 B1	20131017	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : ML REF DOCUMENT NUMBER : 20100402727 COUNTRY OF REF DOCUMENT : GR EFFECTIVE DATE : 20130904
EP1797857 B1	20131031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20130208
EP1797857 B1	20131031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20130207
EP1797857 B1	20131031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20130807
EP1797857 B1	20131031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20130228
EP1797857 B1	20131031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20130904
EP1797857 B1	20131129	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20130207
EP1797857 B1	20131204	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP1797857 B1	20140131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20130228
EP1797857 B1	20140131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONOFLAPSE : LAPSE

				[ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20130207
EP1797857 B1	20140131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20130228
EP1797857 B1	20140930	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SE REF LEGAL EVENT CODE : EUG
EP1797857 B1	20141128	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20140208
EP1797857 B1	20150731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20130207
EP1797857 B1	20150930	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20130207
EP1797857 B1	20160108	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 14
EP1797857 B1	20170124	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 15
EP1797857 B1	20170228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20110207
EP1797857 B1	20170331	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20170123 YEAR OF FEE PAYMENT : 15
EP1797857 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20170125 YEAR OF FEE PAYMENT : 15
EP1797857 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170119 YEAR OF FEE PAYMENT : 15
EP1797857 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170124 YEAR OF FEE PAYMENT : 15
EP1797857 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20170124 YEAR OF FEE PAYMENT : 15
EP1797857 B1	20170630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20170120 YEAR OF FEE PAYMENT : 15
EP1797857 B1	20170630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : ES

				[ANNOUNCED FROM NATIONAL OFFICE TO EPO]	PAYMENT DATE : 20170123 YEAR OF FEE PAYMENT : 15
EP1797857 B1	20180123	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 16
EP1797857 B1	20180330	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20180125 YEAR OF FEE PAYMENT : 16
EP1797857 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20180129 YEAR OF FEE PAYMENT : 16
EP1797857 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20180122 YEAR OF FEE PAYMENT : 16
EP1797857 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20180301 YEAR OF FEE PAYMENT : 16
EP1797857 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180122 YEAR OF FEE PAYMENT : 16
EP1797857 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20180122 YEAR OF FEE PAYMENT : 16
EP1797857 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20180123 YEAR OF FEE PAYMENT : 16
EP1797857 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20190125 YEAR OF FEE PAYMENT : 17
EP1797857 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20190122 YEAR OF FEE PAYMENT : 17
EP1797857 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20190125 YEAR OF FEE PAYMENT : 17
EP1797857 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20190123 YEAR OF FEE PAYMENT : 17
EP1797857 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20190301 YEAR OF FEE PAYMENT : 17
EP1797857 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20190128 YEAR OF FEE PAYMENT : 17
EP1797857 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20190122 YEAR OF FEE PAYMENT : 17
EP1797857 B1	20230207	PEXP		Calculated Patent Term Expiry	
EP2255773 A1	20101201	LSPB	+	published / reissued	
EP2255773 A1	20101201	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20100901

EP2255773 A1	20160429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20160202 YEAR OF FEE PAYMENT : 14
EP2255773 A1	20160429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20160211 YEAR OF FEE PAYMENT : 14
EP2255773 A1	20160429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20160222 YEAR OF FEE PAYMENT : 14
EP2255773 A1	20160429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20160113 YEAR OF FEE PAYMENT : 14
EP2255773 A1	20160531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20160203 YEAR OF FEE PAYMENT : 14
EP2255773 A1	20160531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20160108 YEAR OF FEE PAYMENT : 14
EP2255773 A1	20160531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20160210 YEAR OF FEE PAYMENT : 14
EP2255773 B1	20120104	LSGT	+	granted / extensions (spc, cpc, pte)	
EP2255773 B1	20120104	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP2255773 B1	20120113	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP2255773 B1	20120115	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 539730 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20120115
EP2255773 B1	20120201	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP2255773 B1	20120308	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 60339641 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20120308
EP2255773 B1	20120314	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : T3
EP2255773 B1	20120503	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2379787 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) : EFFECTIVE DATE : 20120503
EP2255773 B1	20120531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20120104

EP2255773 B1	20120731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20120104
EP2255773 B1	20120731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20120404
EP2255773 B1	20120831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20120104
EP2255773 B1	20120831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20120504
EP2255773 B1	20120831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20120405
EP2255773 B1	20120915	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MK05 REF DOCUMENT NUMBER : 539730 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20120104
EP2255773 B1	20120928	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120229
EP2255773 B1	20120928	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20120104
EP2255773 B1	20121031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20120104
EP2255773 B1	20121031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM	COUNTRY OF REF DOCUMENT : CZ NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE

				NATIONAL OFFICE TO EPO]	DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20120104
EP2255773 B1	20121031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20120104
EP2255773 B1	20121031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20120104
EP2255773 B1	20121121	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP2255773 B1	20121130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20120104
EP2255773 B1	20121212	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20121005
EP2255773 B1	20130131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20120104
EP2255773 B1	20130131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120207
EP2255773 B1	20130131	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 60339641 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20121005
EP2255773 B1	20140430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20120104
EP2255773 B1	20140530	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120207
EP2255773 B1	20140731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20030207

EP2255773 B1	20160108	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 14
EP2255773 B1	20170124	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 15
EP2255773 B1	20170331	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20170123 YEAR OF FEE PAYMENT : 15
EP2255773 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20170125 YEAR OF FEE PAYMENT : 15
EP2255773 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170119 YEAR OF FEE PAYMENT : 15
EP2255773 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170124 YEAR OF FEE PAYMENT : 15
EP2255773 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20170124 YEAR OF FEE PAYMENT : 15
EP2255773 B1	20170630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20170120 YEAR OF FEE PAYMENT : 15
EP2255773 B1	20170630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20170123 YEAR OF FEE PAYMENT : 15
EP2255773 B1	20170901	LSWD	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HK REF LEGAL EVENT CODE : WD REF DOCUMENT NUMBER : 1148451 COUNTRY OF REF DOCUMENT : HK
EP2255773 B1	20180123	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 16
EP2255773 B1	20180330	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20180125 YEAR OF FEE PAYMENT : 16
EP2255773 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20180129 YEAR OF FEE PAYMENT : 16
EP2255773 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20180122 YEAR OF FEE PAYMENT : 16
EP2255773 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180122 YEAR OF FEE PAYMENT : 16
EP2255773 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20180301 YEAR OF FEE PAYMENT : 16

EP2255773 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20180123 YEAR OF FEE PAYMENT : 16
EP2255773 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20180122 YEAR OF FEE PAYMENT : 16
EP2255773 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20190123 YEAR OF FEE PAYMENT : 17
EP2255773 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20190301 YEAR OF FEE PAYMENT : 17
EP2255773 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20190125 YEAR OF FEE PAYMENT : 17
EP2255773 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20190125 YEAR OF FEE PAYMENT : 17
EP2255773 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20190122 YEAR OF FEE PAYMENT : 17
EP2255773 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20190128 YEAR OF FEE PAYMENT : 17
EP2255773 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20190122 YEAR OF FEE PAYMENT : 17
EP2255773 B1	20230207	PEXP		Calculated Patent Term Expiry	
ES2285106 T3	20071116	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2285106 T3	20230207	PEXP		Calculated Patent Term Expiry	
ES2359339 T3	20110520	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2359339 T3	20230207	PEXP		Calculated Patent Term Expiry	
ES2379787 T3	20120503	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2379787 T3	20230207	PEXP		Calculated Patent Term Expiry	
HK1072016 A1	20050812	LSPB	+	published / reissued	
HK1072016 A3	20050812	LSPB	+	published / reissued	
HK1105549 A1	20110506	LSPB	+	published / reissued	
HK1105549 A1	20150904	LSLE	-PC	PATENT CEASED (I.E. PATENT HAS LAPSED DUE TO THE FAILURE TO PAY THE RENEWAL FEE)	EFFECTIVE DATE : 20150207
HK1105549 A1	20250510	PEXP		Calculated Patent Term Expiry	
HK1105549 A3	20080320	LSPB	+	published / reissued	
HK1148451 A1	20110909	LSPB	+	published / reissued	
IL158229 A1	20080605	LSPB	+	published / reissued	
IL158229 A1	20090211	LSGT	+FF	PATENT GRANTED	
IL158229 A1	20090615	LSFE	+KB	PATENT RENEWED	
IL158229 A1	20090831	LSFE	+KB	PATENT RENEWED	

IL158229 A1	20100414	LSGT	+FF	PATENT GRANTED	
IL158229 A1	20130203	LSFE	+KB	PATENT RENEWED	
IL158229 A1	20170131	LSFE	+KB	PATENT RENEWED	
JP2005516696 T2	20050609	LSPB	+	published / reissued	
JP2005516696 T2	20051008	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20051007
JP2005516696 T2	20081110	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20081107
JP2005516696 T2	20090225	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20090224
JP2005516696 T2	20090624	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20090623
JP2005516696 T2	20090925	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20090924
JP2005516696 T2	20100331	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2005516696 T2	20100405	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20100402
JP2005516696 T2	20100408	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01
JP2005516696 T2	20100510	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20100428
JP2005516696 T2	20100514	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP2005516696 T2	20100514	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP4509569 B2	20100721	LSGT	+	granted / extensions (spc, cpc, pte)	
JP4509569 B2	20100430	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP4509569 B2	20130502	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP4509569 B2	20130514	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4509569 B2	20140501	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4509569 B2	20140507	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4509569 B2	20150430	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4509569 B2	20150512	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4509569 B2	20160506	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4509569 B2	20160510	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4509569 B2	20170508	LSFE	R20	特許料納付書 (Patent fee	

				payment form)	
JP4509569 B2	20170516	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4509569 B2	20180507	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4509569 B2	20180515	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4509569 B2	20190509	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4509569 B2	20190514	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4509569 B2	20230207	PEXP		Calculated Patent Term Expiry	
NO20034479 A	20031118	LSPB	+	published / reissued	
NO20034479 A	20130923	LSRV	-FC2A	WITHDRAWAL, REJECTION OR DISMISSAL OF LAID OPEN PATENT APPLICATION	
NZ528751 A	20060630	LSPB	+	published / reissued	
NZ528751 A	20040730	LSAS	ASS	CHANGE OF OWNERSHIP	PARTYTYPE : OWNER OWNER : ALARIS MEDICAL, INC, US OLDPARTY : OLD OWNER(S): ALARIS MEDICAL SYSTEMS, INC.
NZ528751 A	20060224	LSAS	ASS	CHANGE OF OWNERSHIP	PARTYTYPE : OWNER OWNER : CARDINAL HEALTH 303, INC., US OLDPARTY : OLD OWNER(S): ALARIS MEDICAL SYSTEMS, INC.
NZ528751 A	20061027	LSGT	+PSEA	PATENT SEALED	
NZ528751 A	20070223	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	
NZ528751 A	20100226	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	
NZ528751 A	20130830	LSLE	-LAPS	PATENT LAPSED	
PL204682 B1	20100129	LSGT	+	granted / extensions (spc, cpc, pte)	
PL373558 A1	20050905	LSPB	+	published / reissued	
PT1474201 T	20070622	LSGT	+	granted / extensions (spc, cpc, pte)	
PT1474201 T	20230207	PEXP		Calculated Patent Term Expiry	
PT1797857 T	20101130	LSGT	+	granted / extensions (spc, cpc, pte)	
PT1797857 T	20230207	PEXP		Calculated Patent Term Expiry	
RU2003130956 A	20050320	LSPB	+	published / reissued	
RU2312683 C2	20071220	LSGT	+	granted / extensions (spc, cpc, pte)	
RU2312683 C2	20100320	LSAS	PD4A	CORRECTION OF NAME OF PATENT OWNER	
RU2312683 C2	20230207	PEXP		Calculated Patent Term Expiry	
US2003153895 AA	20030814	LSPB	+	published / reissued	
US2003153895 AA	20040827	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ALARIS MEDICAL SYSTEMS, INC., CALIFORNIA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:CITICORP NORTH AMERICA, INC.; REEL/FRAME:015736/0573 EFFECTIVE DATE : 20040707
US2003153895 AA	20050316	LSGT	PAT1	Patented Case	
US2003153895 AA	20050316	LSGT	STCF	INFORMATION ON STATUS: PATENT	TEXT : PATENTED CASE

				GRANT	
US2005148994 AA	20050707	LSPB	+	published / reissued	
US2005148994 AA	20060126	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDINAL HEALTH 303, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:ALARIS MEDICAL SYSTEMS, INC.; REEL/FRAME:017071/0026 EFFECTIVE DATE : 20041013
US2005148994 AA	20100104	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CAREFUSION 303, INC.,CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:CARDINAL HEALTH 303, INC.; REEL/FRAME:023730/0406 EFFECTIVE DATE : 20090729
US2005148994 AA	20100104	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CAREFUSION 303, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:CARDINAL HEALTH 303, INC.; REEL/FRAME:023730/0406 EFFECTIVE DATE : 20090729
US2005148994 AA	20100118	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CAREFUSION 303, INC.,CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:CARDINAL HEALTH 303, INC.; REEL/FRAME:023800/0598 EFFECTIVE DATE : 20090801
US2005148994 AA	20100118	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CAREFUSION 303, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:CARDINAL HEALTH 303, INC.; REEL/FRAME:023800/0598 EFFECTIVE DATE : 20090801
US2005148994 AA	20120425	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US6875205 BB	20050405	LSGT	+	granted / extensions (spc, cpc, pte)	
US6875205 BB	20020502	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ALARIS MEDICAL SYSTEMS, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:LEINSING, KARL R.; REEL/FRAME:012857/0070 EFFECTIVE DATE : 20020411
US6875205 BB	20030702	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ALARIS MEDICAL INC., CALIFORNIA OLDPARTY : MERGER; ASSIGNOR:ALARIS MEDICAL SYSTEMS INC.; REEL/FRAME:014229/0718 EFFECTIVE DATE : 20030630
US6875205 BB	20030702	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ALARIS MEDICAL SYSTEMS, INC., CALIFORNIA OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:HSBC BANK USA; REEL/FRAME:014231/0582 EFFECTIVE DATE : 20030630
US6875205 BB	20030702	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ALARIS MEDICAL SYSTEMS, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:ALARIS MEDICAL INC.; REEL/FRAME:014234/0887 EFFECTIVE DATE : 20030630
US6875205 BB	20030702	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CITICORP NORTH

					AMERICA, INC., NEW YORK OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:ALARIS MEDICAL SYSTEMS, INC.; REEL/FRAME:014236/0724 EFFECTIVE DATE : 20030630
US6875205 BB	20050927	LSRE	CC	CERTIFICATE OF CORRECTION	
US6875205 BB	20060118	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CARDINAL HEALTH 303, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:ALARIS MEDICAL SYSTEMS, INC.; REEL/FRAME:017025/0575 EFFECTIVE DATE : 20041013
US6875205 BB	20081006	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6875205 BB	20100118	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CAREFUSION 303, INC.,CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:CARDINAL HEALTH 303, INC.; REEL/FRAME:023800/0598 EFFECTIVE DATE : 20090801
US6875205 BB	20100118	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CAREFUSION 303, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:CARDINAL HEALTH 303, INC.; REEL/FRAME:023800/0598 EFFECTIVE DATE : 20090801
US6875205 BB	20120905	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US6875205 BB	20160928	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US6875205 BB	20230115	PEXP		Calculated Patent Term Expiry (PTA 341 days)	
US8177768 BB	20120515	LSGT	+	granted / extensions (spc, cpc, pte)	
US8177768 BB	20120425	LSGT	PAT1	Patented Case	
US8177768 BB	20151028	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8177768 BB	20300227	PEXP		Calculated Patent Term Expiry (PTA 1835 days)	
WO03066152 A2	20030814	LSPB	+	published / reissued	
WO03066152 A2	20030923	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2442086 COUNTRY OF REF DOCUMENT : CA
WO03066152 A2	20030924	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2003217342 COUNTRY OF REF DOCUMENT : AU
WO03066152 A2	20030930	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 200307614 COUNTRY OF REF DOCUMENT : ZA
WO03066152 A2	20031002	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 158229 COUNTRY OF REF DOCUMENT : IL
WO03066152 A2	20031007	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2003713385 COUNTRY OF REF DOCUMENT : EP
WO03066152 A2	20031008	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 528751 COUNTRY OF REF DOCUMENT : NZ
WO03066152 A2	20031030	LSNP	+WWE	WIPO INFORMATION:	REF DOCUMENT NUMBER :

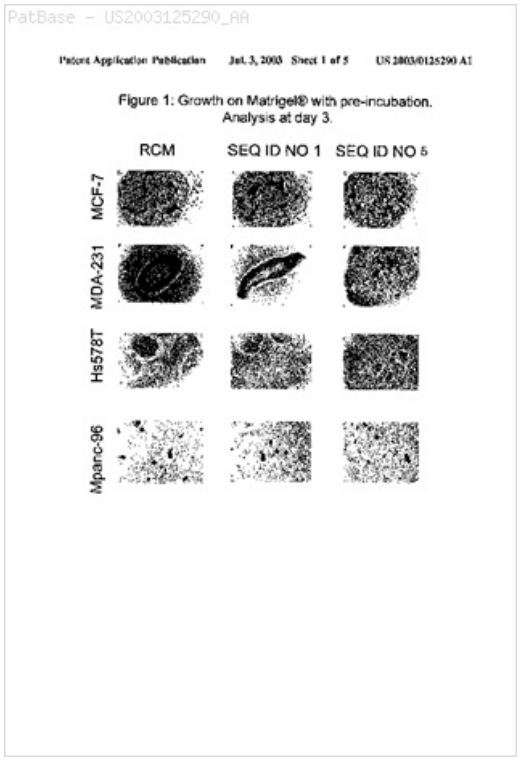
				ENTRY INTO NATIONAL PHASE	373558 COUNTRY OF REF DOCUMENT : PL
WO03066152 A2	20031106	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 038002272 COUNTRY OF REF DOCUMENT : CN
WO03066152 A2	20031201	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2003565573 COUNTRY OF REF DOCUMENT : JP
WO03066152 A3	20041110	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2003713385 COUNTRY OF REF DOCUMENT : EP
WO03066152 A3	20070411	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2003713385 COUNTRY OF REF DOCUMENT : EP
ZA200307614 A	20040330	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA200307614 A	20230929	PEXP		Calculated Patent Term Expiry	

66) Family number: 28448105 (US2003125290A)

Title: THERAPEUTICALLY USEFUL TRIETHYLENEGLYCOL CHOLESTERYL OLIGONUCLEOTIDES

Abstract: The present invention provides a composition comprising a 5'-OH, 3'-TEG cholesteryl synthetic sequence wherein the sequence is SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8. The present invention provides methods of using this composition for induction of response in a cell, including but not limited to inhibition of cellular proliferation, induction of cell cycle arrest, induction of caspase activation, cleavage of poly(ADP-ribose) polymerase, induction of apoptosis or modulation of extracellular matrix-cell interactions, or combinations thereof, in cancer cells or synovial cells, and methods of using this composition for treating disease.

Classifications:
International (IPC 8-9): A01N43/04 A61K A61K31/7088 A61K45/00 A61K47/48 A61K48/00 A61P A61P19/02 A61P35/00 A61P35/02 A61P43/00 C07H C07H21/00 C07H21/04 C12N15/11 C12N15/117 (Advanced/Invention);
A61K31/7088 A61K47/48 A61P35/00 C07H21/04 (Advanced/Non-invention);
A61K31/00 A61K47/00 A61P19/00 A61P35/00 C07H21/00 (Core/Invention)
International (IPC 1-7): 31/7088 A61K31/7088 A61K45/00 A61K47/48 A61K48/00 A61P19/02 A61P35/00 A61P35/02 A61P43/00 C07H21/04
CPC: A61K47/547 A61K47/555 A61K47/60 C12N15/117 C07H21/00 C12N2310/18 C12N2310/3515 C07H21/04 A61K31/7088 A61K47/50
European: A61K47/48H4 A61K47/48H4K A61K47/48H4S A61K47/48K6P C07H21/00 C12N15/117 M12N310/18 M12N310/3515
US: 514/44 514/44.00R 514/44.00RP 514/44R 536/23.2 536/23.200S 536/23.5 600/1 600/1S



Family:

Publication number	Publication date	Application number	Application date
AT314096 E	20060115	AT20020775055T	20021003
AU2002341264 AA	20030414	AU20020341264	20021003
AU2002341264 BB	20070712	AU20020341264	20021003
CA2462425 AA	20040402	CA20022462425	20021003
CN100352510 C	20071205	CN20028024191	20021003
CN1599627 A	20050323	CN20028024191	20021003
DE60208400 D1	20060202	DE20026008400T	20021003
DE60208400 D1	20060202	DE20026008400	20021003
DE60208400 T2	20060706	DE20026008400T	20021003
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EP1432450 B1	20051228	EP20020775055	20021003
ES2250713 T3	20060416	ES20020775055T	20021003
HK1067308 A1	20060623	HK20040110291	20041229
HK1067308 A1	20050408	HK20040110291	20041229
HK1067308 A3	20050408	HK20040110291	20041229
HK1067308 B	20060623	HK20040110291	20041229
IL161181 A0	20040831	IL20020161181	20021003
IL161181 A1	20100630	IL20020161181	20021003
IN00350KN2004 A	20060407	IN2004KN00350	20040315
IN226189 B	20081212	IN2004KN00350	20040315
JP2005509607 T2	20050414	JP20030532094T	20021003
JP4405259 B2	20100127	JP20030532094T	20021003
KR100971571 B1	20100720	KR20047004837	20021003
KR20040068114 A	20040730	KR20047004837	20021003
MXPA04002530 A1	20040531	MX2004PA02530	20021003
PT1432450 T	20060531	PT20020775055T	20021003
SI1432450 T1	20060430	SI20020030269T	20021003
US2003125290 AA	20030703	US20020264280	20021003
US7635686 BB	20091222	US20020264280	20021003
WO03028764 A1	20030410	WO2002IB04065	20021003

Priority:

US20010326884P 20011003 EP20020775055 20021003 US20020264280 20021003
WO2002IB04065 20021003

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Assignee(s): (std): BIONICHE LIFE SCIENCES INC ; FILION MARIO C ; PHILLIPS NIGEL C ; HERRERA GAYOL ANDREA CRISTINA ; HERRERA GAYOL ANDREA C

Assignee(s): BIONICHE LIFE SCIENCES INC BELLEVILLE ; BIONICHE LIFE SCIENCES INC ; HERRERA GAYOL ANDREA CRISTINA ; BIONICHE LIFE SCIENCES INC 231 DUNDAS STREET E BELLEVILLE ONTARIO

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Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT314096 E	20060115	LSGT	+	granted / extensions (spc, cpc, pte)	
AT314096 E	20070115	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	REF DOCUMENT NUMBER : 1432450 COUNTRY OF REF DOCUMENT : EP
AT314096 E	20221003	PEXP		Calculated Patent Term Expiry	
AU2002341264 AA	20030414	LSPB	+	published / reissued	
AU2002341264 BB	20070712	LSGT	+	granted / extensions (spc, cpc, pte)	
AU2002341264 BB	20040617	LSAS	PC1	ASSIGNMENT BEFORE GRANT (SECT. 113)	PARTYTYPE : OWNER OWNER : BIONICHE LIFE SCIENCES INC. OLDPARTY : FORMER APPLICANT(S): BIONICHE LIFE SCIENCES INC.; HERRERA-GAYOL, ANDREA CRISTINA
AU2002341264 BB	20071108	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
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AU2002341264 BB	20221003	PEXP		Calculated Patent Term Expiry	
CA2462425 AA	20040402	LSPB	+	published / reissued	
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DK1432450 T3	20060515	LSGT	+	granted / extensions (spc, cpc, pte)	
DK1432450 T3	20221003	PEXP		Calculated Patent Term Expiry	
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HK1067308 A1	20050408	LSPB	+	published / reissued	
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KR100971571 B1	20071002	LSES	A201	REQUEST FOR EXAMINATION	
KR100971571 B1	20090813	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
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US7635686 BB	20100713	LSRE	CC	CERTIFICATE OF CORRECTION	
US7635686 BB	20101221	LSRE	CC	CERTIFICATE OF CORRECTION	
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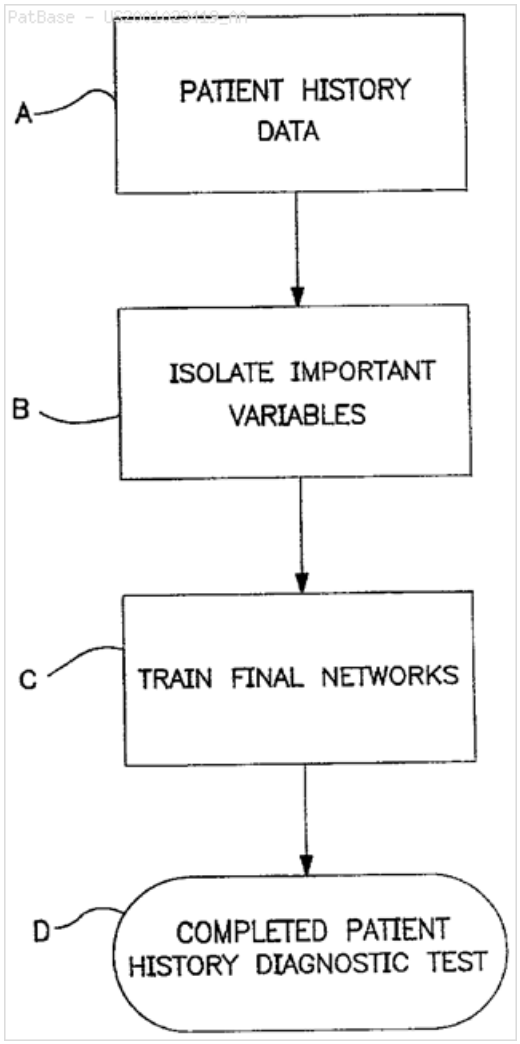
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67) Family number: 29586106 (US2001023419A)

Title: METHOD FOR SELECTING **MEDICAL** AND BIOCHEMICAL DIAGNOSTIC TESTS USING NEURAL NETWORK-RELATED APPLICATIONS

Abstract: Methods are provided for developing **medical** diagnostic tests using decision-support systems, such as neural networks. Patient data or information, typically patient history or clinical data, are analyzed by the decision-support systems to identify important or relevant variables and decision-support systems are trained on the patient data. Patient data are augmented by biochemical test data, or results, where available, to refine performance. The resulting decision-support systems are employed to evaluate specific observation values and test results, to guide the development of biochemical or other diagnostic tests, too assess a course of treatment, to identify new diagnostic tests and disease markers, to identify useful therapies, and to provide the decision-support functionality for the test. Methods for identification of important input variables for a **medical** diagnostic tests for use in training the decision-support systems to guide the development of the tests, for improving the sensitivity and specificity of such tests, and for selecting diagnostic tests that improve overall diagnosis of, or potential for, a disease state and that permit the effectiveness of a selected therapeutic protocol to be assessed are provided. The methods for identification can be applied in any field in which statistics are used to determine outcomes. A method for evaluating the effectiveness of any given diagnostic test is also provided.

Classifications:
International (IPC 8-9): A61B10/00 A61B5/00 A61K A61K31/16 A61K31/21 A61K31/52 A61K31/522 A61K31/5377 A61K31/695 A61K31/77 A61K45/00 A61P1/00 A61P1/02 A61P1/04 A61P11/06 A61P17/06 A61P29/00 A61P31/00 A61P31/04 A61P35/00 A61P37/00 A61P37/02 A61P43/00 A61P7/00 A61P9/00 C07D C07D473/02 C07D473/04 C07D473/06 C07D473/08 C07D473/22 G01N33/48 G06F15/18 G06F19/00 G06N3/00 G06N3/02 G06N3/04 G06N3/08 G06N5/00 G06N5/04 G06Q50/00 (Advanced/Invention);
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A61K31/519 C07D473/00 (Core/Invention)
International (IPC 1-7): A61B10/00 A61B5/00 A61K31/16 A61K31/21 A61K31/52 A61K31/522 A61K31/5377 A61K31/541 A61K31/695 A61K31/77 A61K45/00 A61K7/16 A61K7/22 A61P1/00 A61P1/02 A61P1/04 A61P11/06 A61P17/06 A61P29/00 A61P31/00 A61P31/04 A61P35/00 A61P37/00 A61P37/02 A61P43/00 A61P9/00 C07D473/02 C07D473/04 C07D473/06 C07D473/08 C07D473/22 C07D473/26 C07M9/00 G01N33/48 G06E1/00 G06F15/18 G06F15/80 G06F159/00 G06F17/60 G06F19/00 G06G7/00 G06N3/00 G06N3/02 G06N3/04 G06N3/08 G06N5/04
CPC: C07D473/06 G16H15/00 G16H10/20 G16H10/60 G16H50/20 G16H50/70
European: C07D473/06 G06F19/00A2 G06F19/34K G06F19/34P S06F19/32C S06F19/34J S06F19/34K S06F19/34P S06F19/36A
US: 424/49 424/54 514/228.5 514/228.500P 514/234.5 514/234.500S 514/252.16 514/252.160S 514/263.2 514/263.200S 514/263.22 514/263.23 514/263.34 514/263.35 514/263.36 514/263.4 544/118 544/118S 544/267 544/267S 544/269 544/269P 544/269S 544/270 544/271 544/272 544/6 544/60 544/60S 702/121 702/123 702/82 706/15 706/15P 706/20 706/20P 706/21 706/23 706/45 706/924 706/924S



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Publication number	Publication date	Application number	Application date
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DE69914921 D1	20040325	DE19996014921	19990811
DE69914921 T2	20041223	DE19996014921T	19990811
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Priority:

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Probable Assignee: CYTYC CORP

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Inventor(s): (std): DALUGE SUSAN MARY ; JURGENSEN CYNTHIA HOLDER ; MARTIN MICHAEL TOLAR ; OSTERHOUT MARTIN HOWARD ; OSTEHOUT MARTIN HOWARD ; LAPOINTE JEROME ; DESIENO DUANE D ; DESIENO DUANE ; DALUCE SUSAN M ; JURGENSEN CYNTHIA ; JURGENSEN SYNTHIA HOLDER ; DALUGE S M ; JURGENSEN C H ; MARTIN M T ; DARUGEH S M ; YERGENSEN C H ; MICHAEL TOLAR MARTIN ; CYNTHIA HOLDER JURGENSEN ; SUSAN MARY DALUGE ; MARTIN HOWARD OSTERHOUT ; MARTIN S M DARUGEH C H YERGENS ; DUANE D DESIENO ; JEROME LAPOINTE ; CH YERGENSEN ; SUSAN M DALUCE ; SM DARUGEH ; SM DALUGE ; MT MARTIN ; CH JURGENSEN ; MARTIN MICHAEL ; JURGENSEN CINDY HOLDER ; HOLDER JURGENSEN CYNTHIA ; OSTERHOUT INC

Inventor(s): CINDY HOLDER JURGENSEN ; MARTIN MICHAEL T ; DALUGE SUSAN M ; JURGENSEN CINDY H ; C H JURGENSEN ; S M DALUGE ; M T MARTIN ; S M DARUGEH ; C H YERGENSEN ; SM DARUGEH CH YERGENSEN MT MARTIN ; S M DARUGEH C H YERGENSEN M T MARTIN

Agent(s): SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD; DAVIES COLLISON CAVE PTY LTD; DAVIES COLLISON CAVE; SMART AND BIGGAR; OGILVY RENAULT LLP SENCRL SRL; SARGENT; JOSE ANTONIO LLOREDA; CHINA PATENT AGENT HK LTD 22 F GREAT EAGLE CENTRE 23 HARBOUR ROAD WANCHAI; FISH AND RICHARDSON PC; STEPHANIE

Designated states: AE AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CR CU CY CZ DE DK DM EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT UA UG US UZ VN YU ZA ZW

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
AP1408 A	20050506	LSGT	+	granted / extensions (spc, cpc, pte)	
AP1408 A	20190811	PEXP		Calculated Patent Term Expiry	
AR020154 AA	20020410	LSPB	+	published / reissued	
AR020154 AA	20081103	LSWD	-FA	ABANDONMENT OR WITHDRAWAL	
AT259810 E	20040315	LSGT	+	granted / extensions (spc, cpc, pte)	
AT259810 E	20040815	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	REF DOCUMENT NUMBER : 1104422 COUNTRY OF REF DOCUMENT : EP
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AU199723162 A1	19970828	LSPB	+	published / reissued	
AU199723162 A1	20010222	LSLE	-MK5	APPLICATION LAPSED SECTION 142(2)(E) - PATENT REQUEST AND COMPL. SPECIFICATION NOT ACCEPTED	
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AU775819 B2	20190811	PEXP		Calculated Patent Term Expiry	
BRPI9913020 A	20010508	LSPB	+	published / reissued	
BRPI9913020 A	20090127	LSFE	-B08F	APPLICATION FEES: DISMISSAL - ARTICLE 86 OF INDUSTRIAL PROPERTY LAW	TEXT : REFERENTE AO NAO RECOLHIMENTO DA 9A ANUIDADE.
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CN1149215 C	20040512	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
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CN1149215 C	20190811	PEXP		Calculated Patent Term Expiry	
CN1251676 C	20060419	LSGT	+	granted / extensions (spc, cpc, pte)	
CN1251676 C	20060419	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN1251676 C	20081008	LSLE	-C19	LAPSE OF PATENT RIGHT DUE TO NON-PAYMENT OF THE ANNUAL FEE	
CN1251676 C	20190811	PEXP		Calculated Patent Term Expiry	
CN1323309 A	20011121	LSPB	+	published / reissued	
CN1323309 A	20011121	LSPB	+C06	PUBLICATION	
CN1515571 A	20040728	LSPB	+	published / reissued	
CN1515571 A	20040728	LSPB	+C06	PUBLICATION	
CO5130007 A1	20020227	LSPB	+	published / reissued	
DE69914921 D1	20050317	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE69914921 D1	20050317	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE69914921 D1	20100624	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	

DE69914921 D1	20100624	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
DE69914921 T2	20041223	LSGT	+	granted / extensions (spc, cpc, pte)	
DE69914921 T2	20050317	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE69914921 T2	20100624	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
DE69914921 T2	20190811	PEXP		Calculated Patent Term Expiry	
DK1104422 T3	20040614	LSGT	+	granted / extensions (spc, cpc, pte)	
DK1104422 T3	20190811	PEXP		Calculated Patent Term Expiry	
EA004139 B1	20040226	LSGT	+	granted / extensions (spc, cpc, pte)	
EA004139 B1	20190811	PEXP		Calculated Patent Term Expiry	
EA200100127 A1	20011022	LSPB	+	published / reissued	
EE04721 B1	20061016	LSGT	+	granted / extensions (spc, cpc, pte)	
EE04721 B1	20070215	LSFE	+KB4A	VALID PATENT AT THE END OF A YEAR	EFFECTIVE DATE : 20061231
EE04721 B1	20080215	LSFE	+KB4A	VALID PATENT AT THE END OF A YEAR	EFFECTIVE DATE : 20071231
EE04721 B1	20080415	LSLE	-MM4A	LAPSED BY NOT PAYING THE ANNUAL FEES	EFFECTIVE DATE : 20070811
EE04721 B1	20190811	PEXP		Calculated Patent Term Expiry	
EE200100083 A	20020617	LSPB	+	published / reissued	
EP0879449 A2	19981125	LSPB	+	published / reissued	
EP0879449 A2	19981125	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19980730
EP0879449 A2	20000216	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20000105
EP0879449 A2	20001108	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20000516
EP1104422 A1	20010606	LSPB	+	published / reissued	
EP1104422 A1	20010606	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20010206
EP1104422 A1	20010816	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20010625
EP1104422 A1	20040218	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP1104422 A1	20040227	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1104422 A1	20040324	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP1104422 A1	20040524	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : EP REF DOCUMENT NUMBER :

					20040401329 COUNTRY OF REF DOCUMENT : GR
EP1104422 A1	20040726	LSRV	-LTIE	LT: INVALIDATION OF EUROPEAN PATENT OR PATENT EXTENSION	REF COUNTRY CODE : EP EFFECTIVE DATE : 20040218
EP1104422 A1	20040910	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HK REF LEGAL EVENT CODE : GR REF DOCUMENT NUMBER : 1035195 COUNTRY OF REF DOCUMENT : HK
EP1104422 A1	20041001	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2215399 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP1104422 A1	20050110	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SI REF LEGAL EVENT CODE : IF
EP1104422 A1	20050209	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20041119
EP1104422 A1	20060627	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20060627 YEAR OF FEE PAYMENT : 8
EP1104422 A1	20060628	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20060628 YEAR OF FEE PAYMENT : 8
EP1104422 A1	20060704	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20060704 YEAR OF FEE PAYMENT : 8
EP1104422 A1	20060707	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20060707 YEAR OF FEE PAYMENT : 8
EP1104422 A1	20060707	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20060707 YEAR OF FEE PAYMENT : 8
EP1104422 A1	20060710	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20060710 YEAR OF FEE PAYMENT : 8
EP1104422 A1	20060720	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20060720 YEAR OF FEE PAYMENT : 8
EP1104422 A1	20060802	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20060802 YEAR OF FEE PAYMENT : 8
EP1104422 A1	20060811	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20060811 YEAR OF FEE PAYMENT : 8
EP1104422 A1	20071030	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : CH OWNER : GLAXO GROUP LIMITED REF LEGAL EVENT CODE : PFA OLDPARTY : GLAXO GROUP LIMITED#GLAXO WELLCOME HOUSE BERKELEY AVENUE#GREENFORD, MIDDLESEX UB6 ONN (GB) -TRANSFER

					TO- GLAXO GROUP LIMITED#GLAXO WELLCOME HOUSE BERKELEY AVENUE#GREENFORD, MIDDLESEX UB6 ONN (GB)
EP1104422 A1	20071124	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY PAYMENT DATE : 20060904 YEAR OF FEE PAYMENT : 8
EP1104422 A1	20080131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20060804 YEAR OF FEE PAYMENT : 8
EP1104422 A1	20080225	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : PT REF LEGAL EVENT CODE : MM4A TEXT : LAPSE DUE TO NON-PAYMENT OF FEES EFFECTIVE DATE : 20080211
EP1104422 A1	20080415	LSLE	-EUG	SE: EUROPEAN PATENT HAS LAPSED	REF COUNTRY CODE : EP
EP1104422 A1	20080415	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP1104422 A1	20080421	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DK REF LEGAL EVENT CODE : EBP
EP1104422 A1	20080430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20070831
EP1104422 A1	20080430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20070831
EP1104422 A1	20080430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20070831
EP1104422 A1	20080430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20080301
EP1104422 A1	20080430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20070812
EP1104422 A1	20080430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20060710 YEAR OF FEE PAYMENT : 8
EP1104422 A1	20080501	LSLE	-NLV4	NL: LAPSED OR ANULLED DUE TO NON-PAYMENT OF THE ANNUAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20080301
EP1104422 A1	20080530	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20070811
EP1104422 A1	20080530	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE

				VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	FEES LAPSED DATE : 20080211
EP1104422 A1	20080611	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP1104422 A1	20080630	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20070811
EP1104422 A1	20080630	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20070811
EP1104422 A1	20080630	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SI REF LEGAL EVENT CODE : KO00 EFFECTIVE DATE : 20080327
EP1104422 A1	20080731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20070831
EP1104422 A1	20081031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20070813
EP1104422 A1	20081031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20080829 YEAR OF FEE PAYMENT : 10
EP1104422 A1	20081031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20080821 YEAR OF FEE PAYMENT : 10
EP1104422 A1	20081128	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20080807 YEAR OF FEE PAYMENT : 10
EP1104422 A1	20081128	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20080816 YEAR OF FEE PAYMENT : 10
EP1104422 A1	20081231	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20080708 YEAR OF FEE PAYMENT : 10
EP1104422 A1	20090130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20080304
EP1104422 A1	20090227	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20080828 YEAR OF FEE PAYMENT : 10
EP1104422 A1	20090831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20070811

				FROM NATIONAL OFFICE TO EPO]	
EP1104422 A1	20100228	LSLE	-BERE	BE: LAPSED	PARTYTYPE : OWNER REF COUNTRY CODE : EP OWNER : *GLAXO GROUP LTD EFFECTIVE DATE : 20090831
EP1104422 A1	20100428	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20090811
EP1104422 A1	20100521	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20100430
EP1104422 A1	20100630	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20090831
EP1104422 A1	20100730	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20100302
EP1104422 A1	20100730	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20090831
EP1104422 A1	20101028	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20090812
EP1104422 A1	20101130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20090811
EP1104422 A1	20110331	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20090811
EP1104422 A1	20111031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20090812
EP1104422 B1	20040218	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1104422 B1	20190811	PEXP		Calculated Patent Term Expiry	
ES2215399 T3	20041001	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2215399 T3	20190811	PEXP		Calculated Patent Term Expiry	
GB9817623 A0	19991110	LSWD	-AT	APPLICATIONS TERMINATED BEFORE PUBLICATION UNDER SECTION 16(1)	
HK1035195 A1	20040910	LSPB	+	published / reissued	
HK1035195 A1	20041215	LSFE	+PF	PATENT IN FORCE	
HK1035195 A1	20090320	LSLE	-PC	PATENT CEASED (I.E. PATENT HAS LAPSED DUE TO	EFFECTIVE DATE : 20080811

				THE FAILURE TO PAY THE RENEWAL FEE)	
HK1035195 A1	20210822	PEXP		Calculated Patent Term Expiry	
HK1035195 B	20040910	LSGT	+	granted / extensions (spc, cpc, pte)	
HK1035195 B	20210822	PEXP		Calculated Patent Term Expiry	
HU0103637 AB	20020629	LSPB	+	published / reissued	
ID28723 A	20010628	LSPB	+	published / reissued	
IS5843 A	20010209	LSPB	+	published / reissued	
JP2000501869 T2	20000215	LSPB	+	published / reissued	
JP2002522542 T2	20020723	LSPB	+	published / reissued	
JP2002522542 T2	20040412	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20040409
JP2002522542 T2	20041008	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20041007
JP2002522542 T2	20041119	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2002522542 T2	20041125	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20041124
JP2002522542 T2	20041224	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20041220
JP2002522542 T2	20041224	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP2004041713 A2	20040212	LSPB	+	published / reissued	
JP2004041713 A2	20041104	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20041102
JP2004041713 A2	20050506	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20050502
JP2004041713 A2	20050914	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20050913
JP2004041713 A2	20051213	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20051212
JP2004041713 A2	20060215	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2004041713 A2	20060222	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20060221
JP2004041713 A2	20060316	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20060310

JP2004041713 A2	20060317	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP2004115534 A2	20040415	LSPB	+	published / reissued	
JP2004115534 A2	20041008	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20041007
JP2004115534 A2	20070723	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20070720
JP2004115534 A2	20080107	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20080104
JP2004137251 A2	20040513	LSPB	+	published / reissued	
JP2004137251 A2	20041102	LSWD	-A761	WRITTEN WITHDRAWAL OF APPLICATION	TEXT : JAPANESE INTERMEDIATE CODE: A761 EFFECTIVE DATE : 20041101
JP2004137251 A2	20041201	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A821 EFFECTIVE DATE : 20041101
JP2005319301 A2	20051117	LSPB	+	published / reissued	
JP2005319301 A2	20070314	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20070313
JP2005319301 A2	20070912	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20070911
JP2005319301 A2	20071010	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20071009
JP2005319301 A2	20080108	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20080107
JP2005319301 A2	20080320	LSAS	A711	NOTIFICATION OF CHANGE IN APPLICANT	TEXT : JAPANESE INTERMEDIATE CODE: A711 EFFECTIVE DATE : 20080319
JP2005319301 A2	20080417	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A821 EFFECTIVE DATE : 20080319
JP2005319301 A2	20080422	LSAL	A911	TRANSFER OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A911 EFFECTIVE DATE : 20080421
JP2005319301 A2	20080502	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2005319301 A2	20080514	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20080513
JP2005319301 A2	20080515	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01
JP2005319301 A2	20080612	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20080609
JP2005319301 A2	20080613	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF	TEXT : JAPANESE INTERMEDIATE CODE: R150

JP2005319301 A2	20080616	LSFE	+FPAY	UTILITY MODEL RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP2006172461 A2	20060629	LSPB	+	published / reissued	
JP2006172461 A2	20070411	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20070410
JP2006172461 A2	20070907	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20070906
JP2006172461 A2	20080206	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20080205
JP2006172461 A2	20080508	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20080507
JP2006172461 A2	20080626	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2006172461 A2	20080702	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20080701
JP2006172461 A2	20080703	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01
JP2006172461 A2	20080712	LSAS	A711	NOTIFICATION OF CHANGE IN APPLICANT	TEXT : JAPANESE INTERMEDIATE CODE: A712 EFFECTIVE DATE : 20080711
JP2006172461 A2	20080724	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20080717
JP2006172461 A2	20080815	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP2006172461 A2	20080815	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP2008065836 A2	20080321	LSPB	+	published / reissued	
JP2008065836 A2	20080702	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A132 EFFECTIVE DATE : 20080701
JP2008065836 A2	20080712	LSAS	A711	NOTIFICATION OF CHANGE IN APPLICANT	TEXT : JAPANESE INTERMEDIATE CODE: A712 EFFECTIVE DATE : 20080711
JP2008065836 A2	20080905	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20080904
JP2008065836 A2	20090408	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20090407
JP2008136874 A2	20080619	LSPB	+	published / reissued	
JP2008136874 A2	20080618	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20080617

JP2008136874 A2	20080712	LSAS	A711	NOTIFICATION OF CHANGE IN APPLICANT	TEXT : JAPANESE INTERMEDIATE CODE: A712 EFFECTIVE DATE : 20080711
JP2008136874 A2	20080905	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20080904
JP2008136874 A2	20090610	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20090609
JP3480940 B2	20031222	LSGT	+	granted / extensions (spc, cpc, pte)	
JP3480940 B2	20061024	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP3480940 B2	20071023	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 5
JP3480940 B2	20080717	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 5
JP3480940 B2	20080717	LSAS	S111	REQUEST FOR CHANGE OF OWNERSHIP OR PART OF OWNERSHIP	TEXT : JAPANESE INTERMEDIATE CODE: R313111
JP3480940 B2	20080728	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 5
JP3480940 B2	20080728	LSAS	R350	WRITTEN NOTIFICATION OF REGISTRATION OF TRANSFER	TEXT : JAPANESE INTERMEDIATE CODE: R350
JP3480940 B2	20081125	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 6
JP3480940 B2	20091001	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 6
JP3480940 B2	20091006	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 7
JP3480940 B2	20101005	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 8
JP3480940 B2	20111004	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 9
JP3480940 B2	20121002	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 10
JP3480940 B2	20131010	LSLE	-LAPS	CANCELLATION BECAUSE OF NO PAYMENT OF ANNUAL FEES	
JP3480940 B2	20170207	PEXP		Calculated Patent Term Expiry	
JP3631961 B2	20050323	LSGT	+	granted / extensions (spc, cpc, pte)	
JP3631961 B2	20071225	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT	YEAR OF FEE PAYMENT : 4

				DATE IS RENEWAL DATE OF DATABASE)	
JP3631961 B2	20090106	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 5
JP3631961 B2	20091224	LSLE	-LAPS	CANCELLATION BECAUSE OF NO PAYMENT OF ANNUAL FEES	
JP3631961 B2	20190811	PEXP		Calculated Patent Term Expiry	
JP3782792 B2	20060607	LSGT	+	granted / extensions (spc, cpc, pte)	
JP3782792 B2	20080717	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP3782792 B2	20080717	LSAS	S111	REQUEST FOR CHANGE OF OWNERSHIP OR PART OF OWNERSHIP	TEXT : JAPANESE INTERMEDIATE CODE: R313111
JP3782792 B2	20080728	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP3782792 B2	20080728	LSAS	R350	WRITTEN NOTIFICATION OF REGISTRATION OF TRANSFER	TEXT : JAPANESE INTERMEDIATE CODE: R350
JP3782792 B2	20090317	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 4
JP3782792 B2	20100311	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 4
JP3782792 B2	20100316	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 5
JP3782792 B2	20120315	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 6
JP3782792 B2	20120321	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 7
JP3782792 B2	20230519	PEXP		Calculated Patent Term Expiry	
JP4139822 B2	20080827	LSGT	+	granted / extensions (spc, cpc, pte)	
JP4139822 B2	20110531	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 4
JP4139822 B2	20120531	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 4
JP4139822 B2	20120605	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 5
JP4139822 B2	20130613	LSLE	-LAPS	CANCELLATION BECAUSE OF NO	

				PAYMENT OF ANNUAL FEES	
JP4139822 B2	20250502	PEXP		Calculated Patent Term Expiry	
JP4168187 B2	20081022	LSGT	+	granted / extensions (spc, cpc, pte)	
JP4168187 B2	20110728	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP4168187 B2	20110802	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 4
JP4168187 B2	20120807	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 5
JP4168187 B2	20130815	LSLE	-LAPS	CANCELLATION BECAUSE OF NO PAYMENT OF ANNUAL FEES	
JP4168187 B2	20251212	PEXP		Calculated Patent Term Expiry	
KR20010085369 A	20010907	LSPB	+	published / reissued	
MA26673 A1	20041220	LSPB	+	published / reissued	
MA26673 A1	20190811	PEXP		Calculated Patent Term Expiry	
MY133393 A	20071130	LSGT	+	granted / extensions (spc, cpc, pte)	
MY133393 A	20221130	PEXP		Calculated Patent Term Expiry	
NO20010715 A	20010402	LSPB	+	published / reissued	
NO20010715 A	20080331	LSRV	-FC2A	WITHDRAWAL, REJECTION OR DISMISSAL OF LAID OPEN PATENT APPLICATION	
NZ509778 A	20030829	LSPB	+	published / reissued	
NZ509778 A	20030725	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	
NZ509778 A	20040130	LSGT	+PSEA	PATENT SEALED	
NZ509778 A	20060728	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	
PE09522000 A1	20000929	LSPB	+	published / reissued	
PE09522000 A1	20030314	LSWD	-FD	APPLICATION DECLARED VOID OR LAPSED	
PL346055 A1	20020114	LSPB	+	published / reissued	
PL346055 A1	20070831	LSRV	-REFS	DECISIONS ON REFUSAL TO GRANT PATENTS (TAKEN AFTER THE PUBLICATION OF THE PARTICULARS OF THE APPLICATIONS)	
PT1104422 T	20040630	LSGT	+	granted / extensions (spc, cpc, pte)	
PT1104422 T	20190811	PEXP		Calculated Patent Term Expiry	
SI1104422 T1	20040630	LSGT	+	granted / extensions (spc,	

				cpc, pte)	
SI1104422 T1	20190811	PEXP		Calculated Patent Term Expiry	
SK200100222 A5	20011203	LSPB	+	published / reissued	
TH58172 A	20030910	LSPB	+	published / reissued	
TR200100448 T2	20010921	LSPB	+	published / reissued	
TWI224598 B	20041201	LSGT	+	granted / extensions (spc, cpc, pte)	
TWI224598 B	20080911	LSLE	-MM4A	ANNULMENT OR LAPSE OF PATENT DUE TO NON-PAYMENT OF FEES	
TWI224598 B	20190812	PEXP		Calculated Patent Term Expiry	
US2001023419 AA	20010920	LSPB	+	published / reissued	
US2001023419 AA	20020423	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ADEZA BIOMEDICAL CORPORATION, CALIFORNIA OLDPARTY : TERMINATION OF SECURITY INTEREST; ASSIGNORS:MMC/GATX PARTNERSHIP NO. I; TRANSAMERICA BUSINESS CREDIT CORPORATION; REEL/FRAME:012802/0856 EFFECTIVE DATE : 20020415
US2003004906 AA	20030102	LSPB	+	published / reissued	
US2003004906 AA	20020613	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ADEZA BIOMEDICAL CORPORATION, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:LAPOINTE, JEROME; DESIENO, DUANE; REEL/FRAME:012996/0438 EFFECTIVE DATE : 19970813
US2003004906 AA	20070906	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CYTYC CORPORATION, MASSACHUSETTS OLDPARTY : MERGER; ASSIGNOR:ADEZA BIOMEDICAL CORPORATION; REEL/FRAME:019794/0600 EFFECTIVE DATE : 20070402
US2003004906 AA	20071026	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GOLDMAN SACHS CREDIT PARTNERS L.P., CALIFORNIA OLDPARTY : PATENT SECURITY AGREEMENT; ASSIGNOR:CYTYC CORPORATION; REEL/FRAME:020018/0529 EFFECTIVE DATE : 20071022
US2003004906 AA	20071026	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GOLDMAN SACHS CREDIT PARTNERS L.P.,CALIFORNIA OLDPARTY : PATENT SECURITY AGREEMENT; ASSIGNOR:CYTYC CORPORATION; REEL/FRAME:020018/0529 EFFECTIVE DATE : 20071022
US2003004906 AA	20080729	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GOLDMAN SACHS CREDIT PARTNERS L.P., AS COLLATERAL OLDPARTY : PATENT SECURITY AGREEMENT; ASSIGNOR:CYTYC CORPORATION; REEL/FRAME:021301/0879 EFFECTIVE DATE : 20080717
US2003004906 AA	20090511	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2003004906 AA	20100825	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : HOLOGIC, INC., MASSACHUSETTS

					OLDPARTY : TERMINATION OF PATENT SECURITY AGREEMENTS AND RELEASE OF SECURITY INTERESTS; ASSIGNOR:GOLDMAN SACHS CREDIT PARTNERS, L.P., AS COLLATERAL AGENT; REEL/FRAME:024944/0315 EFFECTIVE DATE : 20100819
US2003004906 AA	20100825	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : R2 TECHNOLOGY, INC., CALIFORNIA OLDPARTY : TERMINATION OF PATENT SECURITY AGREEMENTS AND RELEASE OF SECURITY INTERESTS; ASSIGNOR:GOLDMAN SACHS CREDIT PARTNERS, L.P., AS COLLATERAL AGENT; REEL/FRAME:024944/0315 EFFECTIVE DATE : 20100819
US2003004906 AA	20100825	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SUROS SURGICAL SYSTEMS, INC., INDIANA OLDPARTY : TERMINATION OF PATENT SECURITY AGREEMENTS AND RELEASE OF SECURITY INTERESTS; ASSIGNOR:GOLDMAN SACHS CREDIT PARTNERS, L.P., AS COLLATERAL AGENT; REEL/FRAME:024944/0315 EFFECTIVE DATE : 20100819
US2003004906 AA	20100825	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BIOLUCENT, LLC, CALIFORNIA OLDPARTY : TERMINATION OF PATENT SECURITY AGREEMENTS AND RELEASE OF SECURITY INTERESTS; ASSIGNOR:GOLDMAN SACHS CREDIT PARTNERS, L.P., AS COLLATERAL AGENT; REEL/FRAME:024944/0315 EFFECTIVE DATE : 20100819
US2003004906 AA	20100825	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : DIRECT RADIOGRAPHY CORP., DELAWARE OLDPARTY : TERMINATION OF PATENT SECURITY AGREEMENTS AND RELEASE OF SECURITY INTERESTS; ASSIGNOR:GOLDMAN SACHS CREDIT PARTNERS, L.P., AS COLLATERAL AGENT; REEL/FRAME:024944/0315 EFFECTIVE DATE : 20100819
US2003004906 AA	20100825	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CYTYC CORPORATION, MASSACHUSETTS OLDPARTY : TERMINATION OF PATENT SECURITY AGREEMENTS AND RELEASE OF SECURITY INTERESTS; ASSIGNOR:GOLDMAN SACHS CREDIT PARTNERS, L.P., AS COLLATERAL AGENT; REEL/FRAME:024944/0315 EFFECTIVE DATE : 20100819
US2003004906 AA	20100825	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CYTYC SURGICAL PRODUCTS LIMITED PARTNERSHIP, MASSA OLDPARTY : TERMINATION OF PATENT SECURITY AGREEMENTS AND RELEASE OF SECURITY INTERESTS; ASSIGNOR:GOLDMAN SACHS CREDIT PARTNERS, L.P., AS COLLATERAL AGENT; REEL/FRAME:024944/0315 EFFECTIVE DATE : 20100819
US2003004906 AA	20100825	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CYTYC SURGICAL PRODUCTS II LIMITED PARTNERSHIP, MA OLDPARTY : TERMINATION OF PATENT SECURITY AGREEMENTS AND RELEASE OF SECURITY INTERESTS; ASSIGNOR:GOLDMAN SACHS CREDIT PARTNERS, L.P., AS COLLATERAL AGENT; REEL/FRAME:024944/0315 EFFECTIVE DATE : 20100819
US2003004906 AA	20100825	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CYTYC SURGICAL PRODUCTS III, INC., MASSACHUSETTS OLDPARTY : TERMINATION OF PATENT SECURITY AGREEMENTS AND RELEASE OF SECURITY INTERESTS;

					ASSIGNOR:GOLDMAN SACHS CREDIT PARTNERS, L.P., AS COLLATERAL AGENT; REEL/FRAME:024944/0315 EFFECTIVE DATE : 20100819
US2003004906 AA	20100825	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CYTYC PRENATAL PRODUCTS CORP., MASSACHUSETTS OLDPARTY : TERMINATION OF PATENT SECURITY AGREEMENTS AND RELEASE OF SECURITY INTERESTS; ASSIGNOR:GOLDMAN SACHS CREDIT PARTNERS, L.P., AS COLLATERAL AGENT; REEL/FRAME:024944/0315 EFFECTIVE DATE : 20100819
US2003004906 AA	20100825	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : THIRD WAVE TECHNOLOGIES, INC., WISCONSIN OLDPARTY : TERMINATION OF PATENT SECURITY AGREEMENTS AND RELEASE OF SECURITY INTERESTS; ASSIGNOR:GOLDMAN SACHS CREDIT PARTNERS, L.P., AS COLLATERAL AGENT; REEL/FRAME:024944/0315 EFFECTIVE DATE : 20100819
US2003032804 AA	20030213	LSPB	+	published / reissued	
US2003105731 AA	20030605	LSPB	+	published / reissued	
US2003105731 AA	20070516	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2004034020 AA	20040219	LSPB	+	published / reissued	
US2004034020 AA	20051205	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US6556977 BA	20030429	LSGT	+	granted / extensions (spc, cpc, pte)	
US6556977 BA	19981005	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ADEZA BIOMEDICAL CORPORATION, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:LAPOINTE, JEROME; DESIENO, DUANE; REEL/FRAME:009515/0895 EFFECTIVE DATE : 19980831
US6556977 BA	19990326	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MMC/GATX PARTNERSHIP NO. 1, CALIFORNIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:ADEZA BIOMEDICAL CORPORATION; REEL/FRAME:009845/0090 EFFECTIVE DATE : 19990319
US6556977 BA	20020423	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ADEZA BIOMEDICAL CORPORATION, CALIFORNIA OLDPARTY : TERMINATION OF SECURITY INTEREST; ASSIGNORS:MMC/GATX PARTNERSHIP NO. I; TRANSAMERICA BUSINESS CREDIT CORPORATION; REEL/FRAME:012802/0856 EFFECTIVE DATE : 20020415
US6556977 BA	20030410	LSGT	PAT1	Patented Case	
US6556977 BA	20030410	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US6556977 BA	20060411	LSRE	CC	CERTIFICATE OF CORRECTION	
US6556977 BA	20061030	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6556977 BA	20071019	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CYTYC CORPORATION, MASSACHUSETTS OLDPARTY : MERGER; ASSIGNOR:ADEZA BIOMEDICAL

					CORPORATION; REEL/FRAME:019984/0150 EFFECTIVE DATE : 20070402
US6556977 BA	20071026	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GOLDMAN SACHS CREDIT PARTNERS L.P., CALIFORNIA OLDPARTY : PATENT SECURITY AGREEMENT; ASSIGNOR:CYTYC CORPORATION; REEL/FRAME:020018/0529 EFFECTIVE DATE : 20071022
US6556977 BA	20071026	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GOLDMAN SACHS CREDIT PARTNERS L.P.,CALIFORNIA OLDPARTY : PATENT SECURITY AGREEMENT; ASSIGNOR:CYTYC CORPORATION; REEL/FRAME:020018/0529 EFFECTIVE DATE : 20071022
US6556977 BA	20080729	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GOLDMAN SACHS CREDIT PARTNERS L.P., AS COLLATERAL OLDPARTY : PATENT SECURITY AGREEMENT; ASSIGNOR:CYTYC CORPORATION; REEL/FRAME:021301/0879 EFFECTIVE DATE : 20080717
US6556977 BA	20100825	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : HOLOGIC, INC., MASSACHUSETTS OLDPARTY : TERMINATION OF PATENT SECURITY AGREEMENTS AND RELEASE OF SECURITY INTERESTS; ASSIGNOR:GOLDMAN SACHS CREDIT PARTNERS, L.P., AS COLLATERAL AGENT; REEL/FRAME:024944/0315 EFFECTIVE DATE : 20100819
US6556977 BA	20100825	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : R2 TECHNOLOGY, INC., CALIFORNIA OLDPARTY : TERMINATION OF PATENT SECURITY AGREEMENTS AND RELEASE OF SECURITY INTERESTS; ASSIGNOR:GOLDMAN SACHS CREDIT PARTNERS, L.P., AS COLLATERAL AGENT; REEL/FRAME:024944/0315 EFFECTIVE DATE : 20100819
US6556977 BA	20100825	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SUROS SURGICAL SYSTEMS, INC., INDIANA OLDPARTY : TERMINATION OF PATENT SECURITY AGREEMENTS AND RELEASE OF SECURITY INTERESTS; ASSIGNOR:GOLDMAN SACHS CREDIT PARTNERS, L.P., AS COLLATERAL AGENT; REEL/FRAME:024944/0315 EFFECTIVE DATE : 20100819
US6556977 BA	20100825	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BIOLUCENT, LLC, CALIFORNIA OLDPARTY : TERMINATION OF PATENT SECURITY AGREEMENTS AND RELEASE OF SECURITY INTERESTS; ASSIGNOR:GOLDMAN SACHS CREDIT PARTNERS, L.P., AS COLLATERAL AGENT; REEL/FRAME:024944/0315 EFFECTIVE DATE : 20100819
US6556977 BA	20100825	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : DIRECT RADIOGRAPHY CORP., DELAWARE OLDPARTY : TERMINATION OF PATENT SECURITY AGREEMENTS AND RELEASE OF SECURITY INTERESTS; ASSIGNOR:GOLDMAN SACHS CREDIT PARTNERS, L.P., AS COLLATERAL AGENT; REEL/FRAME:024944/0315 EFFECTIVE DATE : 20100819
US6556977 BA	20100825	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CYTYC CORPORATION, MASSACHUSETTS OLDPARTY : TERMINATION OF PATENT SECURITY AGREEMENTS AND RELEASE OF SECURITY INTERESTS; ASSIGNOR:GOLDMAN SACHS CREDIT

					PARTNERS, L.P., AS COLLATERAL AGENT; REEL/FRAME:024944/0315 EFFECTIVE DATE : 20100819
US6556977 BA	20100825	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CYTYC SURGICAL PRODUCTS LIMITED PARTNERSHIP, MASSA OLDPARTY : TERMINATION OF PATENT SECURITY AGREEMENTS AND RELEASE OF SECURITY INTERESTS; ASSIGNOR:GOLDMAN SACHS CREDIT PARTNERS, L.P., AS COLLATERAL AGENT; REEL/FRAME:024944/0315 EFFECTIVE DATE : 20100819
US6556977 BA	20100825	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CYTYC SURGICAL PRODUCTS II LIMITED PARTNERSHIP, MA OLDPARTY : TERMINATION OF PATENT SECURITY AGREEMENTS AND RELEASE OF SECURITY INTERESTS; ASSIGNOR:GOLDMAN SACHS CREDIT PARTNERS, L.P., AS COLLATERAL AGENT; REEL/FRAME:024944/0315 EFFECTIVE DATE : 20100819
US6556977 BA	20100825	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CYTYC SURGICAL PRODUCTS III, INC., MASSACHUSETTS OLDPARTY : TERMINATION OF PATENT SECURITY AGREEMENTS AND RELEASE OF SECURITY INTERESTS; ASSIGNOR:GOLDMAN SACHS CREDIT PARTNERS, L.P., AS COLLATERAL AGENT; REEL/FRAME:024944/0315 EFFECTIVE DATE : 20100819
US6556977 BA	20100825	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CYTYC PRENATAL PRODUCTS CORP., MASSACHUSETTS OLDPARTY : TERMINATION OF PATENT SECURITY AGREEMENTS AND RELEASE OF SECURITY INTERESTS; ASSIGNOR:GOLDMAN SACHS CREDIT PARTNERS, L.P., AS COLLATERAL AGENT; REEL/FRAME:024944/0315 EFFECTIVE DATE : 20100819
US6556977 BA	20100825	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : THIRD WAVE TECHNOLOGIES, INC., WISCONSIN OLDPARTY : TERMINATION OF PATENT SECURITY AGREEMENTS AND RELEASE OF SECURITY INTERESTS; ASSIGNOR:GOLDMAN SACHS CREDIT PARTNERS, L.P., AS COLLATERAL AGENT; REEL/FRAME:024944/0315 EFFECTIVE DATE : 20100819
US6556977 BA	20101029	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US6556977 BA	20120801	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GOLDMAN SACHS BANK USA, NEW YORK OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:HOLOGIC, INC.; BIOLUCENT, LLC; CYTYC CORPORATION; AND OTHERS; REEL/FRAME:028810/0745 EFFECTIVE DATE : 20120801
US6556977 BA	20141029	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US6556977 BA	20150604	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BIOLUCENT, LLC, MASSACHUSETTS OLDPARTY : SECURITY INTEREST RELEASE REEL/FRAME 028810/0745; ASSIGNOR:GOLDMAN SACHS BANK USA, AS COLLATERAL AGENT; REEL/FRAME:035820/0239 EFFECTIVE DATE : 20150529
US6556977 BA	20150604	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : HOLOGIC, INC., MASSACHUSETTS OLDPARTY : SECURITY INTEREST RELEASE REEL/FRAME 028810/0745;

					ASSIGNOR:GOLDMAN SACHS BANK USA, AS COLLATERAL AGENT; REEL/FRAME:035820/0239 EFFECTIVE DATE : 20150529
US6556977 BA	20150604	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CYTYC CORPORATION, MASSACHUSETTS OLDPARTY : SECURITY INTEREST RELEASE REEL/FRAME 028810/0745; ASSIGNOR:GOLDMAN SACHS BANK USA, AS COLLATERAL AGENT; REEL/FRAME:035820/0239 EFFECTIVE DATE : 20150529
US6556977 BA	20150604	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CYTYC SURGICAL PRODUCTS, LIMITED PARTNERSHIP, MASS OLDPARTY : SECURITY INTEREST RELEASE REEL/FRAME 028810/0745; ASSIGNOR:GOLDMAN SACHS BANK USA, AS COLLATERAL AGENT; REEL/FRAME:035820/0239 EFFECTIVE DATE : 20150529
US6556977 BA	20150604	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SUROS SURGICAL SYSTEMS, INC., MASSACHUSETTS OLDPARTY : SECURITY INTEREST RELEASE REEL/FRAME 028810/0745; ASSIGNOR:GOLDMAN SACHS BANK USA, AS COLLATERAL AGENT; REEL/FRAME:035820/0239 EFFECTIVE DATE : 20150529
US6556977 BA	20150604	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : THIRD WAVE TECHNOLOGIES, INC., MASSACHUSETTS OLDPARTY : SECURITY INTEREST RELEASE REEL/FRAME 028810/0745; ASSIGNOR:GOLDMAN SACHS BANK USA, AS COLLATERAL AGENT; REEL/FRAME:035820/0239 EFFECTIVE DATE : 20150529
US6556977 BA	20150604	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GEN-PROBE INCORPORATED, MASSACHUSETTS OLDPARTY : SECURITY INTEREST RELEASE REEL/FRAME 028810/0745; ASSIGNOR:GOLDMAN SACHS BANK USA, AS COLLATERAL AGENT; REEL/FRAME:035820/0239 EFFECTIVE DATE : 20150529
US6556977 BA	20150807	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BANK OF AMERICA, N.A., AS COLLATERAL AGENT, NORTH OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:HOLOGIC, INC.; BIOLUCENT, LLC; CYTYC CORPORATION; AND OTHERS; REEL/FRAME:036307/0199 EFFECTIVE DATE : 20150529
US6556977 BA	20171109	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GOLDMAN SACHS BANK USA, NEW YORK OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE INCORRECT PATENT NO. 8081301 PREVIOUSLY RECORDED AT REEL: 028810 FRAME: 0745. ASSIGNOR(S) HEREBY CONFIRMS THE SECURITY AGREEMENT; ASSIGNORS:HOLOGIC, INC.; BIOLUCENT, LLC; CYTYC CORPORATION; AND OTHERS; REEL/FRAME:044432/0565 EFFECTIVE DATE : 20120801
US6556977 BA	20171109	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BIOLUCENT, LLC, MASSACHUSETTS OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE INCORRECT PATENT NO. 8081301 PREVIOUSLY RECORDED AT REEL: 035820 FRAME: 0239. ASSIGNOR(S) HEREBY CONFIRMS THE SECURITY INTEREST RELEASE; ASSIGNOR:GOLDMAN SACHS BANK

					USA, AS COLLATERAL AGENT; REEL/FRAME:044727/0529 EFFECTIVE DATE : 20150529
US6556977 BA	20171109	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CYTYC SURGICAL PRODUCTS, LIMITED PARTNERSHIP, MASS OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE INCORRECT PATENT NO. 8081301 PREVIOUSLY RECORDED AT REEL: 035820 FRAME: 0239. ASSIGNOR(S) HEREBY CONFIRMS THE SECURITY INTEREST RELEASE; ASSIGNOR:GOLDMAN SACHS BANK USA, AS COLLATERAL AGENT; REEL/FRAME:044727/0529 EFFECTIVE DATE : 20150529
US6556977 BA	20171109	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : THIRD WAVE TECHNOLOGIES, INC., MASSACHUSETTS OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE INCORRECT PATENT NO. 8081301 PREVIOUSLY RECORDED AT REEL: 035820 FRAME: 0239. ASSIGNOR(S) HEREBY CONFIRMS THE SECURITY INTEREST RELEASE; ASSIGNOR:GOLDMAN SACHS BANK USA, AS COLLATERAL AGENT; REEL/FRAME:044727/0529 EFFECTIVE DATE : 20150529
US6556977 BA	20171109	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SUROS SURGICAL SYSTEMS, INC., MASSACHUSETTS OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE INCORRECT PATENT NO. 8081301 PREVIOUSLY RECORDED AT REEL: 035820 FRAME: 0239. ASSIGNOR(S) HEREBY CONFIRMS THE SECURITY INTEREST RELEASE; ASSIGNOR:GOLDMAN SACHS BANK USA, AS COLLATERAL AGENT; REEL/FRAME:044727/0529 EFFECTIVE DATE : 20150529
US6556977 BA	20171109	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : HOLOGIC, INC., MASSACHUSETTS OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE INCORRECT PATENT NO. 8081301 PREVIOUSLY RECORDED AT REEL: 035820 FRAME: 0239. ASSIGNOR(S) HEREBY CONFIRMS THE SECURITY INTEREST RELEASE; ASSIGNOR:GOLDMAN SACHS BANK USA, AS COLLATERAL AGENT; REEL/FRAME:044727/0529 EFFECTIVE DATE : 20150529
US6556977 BA	20171109	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GEN-PROBE INCORPORATED, MASSACHUSETTS OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE INCORRECT PATENT NO. 8081301 PREVIOUSLY RECORDED AT REEL: 035820 FRAME: 0239. ASSIGNOR(S) HEREBY CONFIRMS THE SECURITY INTEREST RELEASE; ASSIGNOR:GOLDMAN SACHS BANK USA, AS COLLATERAL AGENT; REEL/FRAME:044727/0529 EFFECTIVE DATE : 20150529
US6556977 BA	20171109	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CYTYC CORPORATION, MASSACHUSETTS OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE INCORRECT PATENT NO. 8081301 PREVIOUSLY RECORDED AT REEL: 035820 FRAME: 0239. ASSIGNOR(S) HEREBY CONFIRMS THE SECURITY INTEREST RELEASE; ASSIGNOR:GOLDMAN SACHS BANK USA, AS COLLATERAL AGENT; REEL/FRAME:044727/0529 EFFECTIVE DATE : 20150529

US6556977 BA	20180814	PEXP		Calculated Patent Term Expiry	
US6608069 BA	20030819	LSGT	+	granted / extensions (spc, cpc, pte)	
US6608069 BA	19991108	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GLAXO WELLCOME INC., NORTH CAROLINA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:DALUGE, SUSAN MARY; JURGENSEN, CYNTHIA HOLDER; MARTIN, MICHAEL TOLAR; AND OTHERS; REEL/FRAME:010366/0250 EFFECTIVE DATE : 19990727
US6608069 BA	20031118	LSRE	CC	CERTIFICATE OF CORRECTION	
US6608069 BA	20070119	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6608069 BA	20110819	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US6608069 BA	20110919	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US6608069 BA	20110919	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US6608069 BA	20111011	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20110819
US6608069 BA	20210209	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
US6678669 BB	20040113	LSGT	+	granted / extensions (spc, cpc, pte)	
US6678669 BB	19970815	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ADEZA BIOMEDICAL CORPORATION, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:LAPOINTE, JEROME; DESIENO, DUANE; REEL/FRAME:008749/0230 EFFECTIVE DATE : 19970813
US6678669 BB	19990326	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MMC/GATX PARTNERSHIP NO. 1, CALIFORNIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:ADEZA BIOMEDICAL CORPORATION; REEL/FRAME:009845/0090 EFFECTIVE DATE : 19990319
US6678669 BB	20031223	LSGT	PAT1	Patented Case	
US6678669 BB	20050719	LSRE	CC	CERTIFICATE OF CORRECTION	
US6678669 BB	20060103	LSRE	CC	CERTIFICATE OF CORRECTION	
US6678669 BB	20070713	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6678669 BB	20071019	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CYTYC CORPORATION, MASSACHUSETTS OLDPARTY : MERGER; ASSIGNOR:ADEZA BIOMEDICAL CORPORATION; REEL/FRAME:019984/0150 EFFECTIVE DATE : 20070402
US6678669 BB	20071026	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GOLDMAN SACHS CREDIT PARTNERS L.P., CALIFORNIA OLDPARTY : PATENT SECURITY AGREEMENT; ASSIGNOR:CYTYC

					CORPORATION; REEL/FRAME:020018/0529 EFFECTIVE DATE : 20071022
US6678669 BB	20071026	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GOLDMAN SACHS CREDIT PARTNERS L.P.,CALIFORNIA OLDPARTY : PATENT SECURITY AGREEMENT; ASSIGNOR:CYTYC CORPORATION; REEL/FRAME:020018/0529 EFFECTIVE DATE : 20071022
US6678669 BB	20080729	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GOLDMAN SACHS CREDIT PARTNERS L.P., AS COLLATERAL OLDPARTY : PATENT SECURITY AGREEMENT; ASSIGNOR:CYTYC CORPORATION; REEL/FRAME:021301/0879 EFFECTIVE DATE : 20080717
US6678669 BB	20100825	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : HOLOGIC, INC., MASSACHUSETTS OLDPARTY : TERMINATION OF PATENT SECURITY AGREEMENTS AND RELEASE OF SECURITY INTERESTS; ASSIGNOR:GOLDMAN SACHS CREDIT PARTNERS, L.P., AS COLLATERAL AGENT; REEL/FRAME:024944/0315 EFFECTIVE DATE : 20100819
US6678669 BB	20100825	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : R2 TECHNOLOGY, INC., CALIFORNIA OLDPARTY : TERMINATION OF PATENT SECURITY AGREEMENTS AND RELEASE OF SECURITY INTERESTS; ASSIGNOR:GOLDMAN SACHS CREDIT PARTNERS, L.P., AS COLLATERAL AGENT; REEL/FRAME:024944/0315 EFFECTIVE DATE : 20100819
US6678669 BB	20100825	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SUROS SURGICAL SYSTEMS, INC., INDIANA OLDPARTY : TERMINATION OF PATENT SECURITY AGREEMENTS AND RELEASE OF SECURITY INTERESTS; ASSIGNOR:GOLDMAN SACHS CREDIT PARTNERS, L.P., AS COLLATERAL AGENT; REEL/FRAME:024944/0315 EFFECTIVE DATE : 20100819
US6678669 BB	20100825	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BIOLUCENT, LLC, CALIFORNIA OLDPARTY : TERMINATION OF PATENT SECURITY AGREEMENTS AND RELEASE OF SECURITY INTERESTS; ASSIGNOR:GOLDMAN SACHS CREDIT PARTNERS, L.P., AS COLLATERAL AGENT; REEL/FRAME:024944/0315 EFFECTIVE DATE : 20100819
US6678669 BB	20100825	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : DIRECT RADIOGRAPHY CORP., DELAWARE OLDPARTY : TERMINATION OF PATENT SECURITY AGREEMENTS AND RELEASE OF SECURITY INTERESTS; ASSIGNOR:GOLDMAN SACHS CREDIT PARTNERS, L.P., AS COLLATERAL AGENT; REEL/FRAME:024944/0315 EFFECTIVE DATE : 20100819
US6678669 BB	20100825	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CYTYC CORPORATION, MASSACHUSETTS OLDPARTY : TERMINATION OF PATENT SECURITY AGREEMENTS AND RELEASE OF SECURITY INTERESTS; ASSIGNOR:GOLDMAN SACHS CREDIT PARTNERS, L.P., AS COLLATERAL AGENT; REEL/FRAME:024944/0315 EFFECTIVE DATE : 20100819
US6678669 BB	20100825	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CYTYC SURGICAL PRODUCTS LIMITED PARTNERSHIP, MASSA OLDPARTY : TERMINATION OF PATENT

					SECURITY AGREEMENTS AND RELEASE OF SECURITY INTERESTS; ASSIGNOR:GOLDMAN SACHS CREDIT PARTNERS, L.P., AS COLLATERAL AGENT; REEL/FRAME:024944/0315 EFFECTIVE DATE : 20100819
US6678669 BB	20100825	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CYTYC SURGICAL PRODUCTS II LIMITED PARTNERSHIP, MA OLDPARTY : TERMINATION OF PATENT SECURITY AGREEMENTS AND RELEASE OF SECURITY INTERESTS; ASSIGNOR:GOLDMAN SACHS CREDIT PARTNERS, L.P., AS COLLATERAL AGENT; REEL/FRAME:024944/0315 EFFECTIVE DATE : 20100819
US6678669 BB	20100825	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CYTYC SURGICAL PRODUCTS III, INC., MASSACHUSETTS OLDPARTY : TERMINATION OF PATENT SECURITY AGREEMENTS AND RELEASE OF SECURITY INTERESTS; ASSIGNOR:GOLDMAN SACHS CREDIT PARTNERS, L.P., AS COLLATERAL AGENT; REEL/FRAME:024944/0315 EFFECTIVE DATE : 20100819
US6678669 BB	20100825	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CYTYC PRENATAL PRODUCTS CORP., MASSACHUSETTS OLDPARTY : TERMINATION OF PATENT SECURITY AGREEMENTS AND RELEASE OF SECURITY INTERESTS; ASSIGNOR:GOLDMAN SACHS CREDIT PARTNERS, L.P., AS COLLATERAL AGENT; REEL/FRAME:024944/0315 EFFECTIVE DATE : 20100819
US6678669 BB	20100825	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : THIRD WAVE TECHNOLOGIES, INC., WISCONSIN OLDPARTY : TERMINATION OF PATENT SECURITY AGREEMENTS AND RELEASE OF SECURITY INTERESTS; ASSIGNOR:GOLDMAN SACHS CREDIT PARTNERS, L.P., AS COLLATERAL AGENT; REEL/FRAME:024944/0315 EFFECTIVE DATE : 20100819
US6678669 BB	20110713	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US6678669 BB	20120801	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GOLDMAN SACHS BANK USA, NEW YORK OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:HOLOGIC, INC.; BIOLUCENT, LLC; CYTYC CORPORATION; AND OTHERS; REEL/FRAME:028810/0745 EFFECTIVE DATE : 20120801
US6678669 BB	20150604	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GEN-PROBE INCORPORATED, MASSACHUSETTS OLDPARTY : SECURITY INTEREST RELEASE REEL/FRAME 028810/0745; ASSIGNOR:GOLDMAN SACHS BANK USA, AS COLLATERAL AGENT; REEL/FRAME:035820/0239 EFFECTIVE DATE : 20150529
US6678669 BB	20150604	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BIOLUCENT, LLC, MASSACHUSETTS OLDPARTY : SECURITY INTEREST RELEASE REEL/FRAME 028810/0745; ASSIGNOR:GOLDMAN SACHS BANK USA, AS COLLATERAL AGENT; REEL/FRAME:035820/0239 EFFECTIVE DATE : 20150529
US6678669 BB	20150604	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SUROS SURGICAL SYSTEMS, INC., MASSACHUSETTS OLDPARTY : SECURITY INTEREST RELEASE REEL/FRAME 028810/0745; ASSIGNOR:GOLDMAN SACHS BANK USA, AS COLLATERAL AGENT; REEL/FRAME:035820/0239

					EFFECTIVE DATE : 20150529
US6678669 BB	20150604	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : HOLOGIC, INC., MASSACHUSETTS OLDPARTY : SECURITY INTEREST RELEASE REEL/FRAME 028810/0745; ASSIGNOR:GOLDMAN SACHS BANK USA, AS COLLATERAL AGENT; REEL/FRAME:035820/0239 EFFECTIVE DATE : 20150529
US6678669 BB	20150604	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : THIRD WAVE TECHNOLOGIES, INC., MASSACHUSETTS OLDPARTY : SECURITY INTEREST RELEASE REEL/FRAME 028810/0745; ASSIGNOR:GOLDMAN SACHS BANK USA, AS COLLATERAL AGENT; REEL/FRAME:035820/0239 EFFECTIVE DATE : 20150529
US6678669 BB	20150604	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CYTYC CORPORATION, MASSACHUSETTS OLDPARTY : SECURITY INTEREST RELEASE REEL/FRAME 028810/0745; ASSIGNOR:GOLDMAN SACHS BANK USA, AS COLLATERAL AGENT; REEL/FRAME:035820/0239 EFFECTIVE DATE : 20150529
US6678669 BB	20150604	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CYTYC SURGICAL PRODUCTS, LIMITED PARTNERSHIP, MASS OLDPARTY : SECURITY INTEREST RELEASE REEL/FRAME 028810/0745; ASSIGNOR:GOLDMAN SACHS BANK USA, AS COLLATERAL AGENT; REEL/FRAME:035820/0239 EFFECTIVE DATE : 20150529
US6678669 BB	20150807	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BANK OF AMERICA, N.A., AS COLLATERAL AGENT, NORTH OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:HOLOGIC, INC.; BIOLUCENT, LLC; CYTYC CORPORATION; AND OTHERS; REEL/FRAME:036307/0199 EFFECTIVE DATE : 20150529
US6678669 BB	20160113	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US6678669 BB	20160208	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US6678669 BB	20160208	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US6678669 BB	20160301	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20160113
US6678669 BB	20171109	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GOLDMAN SACHS BANK USA, NEW YORK OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE INCORRECT PATENT NO. 8081301 PREVIOUSLY RECORDED AT REEL: 028810 FRAME: 0745. ASSIGNOR(S) HEREBY CONFIRMS THE SECURITY AGREEMENT; ASSIGNORS:HOLOGIC, INC.; BIOLUCENT, LLC; CYTYC CORPORATION; AND OTHERS; REEL/FRAME:044432/0565 EFFECTIVE DATE : 20120801
US6678669 BB	20171109	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CYTYC SURGICAL PRODUCTS, LIMITED PARTNERSHIP, MASS OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE INCORRECT PATENT NO. 8081301

					PREVIOUSLY RECORDED AT REEL: 035820 FRAME: 0239. ASSIGNOR(S) HEREBY CONFIRMS THE SECURITY INTEREST RELEASE; ASSIGNOR:GOLDMAN SACHS BANK USA, AS COLLATERAL AGENT; REEL/FRAME:044727/0529 EFFECTIVE DATE : 20150529
US6678669 BB	20171109	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SUROS SURGICAL SYSTEMS, INC., MASSACHUSETTS OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE INCORRECT PATENT NO. 8081301 PREVIOUSLY RECORDED AT REEL: 035820 FRAME: 0239. ASSIGNOR(S) HEREBY CONFIRMS THE SECURITY INTEREST RELEASE; ASSIGNOR:GOLDMAN SACHS BANK USA, AS COLLATERAL AGENT; REEL/FRAME:044727/0529 EFFECTIVE DATE : 20150529
US6678669 BB	20171109	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CYTYC CORPORATION, MASSACHUSETTS OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE INCORRECT PATENT NO. 8081301 PREVIOUSLY RECORDED AT REEL: 035820 FRAME: 0239. ASSIGNOR(S) HEREBY CONFIRMS THE SECURITY INTEREST RELEASE; ASSIGNOR:GOLDMAN SACHS BANK USA, AS COLLATERAL AGENT; REEL/FRAME:044727/0529 EFFECTIVE DATE : 20150529
US6678669 BB	20171109	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GEN-PROBE INCORPORATED, MASSACHUSETTS OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE INCORRECT PATENT NO. 8081301 PREVIOUSLY RECORDED AT REEL: 035820 FRAME: 0239. ASSIGNOR(S) HEREBY CONFIRMS THE SECURITY INTEREST RELEASE; ASSIGNOR:GOLDMAN SACHS BANK USA, AS COLLATERAL AGENT; REEL/FRAME:044727/0529 EFFECTIVE DATE : 20150529
US6678669 BB	20171109	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BIOLUCENT, LLC, MASSACHUSETTS OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE INCORRECT PATENT NO. 8081301 PREVIOUSLY RECORDED AT REEL: 035820 FRAME: 0239. ASSIGNOR(S) HEREBY CONFIRMS THE SECURITY INTEREST RELEASE; ASSIGNOR:GOLDMAN SACHS BANK USA, AS COLLATERAL AGENT; REEL/FRAME:044727/0529 EFFECTIVE DATE : 20150529
US6678669 BB	20171109	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : HOLOGIC, INC., MASSACHUSETTS OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE INCORRECT PATENT NO. 8081301 PREVIOUSLY RECORDED AT REEL: 035820 FRAME: 0239. ASSIGNOR(S) HEREBY CONFIRMS THE SECURITY INTEREST RELEASE; ASSIGNOR:GOLDMAN SACHS BANK USA, AS COLLATERAL AGENT; REEL/FRAME:044727/0529 EFFECTIVE DATE : 20150529
US6678669 BB	20171109	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : THIRD WAVE TECHNOLOGIES, INC., MASSACHUSETTS OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE INCORRECT PATENT NO. 8081301 PREVIOUSLY RECORDED AT REEL: 035820 FRAME: 0239. ASSIGNOR(S) HEREBY CONFIRMS THE SECURITY INTEREST RELEASE; ASSIGNOR:GOLDMAN SACHS BANK

					USA, AS COLLATERAL AGENT; REEL/FRAME:044727/0529 EFFECTIVE DATE : 20150529
US6678669 BB	20190602	PEXP		Calculated Patent Term Expiry (PTA 657 days)	
US6770267 BB	20040803	LSGT	+	granted / extensions (spc, cpc, pte)	
US6770267 BB	20030116	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SMITHKLINE BEECHAM CORPORATION, PENNSYLVANIA OLDPARTY : MERGER; ASSIGNOR:GLAXOWELLCOME INC.; REEL/FRAME:013365/0215 EFFECTIVE DATE : 20010331
US6770267 BB	20030203	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SMITHKLINE BEECHAM CORPORATION, PENNSYLVANIA OLDPARTY : MERGER; ASSIGNOR:GLAXOWELLCOME INC.; REEL/FRAME:013412/0277 EFFECTIVE DATE : 20010331
US6770267 BB	20080107	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6770267 BB	20120803	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US6770267 BB	20120903	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US6770267 BB	20120903	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US6770267 BB	20120925	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20120803
US6770267 BB	20230214	PEXP		Calculated Patent Term Expiry (PTA 325 days)	
US7228295 BB	20070605	LSGT	+	granted / extensions (spc, cpc, pte)	
US7228295 BB	20020826	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ADEZA BIOMEDICAL CORPORATION, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:LAPOINTE, JEROME; DESIENO, DUANE D.; REEL/FRAME:013252/0559 EFFECTIVE DATE : 19980831
US7228295 BB	20021217	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ADEZA BIOMEDICAL CORPORATION, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:LAPOINTE, JEROME; DESIENO, DUANE D.; REEL/FRAME:013581/0989 EFFECTIVE DATE : 19980831
US7228295 BB	20070516	LSGT	PAT1	Patented Case	
US7228295 BB	20070807	LSRE	CC	CERTIFICATE OF CORRECTION	
US7228295 BB	20071019	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CYTYC CORPORATION, MASSACHUSETTS OLDPARTY : MERGER; ASSIGNOR:ADEZA BIOMEDICAL CORPORATION; REEL/FRAME:019984/0150 EFFECTIVE DATE : 20070402
US7228295 BB	20071026	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GOLDMAN SACHS CREDIT PARTNERS L.P., CALIFORNIA OLDPARTY : PATENT SECURITY

					AGREEMENT; ASSIGNOR:CYTYC CORPORATION; REEL/FRAME:020018/0529 EFFECTIVE DATE : 20071022
US7228295 BB	20071026	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GOLDMAN SACHS CREDIT PARTNERS L.P.,CALIFORNIA OLDPARTY : PATENT SECURITY AGREEMENT; ASSIGNOR:CYTYC CORPORATION; REEL/FRAME:020018/0529 EFFECTIVE DATE : 20071022
US7228295 BB	20080729	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GOLDMAN SACHS CREDIT PARTNERS L.P., AS COLLATERAL OLDPARTY : PATENT SECURITY AGREEMENT; ASSIGNOR:CYTYC CORPORATION; REEL/FRAME:021301/0879 EFFECTIVE DATE : 20080717
US7228295 BB	20100825	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : HOLOGIC, INC., MASSACHUSETTS OLDPARTY : TERMINATION OF PATENT SECURITY AGREEMENTS AND RELEASE OF SECURITY INTERESTS; ASSIGNOR:GOLDMAN SACHS CREDIT PARTNERS, L.P., AS COLLATERAL AGENT; REEL/FRAME:024944/0315 EFFECTIVE DATE : 20100819
US7228295 BB	20100825	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : R2 TECHNOLOGY, INC., CALIFORNIA OLDPARTY : TERMINATION OF PATENT SECURITY AGREEMENTS AND RELEASE OF SECURITY INTERESTS; ASSIGNOR:GOLDMAN SACHS CREDIT PARTNERS, L.P., AS COLLATERAL AGENT; REEL/FRAME:024944/0315 EFFECTIVE DATE : 20100819
US7228295 BB	20100825	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SUROS SURGICAL SYSTEMS, INC., INDIANA OLDPARTY : TERMINATION OF PATENT SECURITY AGREEMENTS AND RELEASE OF SECURITY INTERESTS; ASSIGNOR:GOLDMAN SACHS CREDIT PARTNERS, L.P., AS COLLATERAL AGENT; REEL/FRAME:024944/0315 EFFECTIVE DATE : 20100819
US7228295 BB	20100825	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BIOLUCENT, LLC, CALIFORNIA OLDPARTY : TERMINATION OF PATENT SECURITY AGREEMENTS AND RELEASE OF SECURITY INTERESTS; ASSIGNOR:GOLDMAN SACHS CREDIT PARTNERS, L.P., AS COLLATERAL AGENT; REEL/FRAME:024944/0315 EFFECTIVE DATE : 20100819
US7228295 BB	20100825	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : DIRECT RADIOGRAPHY CORP., DELAWARE OLDPARTY : TERMINATION OF PATENT SECURITY AGREEMENTS AND RELEASE OF SECURITY INTERESTS; ASSIGNOR:GOLDMAN SACHS CREDIT PARTNERS, L.P., AS COLLATERAL AGENT; REEL/FRAME:024944/0315 EFFECTIVE DATE : 20100819
US7228295 BB	20100825	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CYTYC CORPORATION, MASSACHUSETTS OLDPARTY : TERMINATION OF PATENT SECURITY AGREEMENTS AND RELEASE OF SECURITY INTERESTS; ASSIGNOR:GOLDMAN SACHS CREDIT PARTNERS, L.P., AS COLLATERAL AGENT; REEL/FRAME:024944/0315 EFFECTIVE DATE : 20100819
US7228295 BB	20100825	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CYTYC SURGICAL PRODUCTS LIMITED PARTNERSHIP,

					MASSA OLDPARTY : TERMINATION OF PATENT SECURITY AGREEMENTS AND RELEASE OF SECURITY INTERESTS; ASSIGNOR:GOLDMAN SACHS CREDIT PARTNERS, L.P., AS COLLATERAL AGENT; REEL/FRAME:024944/0315 EFFECTIVE DATE : 20100819
US7228295 BB	20100825	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CYTYC SURGICAL PRODUCTS II LIMITED PARTNERSHIP, MA OLDPARTY : TERMINATION OF PATENT SECURITY AGREEMENTS AND RELEASE OF SECURITY INTERESTS; ASSIGNOR:GOLDMAN SACHS CREDIT PARTNERS, L.P., AS COLLATERAL AGENT; REEL/FRAME:024944/0315 EFFECTIVE DATE : 20100819
US7228295 BB	20100825	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CYTYC SURGICAL PRODUCTS III, INC., MASSACHUSETTS OLDPARTY : TERMINATION OF PATENT SECURITY AGREEMENTS AND RELEASE OF SECURITY INTERESTS; ASSIGNOR:GOLDMAN SACHS CREDIT PARTNERS, L.P., AS COLLATERAL AGENT; REEL/FRAME:024944/0315 EFFECTIVE DATE : 20100819
US7228295 BB	20100825	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CYTYC PRENATAL PRODUCTS CORP., MASSACHUSETTS OLDPARTY : TERMINATION OF PATENT SECURITY AGREEMENTS AND RELEASE OF SECURITY INTERESTS; ASSIGNOR:GOLDMAN SACHS CREDIT PARTNERS, L.P., AS COLLATERAL AGENT; REEL/FRAME:024944/0315 EFFECTIVE DATE : 20100819
US7228295 BB	20100825	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : THIRD WAVE TECHNOLOGIES, INC., WISCONSIN OLDPARTY : TERMINATION OF PATENT SECURITY AGREEMENTS AND RELEASE OF SECURITY INTERESTS; ASSIGNOR:GOLDMAN SACHS CREDIT PARTNERS, L.P., AS COLLATERAL AGENT; REEL/FRAME:024944/0315 EFFECTIVE DATE : 20100819
US7228295 BB	20101206	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US7228295 BB	20120801	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GOLDMAN SACHS BANK USA, NEW YORK OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:HOLOGIC, INC.; BIOLUCENT, LLC; CYTYC CORPORATION; AND OTHERS; REEL/FRAME:028810/0745 EFFECTIVE DATE : 20120801
US7228295 BB	20141205	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US7228295 BB	20150604	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CYTYC CORPORATION, MASSACHUSETTS OLDPARTY : SECURITY INTEREST RELEASE REEL/FRAME 028810/0745; ASSIGNOR:GOLDMAN SACHS BANK USA, AS COLLATERAL AGENT; REEL/FRAME:035820/0239 EFFECTIVE DATE : 20150529
US7228295 BB	20150604	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : THIRD WAVE TECHNOLOGIES, INC., MASSACHUSETTS OLDPARTY : SECURITY INTEREST RELEASE REEL/FRAME 028810/0745; ASSIGNOR:GOLDMAN SACHS BANK USA, AS COLLATERAL AGENT; REEL/FRAME:035820/0239 EFFECTIVE DATE : 20150529
US7228295 BB	20150604	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SUROS SURGICAL SYSTEMS,

					INC., MASSACHUSETTS OLDPARTY : SECURITY INTEREST RELEASE REEL/FRAME 028810/0745; ASSIGNOR:GOLDMAN SACHS BANK USA, AS COLLATERAL AGENT; REEL/FRAME:035820/0239 EFFECTIVE DATE : 20150529
US7228295 BB	20150604	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GEN-PROBE INCORPORATED, MASSACHUSETTS OLDPARTY : SECURITY INTEREST RELEASE REEL/FRAME 028810/0745; ASSIGNOR:GOLDMAN SACHS BANK USA, AS COLLATERAL AGENT; REEL/FRAME:035820/0239 EFFECTIVE DATE : 20150529
US7228295 BB	20150604	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BIOLUCENT, LLC, MASSACHUSETTS OLDPARTY : SECURITY INTEREST RELEASE REEL/FRAME 028810/0745; ASSIGNOR:GOLDMAN SACHS BANK USA, AS COLLATERAL AGENT; REEL/FRAME:035820/0239 EFFECTIVE DATE : 20150529
US7228295 BB	20150604	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CYTYC SURGICAL PRODUCTS, LIMITED PARTNERSHIP, MASS OLDPARTY : SECURITY INTEREST RELEASE REEL/FRAME 028810/0745; ASSIGNOR:GOLDMAN SACHS BANK USA, AS COLLATERAL AGENT; REEL/FRAME:035820/0239 EFFECTIVE DATE : 20150529
US7228295 BB	20150604	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : HOLOGIC, INC., MASSACHUSETTS OLDPARTY : SECURITY INTEREST RELEASE REEL/FRAME 028810/0745; ASSIGNOR:GOLDMAN SACHS BANK USA, AS COLLATERAL AGENT; REEL/FRAME:035820/0239 EFFECTIVE DATE : 20150529
US7228295 BB	20150807	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BANK OF AMERICA, N.A., AS COLLATERAL AGENT, NORTH OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:HOLOGIC, INC.; BIOLUCENT, LLC; CYTYC CORPORATION; AND OTHERS; REEL/FRAME:036307/0199 EFFECTIVE DATE : 20150529
US7228295 BB	20171109	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GOLDMAN SACHS BANK USA, NEW YORK OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE INCORRECT PATENT NO. 8081301 PREVIOUSLY RECORDED AT REEL: 028810 FRAME: 0745. ASSIGNOR(S) HEREBY CONFIRMS THE SECURITY AGREEMENT; ASSIGNORS:HOLOGIC, INC.; BIOLUCENT, LLC; CYTYC CORPORATION; AND OTHERS; REEL/FRAME:044432/0565 EFFECTIVE DATE : 20120801
US7228295 BB	20171109	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CYTYC SURGICAL PRODUCTS, LIMITED PARTNERSHIP, MASS OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE INCORRECT PATENT NO. 8081301 PREVIOUSLY RECORDED AT REEL: 035820 FRAME: 0239. ASSIGNOR(S) HEREBY CONFIRMS THE SECURITY INTEREST RELEASE; ASSIGNOR:GOLDMAN SACHS BANK USA, AS COLLATERAL AGENT; REEL/FRAME:044727/0529 EFFECTIVE DATE : 20150529
US7228295 BB	20171109	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : THIRD WAVE TECHNOLOGIES, INC.,

					MASSACHUSETTS OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE INCORRECT PATENT NO. 8081301 PREVIOUSLY RECORDED AT REEL: 035820 FRAME: 0239. ASSIGNOR(S) HEREBY CONFIRMS THE SECURITY INTEREST RELEASE; ASSIGNOR:GOLDMAN SACHS BANK USA, AS COLLATERAL AGENT; REEL/FRAME:044727/0529 EFFECTIVE DATE : 20150529
US7228295 BB	20171109	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GEN-PROBE INCORPORATED, MASSACHUSETTS OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE INCORRECT PATENT NO. 8081301 PREVIOUSLY RECORDED AT REEL: 035820 FRAME: 0239. ASSIGNOR(S) HEREBY CONFIRMS THE SECURITY INTEREST RELEASE; ASSIGNOR:GOLDMAN SACHS BANK USA, AS COLLATERAL AGENT; REEL/FRAME:044727/0529 EFFECTIVE DATE : 20150529
US7228295 BB	20171109	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : HOLOGIC, INC., MASSACHUSETTS OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE INCORRECT PATENT NO. 8081301 PREVIOUSLY RECORDED AT REEL: 035820 FRAME: 0239. ASSIGNOR(S) HEREBY CONFIRMS THE SECURITY INTEREST RELEASE; ASSIGNOR:GOLDMAN SACHS BANK USA, AS COLLATERAL AGENT; REEL/FRAME:044727/0529 EFFECTIVE DATE : 20150529
US7228295 BB	20171109	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CYTYC CORPORATION, MASSACHUSETTS OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE INCORRECT PATENT NO. 8081301 PREVIOUSLY RECORDED AT REEL: 035820 FRAME: 0239. ASSIGNOR(S) HEREBY CONFIRMS THE SECURITY INTEREST RELEASE; ASSIGNOR:GOLDMAN SACHS BANK USA, AS COLLATERAL AGENT; REEL/FRAME:044727/0529 EFFECTIVE DATE : 20150529
US7228295 BB	20171109	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SUROS SURGICAL SYSTEMS, INC., MASSACHUSETTS OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE INCORRECT PATENT NO. 8081301 PREVIOUSLY RECORDED AT REEL: 035820 FRAME: 0239. ASSIGNOR(S) HEREBY CONFIRMS THE SECURITY INTEREST RELEASE; ASSIGNOR:GOLDMAN SACHS BANK USA, AS COLLATERAL AGENT; REEL/FRAME:044727/0529 EFFECTIVE DATE : 20150529
US7228295 BB	20171109	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BIOLUCENT, LLC, MASSACHUSETTS OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE INCORRECT PATENT NO. 8081301 PREVIOUSLY RECORDED AT REEL: 035820 FRAME: 0239. ASSIGNOR(S) HEREBY CONFIRMS THE SECURITY INTEREST RELEASE; ASSIGNOR:GOLDMAN SACHS BANK USA, AS COLLATERAL AGENT; REEL/FRAME:044727/0529 EFFECTIVE DATE : 20150529
US7228295 BB	20190121	LSFE	FEPP	FEE PAYMENT PROCEDURE	TEXT : MAINTENANCE FEE REMINDER MAILED (ORIGINAL EVENT CODE: REM.); ENTITY STATUS OF PATENT OWNER: LARGE ENTITY
US7228295 BB	20190708	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY	TEXT : PATENT EXPIRED FOR FAILURE TO PAY MAINTENANCE FEES

				MAINTENANCE FEES	(ORIGINAL EVENT CODE: EXP.); ENTITY STATUS OF PATENT OWNER: LARGE ENTITY
US7228295 BB	20190708	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US7228295 BB	20190708	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US7228295 BB	20190730	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20190605
US7228295 BB	20250720	PEXP		Calculated Patent Term Expiry (PTA 1142 days and a terminal disclaimer has been filed)	
WO0009507 A1	20000224	LSPB	+	published / reissued	
WO0009507 A1	19990811	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : P-116/01 COUNTRY OF REF DOCUMENT : YU
WO0009507 A1	19990811	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 99811969.5 COUNTRY OF REF DOCUMENT : CN
WO0009507 A1	20010205	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : IN/PCT/2001/138/KOL COUNTRY OF REF DOCUMENT : IN
WO0009507 A1	20010206	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1999944358 COUNTRY OF REF DOCUMENT : EP
WO0009507 A1	20010206	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 57323/99 COUNTRY OF REF DOCUMENT : AU
WO0009507 A1	20010207	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 509778 COUNTRY OF REF DOCUMENT : NZ
WO0009507 A1	20010207	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 141318 COUNTRY OF REF DOCUMENT : IL
WO0009507 A1	20010208	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2340350 COUNTRY OF REF DOCUMENT : CA
WO0009507 A1	20010208	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2340350 COUNTRY OF REF DOCUMENT : CA KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO0009507 A1	20010209	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 09762559 COUNTRY OF REF DOCUMENT : US
WO0009507 A1	20010209	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 200100127 COUNTRY OF REF DOCUMENT : EA
WO0009507 A1	20010212	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2001/00448 COUNTRY OF REF DOCUMENT : TR
WO0009507 A1	20010212	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1020017001799 COUNTRY OF REF DOCUMENT : KR
WO0009507 A1	20010212	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 200101186 COUNTRY OF REF DOCUMENT : ZA
WO0009507 A1	20010212	LSNP	+WWE	WIPO INFORMATION:	REF DOCUMENT NUMBER : 2001/01186

				ENTRY INTO NATIONAL PHASE	COUNTRY OF REF DOCUMENT : ZA
WO0009507 A1	20010212	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2222001 COUNTRY OF REF DOCUMENT : SK
WO0009507 A1	20010213	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : PV2001-552 COUNTRY OF REF DOCUMENT : CZ
WO0009507 A1	20010213	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : P20010111A COUNTRY OF REF DOCUMENT : HR
WO0009507 A1	20010213	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : PA/A/2001/001632 COUNTRY OF REF DOCUMENT : MX
WO0009507 A1	20010606	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1999944358 COUNTRY OF REF DOCUMENT : EP
WO0009507 A1	20010613	LSWD	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : 8642
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WO0009507 A1	20010907	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1020017001799 COUNTRY OF REF DOCUMENT : KR
WO0009507 A1	20040218	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1999944358 COUNTRY OF REF DOCUMENT : EP
WO0009507 A1	20060918	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1020017001799 COUNTRY OF REF DOCUMENT : KR
WO9729447 A2	19970814	LSPB	+	published / reissued	
WO9729447 A3	19980729	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2244913 COUNTRY OF REF DOCUMENT : CA
WO9729447 A3	19980729	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2244913 COUNTRY OF REF DOCUMENT : CA KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO9729447 A3	19980730	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1997915835 COUNTRY OF REF DOCUMENT : EP
WO9729447 A3	19980806	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 1997 528729 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO9729447 A3	19981125	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1997915835 COUNTRY OF REF DOCUMENT : EP
WO9729447 A3	19981210	LSWD	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : 8642
WO9729447 A3	20000516	LSWD	-WWW	WIPO INFORMATION: WITHDRAWN IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1997915835 COUNTRY OF REF DOCUMENT : EP
WO9909507 A1	19990225	LSPB	+	published / reissued	
WO9909507 A1	20000214	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : KR
WO9909507 A1	20000303	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 1999513428 COUNTRY OF REF DOCUMENT : JP

WO9909507 A1	20000615	LSWD	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : 8642
WO9909507 A1	20001129	LSNE	-122	EP: PCT APPLICATION NON-ENTRY IN EUROPEAN PHASE	REF COUNTRY CODE : WO
WO9909507 A1	20010214	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : CA
YU11601 A	20040312	LSPB	+	published / reissued	
ZA200101186 A	20020212	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA200101186 A	20210211	PEXP		Calculated Patent Term Expiry	

68) Family number: 30200107 (US5728688A)

Title: Therapeutic methods and delivery systems utilizing sex steroid precursors

Abstract: Sex steroid precursors such as dehydroepiandrosterone and dehydroepiandrosterone sulphate, and compounds converted in vivo to either of the foregoing, are utilized for the treatment of vaginal atrophy, hypogonadism, diminished libido, loss of collagen or connective tissues in the skin, and, in combination with an estrogen and/or progestin, for the treatment of menopause. The precursors may be formulated for percutaneous or transmucosal administration. Gels, solutions, lotions, creams, ointments and transdermal patches for the administration of these precursors are provided, as are certain pharmaceutical compositions and kits which can be used for the prevention and treatment of a wide variety of conditions related to decreased secretion of sex steroid precursors by the adrenals.

Classifications:

International (IPC 8-9): A61F13/02 A61K A61K31/505 A61K31/56 A61K31/565 A61K31/566 A61K31/5685 A61K31/57 A61K31/58 A61K45/00 A61K8/63 A61K9/00 A61K9/70 A61P A61P13/00 A61P15/00 A61P15/02 A61P15/12 A61P15/18 A61P17/00 A61P19/04 A61P19/10 A61P21/00 A61P25/00 A61P25/28 A61P3/04 A61P3/10 A61P35/00 A61P5/00 A61P5/24 A61P5/26 A61P5/34 A61P9/00 A61P9/10 A61P9/12 A61Q19/00 C07J1/00 C07J17/00 C07J43/00 C08K3/00 C08L21/00 F16D69/02 (Advanced/Invention);
A61P17/00 A61P25/00 A61P5/00 A61Q19/00 (Advanced/Non-invention);
A61K31/00 A61K31/565 A61K31/57 A61K31/58 A61K8/30 A61K9/00 A61K9/70 A61P13/00 A61P15/00 A61P17/00 A61P19/00 A61P25/00 A61P35/00 A61P5/00 A61Q19/00 C07J1/00 C07J17/00 C07J43/00 (Core/Invention);
C07J (Subclass/Invention)

International (IPC 1-7): A61F13/00 A61K31/56 A61K31/565 A61K31/566 A61K31/57 A61K31/58 A61K47/28 A61K9/00 A61K9/70 A61M37/00 A61P15/00 A61P15/02 A61P15/12 A61P17/00 A61P19/10 A61P3/04 A61P3/10 A61P35/00 A61P43/00 A61P5/24 A61P5/26 A61P5/34 A61P9/00 A61P9/10 A61P9/12 C07J1/00 C07J17/00 C07J43/00 C08K3/00 C08L21/00 F16D69/02

CPC: A61K31/5685 C07J43/006 A61K31/565 A61K31/566 A61K31/57 A61K31/58 C07J1/0011 C07J43/003 A61K8/63 A61Q19/00

European: A61K31/565 A61K31/566 A61K31/5685 A61K31/57 A61K31/58 A61K7/48C18 A61K8/63 A61Q19/00 C07J1/00B2 C07J43/00B C07J43/00C

US: 314/178 424/448 424/449 514/169 514/172 514/173 514/176 514/178 514/179 514/180 514/181

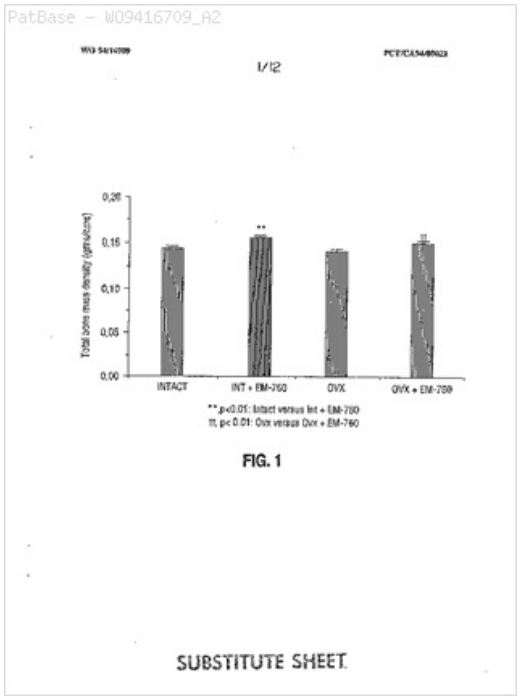


FIG. 1

Family:

Publication number	Publication date	Application number	Application date
AT275957 E	20041015	AT19940904546T	19940119
AT322271 E	20060415	AT19940019149T	19940119
AU199453884 A1	19940728	AU19940053884	19940119
AU199458557 A1	19940815	AU19940058557	19940119
AU686120 B2	19980205	AU19940053884	19940119
CA2154161 AA	19950718	CA19942154161	19940119
CA2154161 C	20061212	CA19942154161	19940119
CN101444519 A	20090603	CN200810168072	19940119
CN102357247 A	20120222	CN201110190933	19940119
CN1100541 C	20030205	CN19941090964	19940119
CN1116823 A	19960214	CN19941090964	19940119
CN1259365 C	20060614	CN20031004075	20030221
CN1439375 A	20030903	CN20021003075	19940119
CN1439375 B	20120808	CN20021003075	19940119
CN1439673 A	20030903	CN20031004075	20030221
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CZ297860 B6	20070418	CZ19950001565	19940119
CZ9501565 A3	19951213	CZ19950001565	19940119
DE69433994 D1	20041021	DE19946033994	19940119
DE69433994 T2	20050922	DE19946033994T	19940119
DE69434697 D1	20060518	DE19946034697	19940119
DE69434697 T2	20070329	DE19946034697T	19940119
DK0680327 T3	20050103	DK19940904546T	19940119
DK1382340 T3	20060814	DK19940019149T	19940119
EP0680327 A1	19951108	EP19940904546	19940119
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Priority:

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Agent(s): GRIFFITH HACK; MARKS AND CLERK; CHINA PATENT AGENT HK LTD; DANIEL FREIMANN AND CO; DR EYAL BRESSLER

Designated states: AT AU BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CZ DE DK ES FI FR GA GB GN GR HU IE IT JP KP KR KZ LI LK LU MC MG ML MN MR MW NE NL NO NZ PL PT RO RU SD SE SK SN TD TG UA VN

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
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EP1382340 A1	20130430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20130102 YEAR OF FEE PAYMENT : 20
EP1382340 A1	20130430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20130125 YEAR OF FEE PAYMENT : 20
EP1382340 A1	20130531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20130129 YEAR OF FEE PAYMENT : 20
EP1382340 A1	20130531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20130128 YEAR OF FEE PAYMENT : 20
EP1382340 A1	20130531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20130125 YEAR OF FEE PAYMENT : 20

				EPO]	
EP1382340 A1	20130628	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20130103 YEAR OF FEE PAYMENT : 20
EP1382340 A1	20130628	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20130104 YEAR OF FEE PAYMENT : 20
EP1382340 A1	20140119	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R071 REF DOCUMENT NUMBER : 69434697 COUNTRY OF REF DOCUMENT : DE
EP1382340 A1	20140120	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DK REF LEGAL EVENT CODE : EUP EFFECTIVE DATE : 20140119
EP1382340 A1	20140121	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R071 REF DOCUMENT NUMBER : 69434697 COUNTRY OF REF DOCUMENT : DE
EP1382340 A1	20140128	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : PT REF LEGAL EVENT CODE : MM4A TEXT : MAXIMUM VALIDITY LIMIT REACHED EFFECTIVE DATE : 20140119
EP1382340 A1	20140129	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : V4 EFFECTIVE DATE : 20140119
EP1382340 A1	20140131	LSLE	-BE20	BE: PATENT EXPIRED	PARTYTYPE : OWNER REF COUNTRY CODE : EP OWNER : *ENDORECHERCHE INC. EFFECTIVE DATE : 20140119
EP1382340 A1	20140131	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP1382340 A1	20140206	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : V4 EFFECTIVE DATE : 20140119
EP1382340 A1	20140212	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : PE20 EXPIRY DATE : 20140118
EP1382340 A1	20140226	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MK9A
EP1382340 A1	20140304	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SE REF LEGAL EVENT CODE : EUG
EP1382340 A1	20140315	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MK07 REF DOCUMENT NUMBER : 322271 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20140119
EP1382340 A1	20140404	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : MA REF DOCUMENT NUMBER : 20060401941 COUNTRY OF REF DOCUMENT : GR EFFECTIVE DATE : 20140120
EP1382340 A1	20140430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF EXPIRATION OF PROTECTION LAPSED DATE : 20140118
EP1382340 A1	20140430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF EXPIRATION OF PROTECTION LAPSED DATE : 20140119

				NATIONAL OFFICE TO EPO]	
EP1382340 A1	20140430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF EXPIRATION OF PROTECTION LAPSED DATE : 20140121
EP1382340 A1	20140630	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF EXPIRATION OF PROTECTION LAPSED DATE : 20140128
EP1382340 A1	20140925	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20140925
EP1382340 A1	20141128	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF EXPIRATION OF PROTECTION LAPSED DATE : 20140120
EP1382340 B1	20060405	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1382340 B1	20140118	PEXP		Calculated Patent Term Expiry	
EP1382340 B1	20140119	PEXP		Calculated Patent Term Expiry	
ES2227523 T3	20050401	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2227523 T3	20140119	PEXP		Calculated Patent Term Expiry	
ES2261836 T3	20061116	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2261836 T3	20140119	PEXP		Calculated Patent Term Expiry	
FI953017 A	19950619	LSPB	+	published / reissued	
HK1130430 A1	20091231	LSPB	+	published / reissued	
HK1130430 A3	20091231	LSPB	+	published / reissued	
HU228385 B1	20130328	LSGT	+	granted / extensions (spc, cpc, pte)	
HU228385 B1	20140119	PEXP		Calculated Patent Term Expiry	
HU73241 A2	19960729	LSPB	+	published / reissued	
IL108371 A1	20090901	LSPB	+	published / reissued	
IL108371 A1	20100531	LSGT	+FF	PATENT GRANTED	
IL108371 A1	20100630	LSFE	+KB	PATENT RENEWED	
IL108371 A1	20120229	LSFE	+KB	PATENT RENEWED	
IL108371 A1	20140930	LSLE	-EXP	PATENT EXPIRED	
IL181015 A1	20121231	LSPB	+	published / reissued	
IL181015 A1	20130430	LSGT	+FF	PATENT GRANTED	
IL181015 A1	20130627	LSFE	+KB20	PATENT RENEWED FOR 20 YEARS	
IL181015 A1	20140930	LSLE	-EXP	PATENT EXPIRED	
IL181018 A1	20120731	LSPB	+	published / reissued	
IL181018 A1	20121129	LSGT	+FF	PATENT GRANTED	
IL181018 A1	20130228	LSFE	+KB20	PATENT RENEWED FOR 20 YEARS	
IL181018 A1	20140930	LSLE	-EXP	PATENT EXPIRED	
JP3441730 B2	20030902	LSGT	+	granted / extensions (spc, cpc, pte)	
JP3441730 B2	20060627	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250

JP3441730 B2	20070710	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 5
JP3441730 B2	20080708	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 6
JP3441730 B2	20090618	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 6
JP3441730 B2	20090623	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 7
JP3441730 B2	20100610	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 7
JP3441730 B2	20100615	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 8
JP3441730 B2	20110614	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 9
JP3441730 B2	20120612	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 10
JP3441730 B2	20130618	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP3441730 B2	20140119	LSLE	-EXPY	CANCELLATION BECAUSE OF COMPLETION OF TERM	
JP3441730 B2	20140119	PEXP		Calculated Patent Term Expiry	
JP8505629 T2	19960618	LSPB	+	published / reissued	
MY134585 A	20071231	LSGT	+	granted / extensions (spc, cpc, pte)	
MY134585 A	20221231	PEXP		Calculated Patent Term Expiry	
MY157883 A	20160801	LSGT	+	granted / extensions (spc, cpc, pte)	
MY157883 A	20310801	PEXP		Calculated Patent Term Expiry	
NO20003545 A	19950616	LSPB	+	published / reissued	
NO20003546 A	19950616	LSPB	+	published / reissued	
NO20003546 A0	20021202	LSRV	-FC2A	WITHDRAWAL, REJECTION OR DISMISSAL OF LAID OPEN PATENT APPLICATION	
NO20003547 A	19950616	LSPB	+	published / reissued	
NO20003549 A	19950616	LSPB	+	published / reissued	
NO20024189 A	19950616	LSPB	+	published / reissued	
NO314067 B1	20030127	LSGT	+	granted / extensions (spc, cpc, pte)	
NO314067 B1	20200710	PEXP		Calculated Patent Term Expiry	
NO314656 B1	20030428	LSGT	+	granted / extensions (spc, cpc, pte)	
NO314656 B1	20140127	LSLE	-MK1K	PATENT EXPIRED	
NO314656 B1	20200710	PEXP		Calculated Patent Term Expiry	
NO315690 B1	20031013	LSGT	+	granted / extensions (spc, cpc, pte)	
NO315690 B1	20200710	PEXP		Calculated Patent Term Expiry	

NO321846 B1	20060710	LSGT	+	granted / extensions (spc, cpc, pte)	
NO321846 B1	20140929	LSLE	-MK1K	PATENT EXPIRED	
NO321846 B1	20220903	PEXP		Calculated Patent Term Expiry	
NO952417 A	19950616	LSPB	+	published / reissued	
NO952417 A	20010115	LSRV	-FC2A	WITHDRAWAL, REJECTION OR DISMISSAL OF LAID OPEN PATENT APPLICATION	
NZ250712 A	19961126	LSPB	+	published / reissued	
NZ250712 A	20040130	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	
NZ250712 A	20070126	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	
NZ250712 A	20140131	LSLE	-EXPY	PATENT EXPIRED	
NZ512334 A	20050527	LSPB	+	published / reissued	
NZ512334 A	20050324	LSWD	-AVOD	APPLICATION VOID	
NZ512334 A	20050930	LSGT	+PSEA	PATENT SEALED	
NZ512334 A	20071130	LSRE	S35A	APPLICATION FOR PROCEEDINGS UNDER SECTION 35 (RESTORATION OF LAPSED PATENTS)	
NZ512334 A	20080530	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	
NZ512334 A	20080530	LSRE	+S35R	PROCEEDINGS UNDER SECTION 35 (RESTORATION OF LAPSED PATENTS): PATENT RESTORED	
NZ512334 A	20140131	LSLE	-EXPY	PATENT EXPIRED	
PT1382340 T	20060731	LSGT	+	granted / extensions (spc, cpc, pte)	
PT1382340 T	20210731	PEXP		Calculated Patent Term Expiry	
PT680327 T	20041231	LSGT	+	granted / extensions (spc, cpc, pte)	
PT680327 T	20191231	PEXP		Calculated Patent Term Expiry	
SK286051 B6	20080205	LSGT	+	granted / extensions (spc, cpc, pte)	
SK286051 B6	20140304	LSLE	-MK4A	EXPIRY OF PATENT	EXPIRY DATE : 20140119
SK286051 B6	20140119	PEXP		Calculated Patent Term Expiry	
SK286664 B6	20090305	LSGT	+	granted / extensions (spc, cpc, pte)	
SK286664 B6	20140304	LSLE	-MK4A	EXPIRY OF PATENT	EXPIRY DATE : 20140119
SK286664 B6	20140119	PEXP		Calculated Patent Term Expiry	
SK77995 A3	19970409	LSPB	+	published / reissued	
UA73911 C2	20041215	LSGT	+	granted / extensions (spc, cpc, pte)	
UA73911 C2	20140119	PEXP		Calculated Patent Term Expiry	
US5728688 A	19980317	LSGT	+	granted / extensions (spc, cpc, pte)	
US5728688 A	19980209	LSGT	PAT1	Patented Case	
US5728688 A	19980209	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5728688 A	20010820	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5728688 A	20050701	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8

US5728688 A	20090520	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5728688 A	20150607	PEXP		Calculated Patent Term Expiry	
US5776923 A	19980707	LSGT	+	granted / extensions (spc, cpc, pte)	
US5776923 A	19940314	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ENDORECHERCHE, INC., CANADA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:LABRIE, FERNAND; REEL/FRAME:006899/0926 EFFECTIVE DATE : 19940225
US5776923 A	19980706	LSGT	PAT1	Patented Case	
US5776923 A	19980706	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5776923 A	20011211	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5776923 A	20051027	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5776923 A	20091023	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5776923 A	20150707	PEXP		Calculated Patent Term Expiry	
US5780460 A	19980714	LSGT	+	granted / extensions (spc, cpc, pte)	
US5780460 A	19980608	LSGT	PAT1	Patented Case	
US5780460 A	19980608	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5780460 A	20011217	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5780460 A	20051027	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5780460 A	20091210	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5780460 A	20150714	PEXP		Calculated Patent Term Expiry	
US5798347 A	19980825	LSGT	+	granted / extensions (spc, cpc, pte)	
US5798347 A	20020128	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5798347 A	20051109	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5798347 A	20100825	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5798347 A	20100920	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US5798347 A	20100920	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US5798347 A	20101012	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20100825
US5798347 A	20150825	PEXP		Calculated Patent Term Expiry	
US5807849 A	19980915	LSGT	+	granted / extensions (spc, cpc, pte)	
US5807849 A	19980810	LSGT	PAT1	Patented Case	
US5807849 A	19980810	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5807849 A	20020220	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5807849 A	20051216	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8

US5807849 A	20091116	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5807849 A	20150613	PEXP		Calculated Patent Term Expiry	
US5824671 A	19981020	LSGT	+	granted / extensions (spc, cpc, pte)	
US5824671 A	20020321	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5824671 A	20060216	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5824671 A	20101020	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5824671 A	20101115	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US5824671 A	20101115	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US5824671 A	20101207	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20101020
US5824671 A	20151020	PEXP		Calculated Patent Term Expiry	
US5837700 A	19981117	LSGT	+	granted / extensions (spc, cpc, pte)	
US5837700 A	20020418	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5837700 A	20061117	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5837700 A	20061220	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US5837700 A	20061220	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US5837700 A	20070116	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20061117
US5837700 A	20151117	PEXP		Calculated Patent Term Expiry	
US5843932 A	19981201	LSGT	+	granted / extensions (spc, cpc, pte)	
US5843932 A	19981124	LSGT	PAT1	Patented Case	
US5843932 A	19981124	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5843932 A	20020501	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5843932 A	20060511	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5843932 A	20100422	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5843932 A	20151201	PEXP		Calculated Patent Term Expiry	
US5854229 A	19981229	LSGT	+	granted / extensions (spc, cpc, pte)	
US5854229 A	20020530	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5854229 A	20060516	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5854229 A	20101229	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5854229 A	20110124	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	

US5854229 A	20110124	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US5854229 A	20151229	PEXP		Calculated Patent Term Expiry	
US5872114 A	19990216	LSGT	+	granted / extensions (spc, cpc, pte)	
US5872114 A	20020716	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5872114 A	20060623	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5872114 A	20110216	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5872114 A	20110314	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US5872114 A	20110314	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US5872114 A	20110405	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20110216
US5872114 A	20160216	PEXP		Calculated Patent Term Expiry	
US5922700 A	19990713	LSGT	+	granted / extensions (spc, cpc, pte)	
US5922700 A	19990702	LSGT	PAT1	Patented Case	
US5922700 A	20030714	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5922700 A	20030909	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20030713
US5922700 A	20180125	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US5922700 A	20180125	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US5922700 A	20160713	PEXP		Calculated Patent Term Expiry	
US5948434 A	19990907	LSGT	+	granted / extensions (spc, cpc, pte)	
US5948434 A	19990826	LSGT	PAT1	Patented Case	
US5948434 A	19990826	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5948434 A	20030207	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5948434 A	20070117	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5948434 A	20101105	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5948434 A	20160907	PEXP		Calculated Patent Term Expiry	
US5955455 A	19990921	LSGT	+	granted / extensions (spc, cpc, pte)	
US5955455 A	20030224	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5955455 A	20070117	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5955455 A	20110921	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5955455 A	20111017	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees	

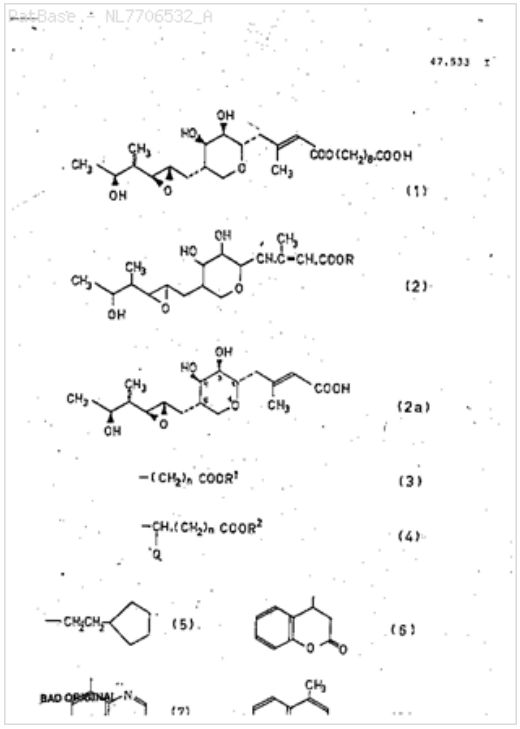
				Under 37 CFR 1.362	
US5955455 A	20111017	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US5955455 A	20111108	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20110921
US5955455 A	20171113	PEXP		Calculated Patent Term Expiry	
WO9416709 A2	19940804	LSPB	+	published / reissued	
WO9416709 A2	19940119	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 94190964.6 COUNTRY OF REF DOCUMENT : CN
WO9416709 A3	19950613	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 77995 COUNTRY OF REF DOCUMENT : SK
WO9416709 A3	19950615	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : PV1995-1565 COUNTRY OF REF DOCUMENT : CZ
WO9416709 A3	19950617	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1994904546 COUNTRY OF REF DOCUMENT : EP
WO9416709 A3	19950619	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 953017 COUNTRY OF REF DOCUMENT : FI
WO9416709 A3	19950718	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2154161 COUNTRY OF REF DOCUMENT : CA
WO9416709 A3	19951108	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1994904546 COUNTRY OF REF DOCUMENT : EP
WO9416709 A3	19951109	LSWD	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : 8642
WO9416709 A3	19951213	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : PV1995-1565 COUNTRY OF REF DOCUMENT : CZ
WO9416709 A3	20040915	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1994904546 COUNTRY OF REF DOCUMENT : EP
WO9416709 A3	20061127	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 51032006 COUNTRY OF REF DOCUMENT : SK
WO9416709 A3	20070418	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : PV1995-1565 COUNTRY OF REF DOCUMENT : CZ
ZA9400372 A	19950719	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA9400372 A	20140118	PEXP		Calculated Patent Term Expiry	

69) Family number: 30339107 (YU162482A)

Title: PROCESS FOR OBTAINING ANTIBACTERIAL COMPOUNDS

Abstract: Esters of an acid of formula: which is termed "monic acid" have activity against Gram-positive and Gram-negative organisms.

Classifications:
International (IPC 8-9): A61K31/335 A61K31/35 A61K31/435 A61K31/44 A61K31/47 A61P31/04 C07D303/00 C07D309/00 C07D309/10 C07D315/00 C07D405/14 C07D407/04 C07D407/06 C07D407/14 (Advanced/Invention);
A61K31/335 A61K31/35 A61K31/435 A61K31/44 A61K31/47 A61P31/00 C07D303/00 C07D309/00 C07D315/00 C07D405/00 C07D407/00 (Core/Invention);
C07C (Subclass/Invention)
International (IPC 1-7): A61K31/00 A61K31/335 A61K31/35 A61K31/365 C07D309/00 C07D309/10 C07D309/22 C07D309/30 C07D311/00 C07D315/00 C07D407/06
CPC: A61K31/435 C07D407/06
European: 124HC1A2C+A2 124HC2A2C+A2 124HC5A3A0+A2C0+2 A61K31/435 C07D407/06



Family:

Publication number	Publication date	Application number	Application date
AT358734 B	19800925	AT19790000911	19790207
AT360155 B	19801229	AT19790000910	19790207
AT91079 A	19800515	AT19790000910	19790207
AT91179 A	19800215	AT19790000911	19790207
MX5477 U	19830819	MX19770005806U	19770615
NL188850 B	19920518	NL19770006532	19770614
NL188850 C	19921016	NL19770006532	19770614
NL7706529 A	19771219	NL19770006529	19770614
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NO772085 A	19771216	NO19770002085	19770614
NO772085 L	19771216	NO19770002085	19770614
NO821472 A	19771216	NO19820001472	19820504
NO821472 L	19771216	NO19820001472	19820504
NZ184352 A	19781218	NZ19770184352	19770609
PH14605 A	19811002	PH19770019877	19770615
PH15782 A	19830325	PH19790022528	19790521
PT66665 A	19770701	PT19770066665	19770614
PT66665 B	19781113	PT19770066665	19770614
SE433214 B	19840514	SE19770006878	19770614
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SE7706877 A	19771216	SE19770006877	19770614
SE7706877 L	19771216	SE19770006877	19770614
SE7706878 A	19771216	SE19770006878	19770614
SE8105936 A	19811007	SE19810005936	19811007
SE8105936 L	19811007	SE19810005936	19811007
YU148977 A	19821031	YU19770001489	19770615
YU162482 A	19830121	YU19820001624	19820723

Priority:

GB19760024712 19760615 GB19760040472 19760929 GB19770008647 19770301
AT19770004229 19770615

Probable Assignee: BEECHAM GROUP LTD

Assignee(s): (std): BEECHAM GROUP LTD

Assignee(s): BEECHAM GROUP TE BRENTFORD GROOT BRITTANNIE LTD ; BEECHAM GROUP TE BRENTFORD LTD ; BEECHAM GROUP LIMITED ; BEECHAM GROUP LIMITED TE BRENTFORD GROOT BRITTANNI ; BEECHAM GROUP LIMITED TE BRENTFORD GROOT BRITTANNIE

Inventor(s): (std): AROGERS N H ; AROGERS NH ; CLAYTON J ; CLAYTON J P ; CLAYTON JOHN P ; CLAYTON JOHN PETER ;

	CLAYTON JP ; KONG LUK ; LUK K ; LUK KONG ; ROGERS N ; ROGERS N H ; ROGERS NH ; ROGERS NORMAN H ; ROGERS NORMAN HAROLD
Inventor(s):	N H ROGERS ; NORMAN HAROLD ROGERS ; J P CLAYTON ; JOHN PETER CLAYTON ; K LUK

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
AT358734 B	19800925	LSGT	+	granted / extensions (spc, cpc, pte)	
AT358734 B	19851115	LSLE	-ELJ	CEASED DUE TO NON-PAYMENT OF THE ANNUAL FEE	
AT358734 B	19990207	PEXP		Calculated Patent Term Expiry	
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AT360155 B	19850215	LSLE	-ELJ	CEASED DUE TO NON-PAYMENT OF THE ANNUAL FEE	
AT360155 B	19990207	PEXP		Calculated Patent Term Expiry	
AT91079 A	19800515	LSPB	+	published / reissued	
AT91179 A	19800215	LSPB	+	published / reissued	
NL188850 B	19920518	LSPB	+	published / reissued	
NL188850 B	19970614	PEXP		Calculated Patent Term Expiry	
NL188850 C	19921016	LSGT	+	granted / extensions (spc, cpc, pte)	
NL188850 C	19970303	LSLE	-V1	LAPSED BECAUSE OF NON-PAYMENT OF THE ANNUAL FEE	EFFECTIVE DATE : 19970101
NL188850 C	19970614	PEXP		Calculated Patent Term Expiry	
NL7706529 A	19771219	LSPB	+	published / reissued	
NL7706529 A	19840501	LSES	+BA	A REQUEST FOR SEARCH OR AN INTERNATIONAL-TYPE SEARCH HAS BEEN FILED	
NL7706529 A	19840501	LSES	BB	A SEARCH REPORT HAS BEEN DRAWN UP	
NL7706529 A	19840903	LSES	+BC	A REQUEST FOR EXAMINATION HAS BEEN FILED	
NL7706529 A	19940201	LSLE	-BV	THE PATENT APPLICATION HAS LAPSED	
NL7706532 A	19771219	LSPB	+	published / reissued	
NL7706532 A	19840501	LSES	+BA	A REQUEST FOR SEARCH OR AN INTERNATIONAL-TYPE SEARCH HAS BEEN FILED	
NL7706532 A	19840501	LSES	BB	A SEARCH REPORT HAS BEEN DRAWN UP	
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NO772085 A	19771216	LSPB	+	published / reissued	
NO821472 A	19771216	LSPB	+	published / reissued	
NZ184352 A	19781218	LSPB	+	published / reissued	
PH14605 A	19811002	LSGT	+	granted / extensions (spc, cpc, pte)	
PH14605 A	19981002	PEXP		Calculated Patent Term Expiry	
PH15782 A	19830325	LSGT	+	granted / extensions (spc, cpc, pte)	
PH15782 A	20000325	PEXP		Calculated Patent Term Expiry	
PT66665 A	19770701	LSPB	+	published / reissued	
PT66665 B	19781113	LSGT	+	granted / extensions (spc, cpc, pte)	
PT66665 B	19970614	PEXP		Calculated Patent Term Expiry	
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SE433214 C	19840823	LSGT	+	granted / extensions (spc, cpc, pte)	
SE433214 C	19970614	PEXP		Calculated Patent Term Expiry	
SE7706877 A	19771216	LSPB	+	published / reissued	
SE7706877 L	19950228	LSLE	-NAV	PATENT APPLICATION HAS LAPSED	TEXT : 7706877-3
SE7706878 A	19771216	LSPB	+	published / reissued	

SE8105936 A	19811007	LSPB	+	published / reissued	
SE8105936 L	19950228	LSLE	-NAV	PATENT APPLICATION HAS LAPSED	TEXT : 8105936-2
YU148977 A	19821031	LSPB	+	published / reissued	
YU162482 A	19830121	LSPB	+	published / reissued	

70) Family number: 34949110 (US2007261695A)

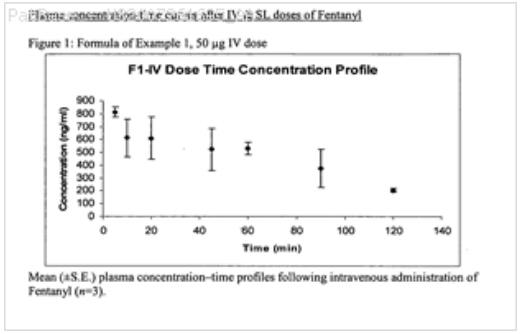
Title: SUBLINGUAL FENTANYL SPRAY

Abstract: The present invention is directed to sublingual formulations containing fentanyl, a pharmaceutically acceptable salt thereof, or derivative thereof, suitable for administration to a patient, and methods for treatment with the formulations.

FDA Data:

Application number	Active ingredient	Proprietary name	Applicant	Date of approval
202788	FENTANYL	SUBSYS	INSYS DEV CO INC	Aug 30, 2012
202788	FENTANYL	SUBSYS	INSYS DEV CO INC	Jan 4, 2012
202788	FENTANYL	SUBSYS	INSYS THERAP	Aug 30, 2012
202788	FENTANYL	SUBSYS	INSYS THERAP	Jan 4, 2012

Classifications:
International (IPC 8-9): A01N37/00 A01N43/40 A61B19/00 A61K A61K31/21 A61K31/435 A61K31/445 A61K31/4468 A61K45/00 A61K47/02 A61K47/04 A61K47/10 A61K47/14 A61K47/34 A61K9/00 A61K9/08 A61K9/10 A61K9/12 A61K9/28 A61K9/68 A61M11/00 A61M11/06 A61M37/00 A61P23/00 A61P25/04 A61P25/20 A61P29/00 A61P35/00 A61P43/00 (Advanced/Invention);
A61B19/00 A61K9/00 A61M11/00 (Advanced/Non-invention);
A61B19/00 A61K31/00 A61K31/21 A61K31/445 A61K31/4468 A61K47/02 A61K47/14 A61K9/00 A61K9/08 A61K9/12 A61K9/28 A61K9/68 A61M11/00 A61P23/00 A61P25/00 A61P43/00 (Core/Invention)
International (IPC 1-7): A61B19/00 A61K31/445
CPC: A61K31/435 A61M11/00 A61K9/0056 A61K31/445 A61K9/0053 A61K47/10 A61K31/4468 A61K9/006
European: A61K31/445 A61K9/00M18D
US: 1/1 128/200.14 128/200.21 128/200.210P 239/302 424/400 424/400S 514/329 514/329S 514/506 514/506S 546/224 604/407 604/407S



Family:

Publication number	Publication date	Application number	Application date
AU2007208229 AA	20070802	AU20070208229	20070125
AU2007208229 BB	20091105	AU20070208229	20070125
AU2008282743 AA	20090205	AU20080282743	20080801
AU2008282743 BB	20121129	AU20080282743	20080801
BRPI0707235 A2	20110426	BR2007PI07235	20070125
CA2637672 AA	20080717	CA20072637672	20070125
CA2637672 C	20120724	CA20072637672	20070125
CA2698749 AA	20100308	CA20082698749	20080801
CA2698749 C	20170523	CA20082698749	20080801
CN101378735 A	20090304	CN200780003555	20070125
CN101378735 B	20130403	CN200780003555	20070125
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DK1976521 T3	20150427	DK20070762549T	20070125
DK2180844 T3	20180423	DK20080795007T	20080801
EP1976521 A2	20081008	EP20070762549	20070125
EP1976521 A4	20101103	EP20070762549	20070125
EP1976521 B1	20150311	EP20070762549	20070125
EP2180844 A2	20100505	EP20080795007	20080801
EP2180844 A4	20130911	EP20080795007	20080801
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JP2013056928 A2	20130328	JP20120256454	20121122
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RU2008130763 A	20100227	RU20080130763	20070125
RU2432950 C2	20111110	RU20080130763	20070125

SI1976521 T1	20150630	SI200700316 30T	20070125
TR201504337 T4	20150521	TR20150004337T	20070125
US2007261695 AA	20071115	US20070698739	20070125
US2009176834 AA	20090709	US20080221333	20080801
US2013296368 AA	20131107	US20130895111	20130515
US2013327321 AA	20131212	US20130895124	20130515
US2014343100 AA	20141120	US20140448720	20140731
US2014343288 AA	20141120	US20140448752	20140731
US2016095846 AA	20160407	US20150966301	20151211
US2016193142 AA	20160707	US20160042999	20160212
US2017202820 AA	20170720	US20170478430	20170404
US2017239230 AA	20170824	US20170478499	20170404
US2018303813 AA	20181025	US20180019941	20180627
US8486972 BB	20130716	US20070698739	20070125
US8486973 BB	20130716	US20080221333	20080801
US8835459 BB	20140916	US20130895111	20130515
US8835460 BB	20140916	US20130895124	20130515
US9241935 BB	20160126	US20140448752	20140731
US9289387 BB	20160322	US20140448720	20140731
US9642797 BB	20170509	US20160042999	20160212
US9642844 BB	20170509	US20150966301	20151211
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WO07087431 A2	20070802	WO2007US02163	20070125
WO07087431 A3	20080925	WO2007US02163	20070125
WO09017837 A2	20090205	WO2008US09359	20080801
WO09017837 A3	20090430	WO2008US09359	20080801
WO09017837 A9	20090625	WO2008US09359	20080801

Priority:

US20060762057	20060125	US20060762057P	20060125	EP20070762549	20070125
JP20080552436	20070125	JP20120256454	20070125	JP20080552436T	20070125
US20070698739	20070125	WO2007US02163	20070125	US20070963076P	20070802
US20070963253P	20070803	EP20080795007	20080801	US20080221333	20080801
WO2008US09359	20080801	US20130895111	20130515	US20130895124	20130515
US20140448720	20140731	US20140448752	20140731	US20150966301	20151211
US20160042999	20160212	US20170478430	20170404	US20170478499	20170404
US20180019941	20180627				

Probable Assignee: INSYS DEVELOPMENT CO INC

Assignee(s): (std): GOSKONDA VENKAT R ; INSIS TERAP JUTIKS INK ; INSYS DEV CO INC ; KATTOOKARAN LINET ; ZHU ZHONGYUAN ; PARIKH NEHA N ; KOTTAYIL S GEORGE ; INSYS THERAPEUTICS INC ; PARIKH NEHA ; INSYS PHARMA INC

Assignee(s): KOTTAYIL S ; INSYS THERAPEUTICS INC CHANDLER ; INSYS DEVELOPMENT CO INC

Inventor(s): (std): VENKAT R GOSKONDA ; GOSKONDA VENKAT ; LINET KATTOOKARAN ; ZHONGYUAN ZHU ; KOTTEJL S DZHORDZH ; KEHTTUKERAN LAJNET ; GOSKONDA VENKEJT R ; PEHRIK NEKHA N ; ZHU ZHONGUAN ; NEHA PARIKH ; KOTTAYIL S G ; PARIKH NEHA ; KOTTAYIL S GEORGE ; PARIKH NEHA N ; ZHU ZHONGYUAN ; GOSKONDA VENKAT R ; KATTOOKARAN LINET ; S GEORGE KOTTAYIL ; KOTTAYIL GEORGE S ; KOTTAYIL S

Inventor(s): GEORGE S ; NEHA N PARIKH ; KOTTAYIL S GEORGE LONG GROVE ; ZHU ZHONGYUAN VERNON HILLS ; GOSKONDA VENKAT R GURNEE ; KATTOOKARAN LINET MOUNT PROSPECT ; PARIKH NEHA N CHICAGO

Agent(s): FB RICE; FB RICE PTY LTD; GOWLING LAFLEUR HENDERSON LLP; GOWLING WLG CANADA LLP; K AND H BONAPAT; CURLEY DONNACHA JOHN; HANNA PETER WILLIAM DEREK; HANNA MOORE AND CURLEY; CURELL MIREIA; CHINA PATENT AGENT HK LTD; TUGBA DERYA; DAVIDSON DAVIDSON AND KAPPEL LLC; SNELL AND WILMER LLP MAIN; WOOD PHILLIPS KATZ CLARK AND MORTIMER; DIMARCO BENJAMIN S

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
AU2007208229 AA	20070802	LSPB	+	published / reissued	
AU2007208229 BB	20091105	LSGT	+	granted / extensions (spc, cpc, pte)	
AU2007208229 BB	20100304	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU2007208229 BB	20270125	PEXP		Calculated Patent Term Expiry	
AU2008282743 AA	20090205	LSPB	+	published / reissued	
AU2008282743 BB	20121129	LSGT	+	granted / extensions (spc, cpc, pte)	
AU2008282743 BB	20130328	LSGT	+FGA	LETTERS PATENT	

				SEALED OR GRANTED (STANDARD PATENT)	
AU2008282743 BB	20280801	PEXP		Calculated Patent Term Expiry	
BRPI0707235 A2	20180123	LSES	B07D	TECHNICAL EXAMINATION (OPINION) RELATED TO ARTICLE 229 OF INDUSTRIAL PROPERTY LAW	
CA2637672 AA	20080717	LSPB	+	published / reissued	
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CA2637672 C	20120724	LSGT	+	granted / extensions (spc, cpc, pte)	
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CA2698749 AA	20130425	LSES	+EEER	EXAMINATION REQUEST	EFFECTIVE DATE : 20130412
CA2698749 C	20170523	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2698749 C	20280801	PEXP		Calculated Patent Term Expiry	
CN101378735 A	20090304	LSPB	+	published / reissued	
CN101378735 A	20090304	LSPB	+C06	PUBLICATION	
CN101378735 B	20130403	LSGT	+	granted / extensions (spc, cpc, pte)	
CN101378735 B	20130403	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
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CY1117263 T1	20170426	LSGT	+	granted / extensions (spc, cpc, pte)	
DE602007040580 D1	20150410	LSAS	R081	CHANGE OF APPLICANT/PATENTEE	PARTYTYPE : OWNER OWNER : INSYS THERAPEUTICS, INC., CHANDLER, ARIZ., US OLDPARTY : INSYS THERAPEUTICS, INC., MUNDELEIN, ILL., US
DK1976521 T3	20150427	LSGT	+	granted / extensions (spc, cpc, pte)	
DK1976521 T3	20270125	PEXP		Calculated Patent Term Expiry	
DK2180844 T3	20180423	LSGT	+	granted / extensions (spc, cpc, pte)	
DK2180844 T3	20280801	PEXP		Calculated Patent Term Expiry	
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EP1976521 A2	20160331	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20160201 YEAR OF FEE PAYMENT : 10
EP1976521 A2	20160331	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20160126 YEAR OF FEE PAYMENT : 10
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EP1976521 A2	20160429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY PAYMENT DATE : 20160121 YEAR OF FEE PAYMENT : 10
EP1976521 A2	20160429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20160120 YEAR OF FEE PAYMENT : 10
EP1976521 A2	20160429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20160122 YEAR OF FEE PAYMENT : 10
EP1976521 A2	20160429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE PAYMENT DATE : 20160121 YEAR OF FEE PAYMENT : 10
EP1976521 A2	20160429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20160127 YEAR OF FEE PAYMENT : 10
EP1976521 A2	20160429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20160127 YEAR OF FEE PAYMENT : 10
EP1976521 A2	20160429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20160121 YEAR OF FEE PAYMENT : 10
EP1976521 A2	20160429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20160126 YEAR OF FEE PAYMENT : 10
EP1976521 A2	20160429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LT PAYMENT DATE : 20160119 YEAR OF FEE PAYMENT : 10
EP1976521 A2	20160429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20160125 YEAR OF FEE PAYMENT : 10
EP1976521 A2	20160429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK PAYMENT DATE : 20160119 YEAR OF FEE PAYMENT : 10
EP1976521 A2	20160531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20160127 YEAR OF FEE PAYMENT : 10
EP1976521 A2	20160531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20160126 YEAR OF FEE PAYMENT : 10
EP1976521 A2	20160531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LV PAYMENT DATE : 20160121 YEAR OF FEE PAYMENT : 10
EP1976521 A2	20160531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20160203 YEAR OF FEE PAYMENT : 10
EP1976521 A2	20160531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20160127 YEAR OF FEE PAYMENT : 10

				EPO]	
EP1976521 A2	20160531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20160121 YEAR OF FEE PAYMENT : 10
EP1976521 A2	20160531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20160127 YEAR OF FEE PAYMENT : 10
EP1976521 A2	20160531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20160125 YEAR OF FEE PAYMENT : 10
EP1976521 A2	20160531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20160128 YEAR OF FEE PAYMENT : 10
EP1976521 A2	20160531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20160125 YEAR OF FEE PAYMENT : 10
EP1976521 A2	20160531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20160120 YEAR OF FEE PAYMENT : 10
EP1976521 A2	20160531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20160119 YEAR OF FEE PAYMENT : 10
EP1976521 A2	20160531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20160127 YEAR OF FEE PAYMENT : 10
EP1976521 A2	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG PAYMENT DATE : 20170127 YEAR OF FEE PAYMENT : 10
EP1976521 A4	20101103	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	EFFECTIVE DATE : 20100930
EP1976521 A4	20110720	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20110620
EP1976521 A4	20141203	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20141106
EP1976521 B1	20150311	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1976521 B1	20150311	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP1976521 B1	20150313	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1976521 B1	20150325	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : T3
EP1976521 B1	20150408	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP1976521 B1	20150415	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 714928 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20150415
EP1976521 B1	20150423	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602007040580

					COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20150423
EP1976521 B1	20150506	LSAS	RAP2	RIGHTS OF A PATENT TRANSFERRED	PARTYTYPE : OWNER OWNER : INSYS THERAPEUTICS, INC.
EP1976521 B1	20150506	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2535233 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) : EFFECTIVE DATE : 20150506
EP1976521 B1	20150513	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : RO REF LEGAL EVENT CODE : EPE
EP1976521 B1	20150521	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : DE OWNER : INSYS THERAPEUTICS, INC., CHANDLER, US REF LEGAL EVENT CODE : R081 REF DOCUMENT NUMBER : 602007040580 COUNTRY OF REF DOCUMENT : DE OLDPARTY : FORMER OWNER: INSYS THERAPEUTICS, INC., MUNDELEIN, ILL., US EFFECTIVE DATE : 20150410
EP1976521 B1	20150729	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : EP REF DOCUMENT NUMBER : 20150400938 COUNTRY OF REF DOCUMENT : GR EFFECTIVE DATE : 20150618
EP1976521 B1	20151130	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HU REF LEGAL EVENT CODE : AG4A REF DOCUMENT NUMBER : E024617 COUNTRY OF REF DOCUMENT : HU
EP1976521 B1	20151214	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 602007040580 COUNTRY OF REF DOCUMENT : DE
EP1976521 B1	20160126	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 10
EP1976521 B1	20160217	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20151214
EP1976521 B1	20160531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG PAYMENT DATE : 20160129 YEAR OF FEE PAYMENT : 10
EP1976521 B1	20160915	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : UEP REF DOCUMENT NUMBER : 714928 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20150311
EP1976521 B1	20161031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20160930
EP1976521 B1	20170125	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 11
EP1976521 B1	20170331	LSFE	+PGFP	ANNUAL FEE PAID TO	COUNTRY OF REF DOCUMENT : NL

				NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	PAYMENT DATE : 20170126 YEAR OF FEE PAYMENT : 11
EP1976521 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20170127 YEAR OF FEE PAYMENT : 11
EP1976521 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170125 YEAR OF FEE PAYMENT : 11
EP1976521 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20170130 YEAR OF FEE PAYMENT : 11
EP1976521 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20170127 YEAR OF FEE PAYMENT : 11
EP1976521 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20170120 YEAR OF FEE PAYMENT : 11
EP1976521 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20170120 YEAR OF FEE PAYMENT : 11
EP1976521 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE PAYMENT DATE : 20170124 YEAR OF FEE PAYMENT : 11
EP1976521 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LT PAYMENT DATE : 20170118 YEAR OF FEE PAYMENT : 11
EP1976521 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170125 YEAR OF FEE PAYMENT : 11
EP1976521 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20170127 YEAR OF FEE PAYMENT : 11
EP1976521 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IS PAYMENT DATE : 20170118 YEAR OF FEE PAYMENT : 11
EP1976521 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20170126 YEAR OF FEE PAYMENT : 11
EP1976521 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20170127 YEAR OF FEE PAYMENT : 11
EP1976521 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20170119 YEAR OF FEE PAYMENT : 11
EP1976521 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20170127 YEAR OF FEE PAYMENT : 11
EP1976521 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20170125 YEAR OF FEE PAYMENT : 11
EP1976521 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO	COUNTRY OF REF DOCUMENT : LU

				NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	PAYMENT DATE : 20170130 YEAR OF FEE PAYMENT : 11
EP1976521 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20170119 YEAR OF FEE PAYMENT : 11
EP1976521 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY PAYMENT DATE : 20170130 YEAR OF FEE PAYMENT : 11
EP1976521 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20170119 YEAR OF FEE PAYMENT : 11
EP1976521 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20170118 YEAR OF FEE PAYMENT : 11
EP1976521 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20170120 YEAR OF FEE PAYMENT : 11
EP1976521 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK PAYMENT DATE : 20170120 YEAR OF FEE PAYMENT : 11
EP1976521 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20170127 YEAR OF FEE PAYMENT : 11
EP1976521 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LV PAYMENT DATE : 20170120 YEAR OF FEE PAYMENT : 11
EP1976521 B1	20170630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20170126 YEAR OF FEE PAYMENT : 11
EP1976521 B1	20170630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20170119 YEAR OF FEE PAYMENT : 11
EP1976521 B1	20170630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20170124 YEAR OF FEE PAYMENT : 11
EP1976521 B1	20180125	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 12
EP1976521 B1	20180330	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20180126 YEAR OF FEE PAYMENT : 12
EP1976521 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180129 YEAR OF FEE PAYMENT : 12
EP1976521 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20180129 YEAR OF FEE PAYMENT : 12
EP1976521 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20180129 YEAR OF FEE PAYMENT : 12
EP1976521 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO	COUNTRY OF REF DOCUMENT :

				NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	CH PAYMENT DATE : 20180127 YEAR OF FEE PAYMENT : 12
EP1976521 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20180125 YEAR OF FEE PAYMENT : 12
EP1976521 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20180201 YEAR OF FEE PAYMENT : 12
EP1976521 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20180129 YEAR OF FEE PAYMENT : 12
EP1976521 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20180129 YEAR OF FEE PAYMENT : 12
EP1976521 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20180119 YEAR OF FEE PAYMENT : 12
EP1976521 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20180119 YEAR OF FEE PAYMENT : 12
EP1976521 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20180122 YEAR OF FEE PAYMENT : 12
EP1976521 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20180129 YEAR OF FEE PAYMENT : 12
EP1976521 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20180125 YEAR OF FEE PAYMENT : 12
EP1976521 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20180129 YEAR OF FEE PAYMENT : 12
EP1976521 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20180118 YEAR OF FEE PAYMENT : 12
EP1976521 B1	20180810	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : LT REF LEGAL EVENT CODE : MM4D EFFECTIVE DATE : 20180125
EP1976521 B1	20180815	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : EE REF LEGAL EVENT CODE : MM4A REF DOCUMENT NUMBER : E010444 COUNTRY OF REF DOCUMENT : EE EFFECTIVE DATE : 20180131
EP1976521 B1	20181001	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SK REF LEGAL EVENT CODE : MM4A REF DOCUMENT NUMBER : E 18632 COUNTRY OF REF DOCUMENT : SK EFFECTIVE DATE : 20180125
EP1976521 B1	20181030	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SI REF LEGAL EVENT CODE : KO00 EFFECTIVE DATE : 20180925
EP1976521 B1	20181031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM	COUNTRY OF REF DOCUMENT : RO NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES

				NATIONAL OFFICE TO EPO]	LAPSED DATE : 20180125
EP1976521 B1	20181031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180131
EP1976521 B1	20181031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180125
EP1976521 B1	20181031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180125
EP1976521 B1	20181031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180126
EP1976521 B1	20181031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180125
EP1976521 B1	20181130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180125
EP1976521 B1	20181130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180126
EP1976521 B1	20181130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180125
EP1976521 B1	20181130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LV NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180125
EP1976521 B1	20181130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IS NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20180801
EP1976521 B1	20190131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180806
EP1976521 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20190128 YEAR OF FEE PAYMENT : 13
EP1976521 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20190128

				NATIONAL OFFICE TO EPO]	YEAR OF FEE PAYMENT : 13
EP1976521 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20190204 YEAR OF FEE PAYMENT : 13
EP1976521 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20190129 YEAR OF FEE PAYMENT : 13
EP1976521 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20190118 YEAR OF FEE PAYMENT : 13
EP1976521 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20190126 YEAR OF FEE PAYMENT : 13
EP1976521 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20190129 YEAR OF FEE PAYMENT : 13
EP1976521 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20190201 YEAR OF FEE PAYMENT : 13
EP1976521 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20190123 YEAR OF FEE PAYMENT : 13
EP1976521 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20190125 YEAR OF FEE PAYMENT : 13
EP1976521 B1	20190531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20190122 YEAR OF FEE PAYMENT : 13
EP1976521 B1	20190531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20190129 YEAR OF FEE PAYMENT : 13
EP1976521 B1	20190531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20190128 YEAR OF FEE PAYMENT : 13
EP1976521 B1	20190531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20190129 YEAR OF FEE PAYMENT : 13
EP1976521 B1	20190531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20190130 YEAR OF FEE PAYMENT : 13
EP1976521 B1	20190531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20190129 YEAR OF FEE PAYMENT : 13
EP1976521 B1	20190628	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180131
EP1976521 B1	20270125	PEXP		Calculated Patent Term Expiry	
EP2180844 A2	20100505	LSPB	+	published / reissued	
EP2180844 A2	20100505	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20100301

EP2180844 A4	20130911	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	EFFECTIVE DATE : 20130813
EP2180844 A4	20140416	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20140318
EP2180844 A4	20170118	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20161222
EP2180844 A4	20170628	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20170530
EP2180844 A4	20170920	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20170825
EP2180844 A4	20171108	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : INSYS DEVELOPMENT COMPANY, INC.
EP2180844 B1	20180221	LSGT	+	granted / extensions (spc, cpc, pte)	
EP2180844 B1	20180221	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP2180844 B1	20180228	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP2180844 B1	20180315	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 970956 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20180315
EP2180844 B1	20180321	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP2180844 B1	20180322	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602008054114 COUNTRY OF REF DOCUMENT : DE
EP2180844 B1	20180517	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2668366 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) : EFFECTIVE DATE : 20180517
EP2180844 B1	20180522	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NO REF LEGAL EVENT CODE : T2 EFFECTIVE DATE : 20180221
EP2180844 B1	20180710	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : LT REF LEGAL EVENT CODE : MG4D
EP2180844 B1	20180731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20180221
EP2180844 B1	20180731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20180221
EP2180844 B1	20180731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT	COUNTRY OF REF DOCUMENT : NL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE

				INFORMATION FROM NATIONAL OFFICE TO EPO]	DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20180221
EP2180844 B1	20180731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20180221
EP2180844 B1	20180827	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 11
EP2180844 B1	20180831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20180521
EP2180844 B1	20180831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LV NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20180221
EP2180844 B1	20180906	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : EP REF DOCUMENT NUMBER : 20180401018 COUNTRY OF REF DOCUMENT : GR EFFECTIVE DATE : 20180829
EP2180844 B1	20181031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20180221
EP2180844 B1	20181031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20180221
EP2180844 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20180904 YEAR OF FEE PAYMENT : 11
EP2180844 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180829 YEAR OF FEE PAYMENT : 11
EP2180844 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NO PAYMENT DATE : 20180829 YEAR OF FEE PAYMENT : 11
EP2180844 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20180827 YEAR OF FEE PAYMENT : 11
EP2180844 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20180827 YEAR OF FEE PAYMENT : 11

				EPO]	
EP2180844 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20180822 YEAR OF FEE PAYMENT : 11
EP2180844 B1	20181122	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 602008054114 COUNTRY OF REF DOCUMENT : DE
EP2180844 B1	20181130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20180221
EP2180844 B1	20181130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20180221
EP2180844 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20180829 YEAR OF FEE PAYMENT : 11
EP2180844 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20180905 YEAR OF FEE PAYMENT : 11
EP2180844 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20180829 YEAR OF FEE PAYMENT : 11
EP2180844 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20180731 YEAR OF FEE PAYMENT : 11
EP2180844 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20180829 YEAR OF FEE PAYMENT : 11
EP2180844 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20180829 YEAR OF FEE PAYMENT : 11
EP2180844 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20180828 YEAR OF FEE PAYMENT : 11
EP2180844 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20180719 YEAR OF FEE PAYMENT : 11
EP2180844 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20180827 YEAR OF FEE PAYMENT : 11
EP2180844 B1	20181231	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20180726 YEAR OF FEE PAYMENT : 11
EP2180844 B1	20190130	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20181122
EP2180844 B1	20190228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT	COUNTRY OF REF DOCUMENT : SI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE

				INFORMATION FROM NATIONAL OFFICE TO EPO]	DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20180221
EP2180844 B1	20190329	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20180221
EP2180844 B1	20190430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180801
EP2180844 B1	20280801	PEXP		Calculated Patent Term Expiry	
EP2641595 A1	20130925	LSPB	+	published / reissued	
EP2641595 A1	20141119	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20140326
ES2535233 T3	20150506	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2535233 T3	20270125	PEXP		Calculated Patent Term Expiry	
ES2668366 T3	20180517	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2668366 T3	20280801	PEXP		Calculated Patent Term Expiry	
HK1189809 A1	20140620	LSPB	+	published / reissued	
IN01434DN2010 A	20100806	LSPB	+	published / reissued	
IN03043KN2008 A	20090206	LSPB	+	published / reissued	
JP2009528272 T2	20090806	LSPB	+	published / reissued	
JP2009528272 T2	20111226	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20111222
JP2009528272 T2	20120623	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20120622
JP2009528272 T2	20120726	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20120725
JP2009528272 T2	20121123	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20121122
JP2009528272 T2	20130118	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A821 EFFECTIVE DATE : 20121225
JP2009528272 T2	20130201	LSAL	A911	TRANSFER OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A911 EFFECTIVE DATE : 20130131
JP2009528272 T2	20130227	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20130226
JP2009528272 T2	20130305	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20130304
JP2009528272 T2	20130328	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2009528272 T2	20130402	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20130401

				(UTILITY MODEL)	
JP2009528272 T2	20130411	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20130402
JP2009528272 T2	20130412	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP2009528272 T2	20130412	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP2013056928 A2	20130328	LSPB	+	published / reissued	
JP2013056928 A2	20140314	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20140313
JP2013056928 A2	20140604	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20140603
JP2013056928 A2	20140929	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2013056928 A2	20141003	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20141002
JP2013056928 A2	20141016	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20141003
JP2013056928 A2	20141017	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 5630877 COUNTRY OF REF DOCUMENT : JP
JP2013127003 A2	20130627	LSPB	+	published / reissued	
JP2013127003 A2	20130326	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20130322
JP2013127003 A2	20140520	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20140519
JP2013127003 A2	20150513	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20150512
JP5241514 B2	20130717	LSGT	+	granted / extensions (spc, cpc, pte)	
JP5241514 B2	20130404	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP5241514 B2	20130409	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP5241514 B2	20160324	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5241514 B2	20160329	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5241514 B2	20170330	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5241514 B2	20170404	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5241514 B2	20180412	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5241514 B2	20180417	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5241514 B2	20190411	LSFE	R20	特許料納付書 (Patent fee payment form)	

JP5241514 B2	20190416	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5241514 B2	20270125	PEXP		Calculated Patent Term Expiry	
JP5630877 B2	20141126	LSGT	+	granted / extensions (spc, cpc, pte)	
JP5630877 B2	20130323	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20130322
JP5630877 B2	20141009	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP5630877 B2	20141014	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP5630877 B2	20141017	LSGT	+R150	特許証 (Patent certificate)	
JP5630877 B2	20171019	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5630877 B2	20171024	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5630877 B2	20181011	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5630877 B2	20181016	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5630877 B2	20321122	PEXP		Calculated Patent Term Expiry	
MX2008009522 A1	20090107	LSPB	+	published / reissued	
MX2008009522 A1	20150416	LSGT	+FG	GRANT OR REGISTRATION	
NZ569949 A	20111028	LSPB	+	published / reissued	
NZ569949 A	20120224	LSGT	+PSEA	PATENT SEALED	
NZ569949 A	20120629	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	
NZ569949 A	20140131	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	TEXT : PATENT RENEWED FOR 3 YEARS UNTIL 25 JAN 2017 BY COMPUTER PACKAGES INC EFFECTIVE DATE : 20140128
NZ569949 A	20170127	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	TEXT : PATENT RENEWED FOR 1 YEAR UNTIL 25 JAN 2018 BY COMPUTER PACKAGES INC EFFECTIVE DATE : 20170118
NZ569949 A	20180126	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	TEXT : PATENT RENEWED FOR 1 YEAR UNTIL 25 JAN 2019 BY COMPUTER PACKAGES INC EFFECTIVE DATE : 20180118
NZ569949 A	20190125	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	TEXT : PATENT RENEWED FOR 1 YEAR UNTIL 25 JAN 2020 BY COMPUTER PACKAGES INC EFFECTIVE DATE : 20190118
PL2180844 T3	20180731	LSGT	+	granted / extensions (spc, cpc, pte)	
PT1976521 T	20150609	LSGT	+	granted / extensions (spc, cpc, pte)	
PT1976521 T	20270125	PEXP		Calculated Patent Term Expiry	
PT2180844 T	20180406	LSGT	+	granted / extensions (spc, cpc, pte)	
PT2180844 T	20280801	PEXP		Calculated Patent Term Expiry	
RU2008130763 A	20100227	LSPB	+	published / reissued	
RU2008130763 A	20101210	LSWD	-FA92	ACKNOWLEDGEMENT OF APPLICATION WITHDRAWN (LACK OF SUPPLEMENTARY MATERIALS SUBMITTED)	EFFECTIVE DATE : 20101021
RU2008130763 A	20110627	LSRE	+FZ9A	APPLICATION NOT	EFFECTIVE DATE : 20110420

				WITHDRAWN (CORRECTION OF THE NOTICE OF WITHDRAWAL)	
RU2432950 C2	20111110	LSGT	+	granted / extensions (spc, cpc, pte)	
RU2432950 C2	20270125	PEXP		Calculated Patent Term Expiry	
SI1976521 T1	20150630	LSGT	+	granted / extensions (spc, cpc, pte)	
SI1976521 T1	20270125	PEXP		Calculated Patent Term Expiry	
TR201504337 T4	20150521	LSGT	+	granted / extensions (spc, cpc, pte)	
TR201504337 T4	20270125	PEXP		Calculated Patent Term Expiry	
US10016403 BB	20180710	LSGT	+	granted / extensions (spc, cpc, pte)	
US10016403 BB	20180620	LSGT	PAT1	Patented Case	
US10016403 BB	20370404	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
US2007261695 AA	20071115	LSPB	+	published / reissued	
US2007261695 AA	20130626	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2009176834 AA	20090709	LSPB	+	published / reissued	
US2009176834 AA	20130626	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2013296368 AA	20131107	LSPB	+	published / reissued	
US2013296368 AA	20140822	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INSYS PHARMA, INC., ARIZONA OLDPARTY : CHANGE OF NAME; ASSIGNOR:INSYS THERAPEUTICS, INC.; REEL/FRAME:033596/0258 EFFECTIVE DATE : 20110120
US2013296368 AA	20140827	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2013327321 AA	20131212	LSPB	+	published / reissued	
US2013327321 AA	20140822	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INSYS PHARMA, INC., ARIZONA OLDPARTY : CHANGE OF NAME; ASSIGNOR:INSYS THERAPEUTICS, INC.; REEL/FRAME:033596/0258 EFFECTIVE DATE : 20110120
US2013327321 AA	20140827	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2014343100 AA	20141120	LSPB	+	published / reissued	
US2014343100 AA	20160203	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INSYS DEVELOPMENT COMPANY, INC., ARIZONA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:INSYS PHARMA, INC.; REEL/FRAME:037652/0049 EFFECTIVE DATE : 20160202
US2014343100 AA	20160302	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2014343288 AA	20141120	LSPB	+	published / reissued	
US2014343288 AA	20160106	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2016095846 AA	20160407	LSPB	+	published / reissued	
US2016095846 AA	20170419	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE

US2016193142 AA	20160707	LSPB	+	published / reissued	
US2016193142 AA	20170419	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2017202820 AA	20170720	LSPB	+	published / reissued	
US2017202820 AA	20171105	LSES	-NFA2	Non Final Action Counted, Not Yet Mailed	
US2017202820 AA	20171106	LSES	NFA1	Non Final Action Mailed	
US2017202820 AA	20180309	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2017202820 AA	20180611	LSFE	+PPR1	Publications -- Issue Fee Payment Received	
US2017202820 AA	20180612	LSFE	+PPV1	Publications -- Issue Fee Payment Verified	
US2017202820 AA	20180620	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2017239230 AA	20170824	LSPB	+	published / reissued	
US2017239230 AA	20171105	LSES	-NFA2	Non Final Action Counted, Not Yet Mailed	
US2017239230 AA	20171106	LSES	NFA1	Non Final Action Mailed	
US2018303813 AA	20181025	LSPB	+	published / reissued	
US2018303813 AA	20190531	LSES	NFA1	Non Final Action Mailed	
US8486972 BB	20130716	LSGT	+	granted / extensions (spc, cpc, pte)	
US8486972 BB	20070816	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INSYS THERAPEUTICS, INC., ARIZONA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:KOTTAYIL, S. GEORGE; GOSKONDA, VENKAT R.; ZHU, ZHONGYUAN; AND OTHERS; REEL/FRAME:019706/0295; SIGNING DATES FROM 20070801 TO 20070807
US8486972 BB	20070816	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INSYS THERAPEUTICS, INC., ARIZONA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:KOTTAYIL, S. GEORGE; GOSKONDA, VENKAT R.; ZHU, ZHONGYUAN; AND OTHERS; SIGNING DATES FROM 20070801 TO 20070807; REEL/FRAME:019706/0295
US8486972 BB	20130626	LSGT	PAT1	Patented Case	
US8486972 BB	20140822	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INSYS PHARMA, INC., ARIZONA OLDPARTY : CHANGE OF NAME; ASSIGNOR:INSYS THERAPEUTICS, INC.; REEL/FRAME:033596/0258 EFFECTIVE DATE : 20110120
US8486972 BB	20151006	LSOP	IPR	AIA TRIAL PROCEEDING FILED BEFORE THE PATENT AND APPEAL BOARD: INTER PARTES REVIEW	PARTYTYPE : OPPONENT OPPONENT : COALITION FOR AFFORDABLE DRUGS XI LLC,HAYMAN CREDE OLDPARTY : TRIAL NO: IPR2015-01800 EFFECTIVE DATE : 20150824
US8486972 BB	20160203	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INSYS DEVELOPMENT COMPANY, INC., ARIZONA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:INSYS PHARMA, INC.;

					REEL/FRAME:037652/0049 EFFECTIVE DATE : 20160202
US8486972 BB	20170116	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8486972 BB	20300427	PEXP		Calculated Patent Term Expiry (PTA 1188 days)	
US8486973 BB	20130716	LSGT	+	granted / extensions (spc, cpc, pte)	
US8486973 BB	20090331	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INSYS THERAPEUTICS, INC., ARIZONA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:KOTTAYIL, S. GEORGE; GOSKONDA, VENKAT R.; ZHU, ZHONGYUAN; AND OTHERS; REEL/FRAME:022475/0834; SIGNING DATES FROM 20090305 TO 20090328
US8486973 BB	20090331	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INSYS THERAPEUTICS, INC., ARIZONA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:KOTTAYIL, S. GEORGE; GOSKONDA, VENKAT R.; ZHU, ZHONGYUAN; AND OTHERS; SIGNING DATES FROM 20090305 TO 20090328; REEL/FRAME:022475/0834
US8486973 BB	20130626	LSGT	PAT1	Patented Case	
US8486973 BB	20140822	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INSYS PHARMA, INC., ARIZONA OLDPARTY : CHANGE OF NAME; ASSIGNOR:INSYS THERAPEUTICS, INC.; REEL/FRAME:033596/0258 EFFECTIVE DATE : 20110120
US8486973 BB	20160203	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INSYS DEVELOPMENT COMPANY, INC., ARIZONA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:INSYS PHARMA, INC.; REEL/FRAME:037652/0049 EFFECTIVE DATE : 20160202
US8486973 BB	20170116	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8486973 BB	20300606	PEXP		Calculated Patent Term Expiry (PTA 674 days and a terminal disclaimer has been filed)	
US8835459 BB	20140916	LSGT	+	granted / extensions (spc, cpc, pte)	
US8835459 BB	20131008	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INSYS THERAPEUTICS, INC., ARIZONA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:KOTTAYIL, S. GEORGE; GOSKONDA, VENKAT R.; ZHU, ZHONGYUAN; AND OTHERS; SIGNING DATES FROM 20090305 TO 20090328; REEL/FRAME:031363/0306
US8835459 BB	20140827	LSGT	PAT1	Patented Case	
US8835459 BB	20151013	LSOP	IPR	AIA TRIAL PROCEEDING FILED BEFORE THE PATENT AND APPEAL BOARD: INTER PARTES REVIEW	PARTYTYPE : OPPONENT OPPONENT : COALITION FOR AFFORDABLE DRUGS XI LLC,HAYMAN CREDE OLDPARTY : TRIAL NO: IPR2015-01797 EFFECTIVE DATE : 20150824
US8835459 BB	20160203	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INSYS DEVELOPMENT COMPANY, INC., ARIZONA OLDPARTY : ASSIGNMENT OF

					ASSIGNORS INTEREST; ASSIGNOR:INSYS PHARMA, INC.; REEL/FRAME:037652/0049 EFFECTIVE DATE : 20160202
US8835459 BB	20180316	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8835459 BB	20330515	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
US8835460 BB	20140916	LSGT	+	granted / extensions (spc, cpc, pte)	
US8835460 BB	20131008	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INSYS THERAPEUTICS, INC., ARIZONA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:KOTTAYIL, S. GEORGE; GOSKONDA, VENKAT R.; ZHU, ZHONGYUAN; AND OTHERS; SIGNING DATES FROM 20070801 TO 20070807; REEL/FRAME:031363/0380
US8835460 BB	20140827	LSGT	PAT1	Patented Case	
US8835460 BB	20141125	LSRE	CC	CERTIFICATE OF CORRECTION	
US8835460 BB	20151006	LSOP	IPR	AIA TRIAL PROCEEDING FILED BEFORE THE PATENT AND APPEAL BOARD: INTER PARTES REVIEW	PARTYTYPE : OPPONENT OPPONENT : COALITION FOR AFFORDABLE DRUGS XI LLC,HAYMAN CREDE OLDPARTY : TRIAL NO: IPR2015-01799 EFFECTIVE DATE : 20150824
US8835460 BB	20160203	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INSYS DEVELOPMENT COMPANY, INC., ARIZONA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:INSYS PHARMA, INC.; REEL/FRAME:037652/0049 EFFECTIVE DATE : 20160202
US8835460 BB	20180316	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8835460 BB	20330515	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
US9241935 BB	20160126	LSGT	+	granted / extensions (spc, cpc, pte)	
US9241935 BB	20140822	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INSYS THERAPEUTICS, INC., ARIZONA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:KOTTAYIL, S. GEORGE; GOSKONDA, VENKAT R.; ZHU, ZHONGYUAN; AND OTHERS; SIGNING DATES FROM 20090305 TO 20090328; REEL/FRAME:033594/0303
US9241935 BB	20140822	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INSYS PHARMA, INC., ARIZONA OLDPARTY : CHANGE OF NAME; ASSIGNOR:INSYS THERAPEUTICS, INC.; REEL/FRAME:033596/0258 EFFECTIVE DATE : 20110120
US9241935 BB	20151211	LSFE	+PPR1	Publications -- Issue Fee Payment Received	
US9241935 BB	20151217	LSFE	+PPV1	Publications -- Issue Fee Payment Verified	
US9241935 BB	20160106	LSGT	PAT1	Patented Case	
US9241935 BB	20160203	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INSYS DEVELOPMENT COMPANY, INC., ARIZONA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST;

					ASSIGNOR:INSYS PHARMA, INC.; REEL/FRAME:037652/0049 EFFECTIVE DATE : 20160202
US9241935 BB	20160426	LSRE	CC	CERTIFICATE OF CORRECTION	
US9241935 BB	20190726	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US9241935 BB	20340731	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
US9289387 BB	20160322	LSGT	+	granted / extensions (spc, cpc, pte)	
US9289387 BB	20140822	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INSYS THERAPEUTICS, INC., ARIZONA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:KOTTAYIL, S. GEORGE; GOSKONDA, VENKAT R.; PARIKH, NEHA; AND OTHERS; SIGNING DATES FROM 20070801 TO 20070807; REEL/FRAME:033594/0074
US9289387 BB	20140822	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INSYS PHARMA, INC., ARIZONA OLDPARTY : CHANGE OF NAME; ASSIGNOR:INSYS THERAPEUTICS, INC.; REEL/FRAME:033596/0258 EFFECTIVE DATE : 20110120
US9289387 BB	20151118	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US9289387 BB	20160302	LSGT	PAT1	Patented Case	
US9289387 BB	20340731	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
US9642797 BB	20170509	LSGT	+	granted / extensions (spc, cpc, pte)	
US9642797 BB	20160316	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INSYS THERAPEUTICS, INC., ARIZONA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:KOTTAYIL, S. GEORGE; GOSKONDA, VENKAT R.; PARIKH, NEHA; AND OTHERS; SIGNING DATES FROM 20070801 TO 20070807; REEL/FRAME:037994/0977
US9642797 BB	20160316	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INSYS DEVELOPMENT COMPANY, INC., ARIZONA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:INSYS PHARMA, INC.; REEL/FRAME:037995/0048 EFFECTIVE DATE : 20160202
US9642797 BB	20160316	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INSYS PHARMA, INC., ARIZONA OLDPARTY : CHANGE OF NAME; ASSIGNOR:INSYS THERAPEUTICS, INC.; REEL/FRAME:038106/0432 EFFECTIVE DATE : 20110120
US9642797 BB	20170419	LSGT	PAT1	Patented Case	
US9642797 BB	20360212	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
US9642844 BB	20170509	LSGT	+	granted / extensions (spc, cpc, pte)	
US9642844 BB	20151214	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INSYS THERAPEUTICS, INC., ARIZONA

					OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:KOTTAYIL, S. GEORGE; GOSKONDA, VENKAT R.; ZHU, ZHONGYUAN; AND OTHERS; SIGNING DATES FROM 20090305 TO 20090328; REEL/FRAME:037279/0409
US9642844 BB	20151214	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INSYS PHARMA, INC., ARIZONA OLDPARTY : CHANGE OF NAME; ASSIGNOR:INSYS THERAPEUTICS, INC.; REEL/FRAME:037279/0478 EFFECTIVE DATE : 20140822
US9642844 BB	20160203	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INSYS DEVELOPMENT COMPANY, INC., ARIZONA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:INSYS PHARMA, INC.; REEL/FRAME:037652/0049 EFFECTIVE DATE : 20160202
US9642844 BB	20170419	LSGT	PAT1	Patented Case	
US9642844 BB	20351211	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
WO07087431 A2	20070802	LSPB	+	published / reissued	
WO07087431 A2	20080717	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2637672 COUNTRY OF REF DOCUMENT : CA
WO07087431 A2	20080721	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2007762549 COUNTRY OF REF DOCUMENT : EP
WO07087431 A2	20080722	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2007208229 COUNTRY OF REF DOCUMENT : AU
WO07087431 A2	20080722	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 569949 COUNTRY OF REF DOCUMENT : NZ
WO07087431 A2	20080724	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2008552436 COUNTRY OF REF DOCUMENT : JP
WO07087431 A2	20080724	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : MX/A/2008/009522 COUNTRY OF REF DOCUMENT : MX
WO07087431 A2	20080725	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 200780003555.X COUNTRY OF REF DOCUMENT : CN
WO07087431 A2	20080726	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO07087431 A2	20080728	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 3043/KOLNP/2008 COUNTRY OF REF DOCUMENT : IN
WO07087431 A2	20080814	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2007208229 COUNTRY OF REF DOCUMENT : AU DATE OF REF DOCUMENT : 20070125 KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO07087431 A2	20080825	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2008130763 COUNTRY OF REF DOCUMENT : RU KIND CODE OF REF DOCUMENT :

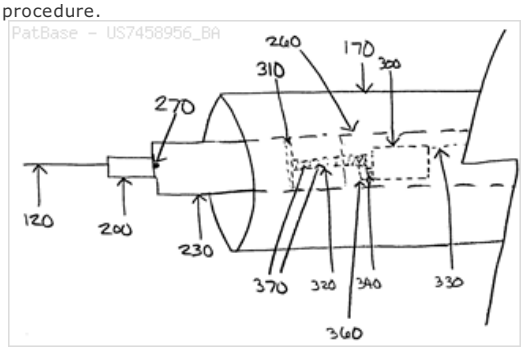
					A DESIGNATED STATE(S) :
WO07087431 A3	20110426	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : PI0707235 COUNTRY OF REF DOCUMENT : BR KIND CODE OF REF DOCUMENT : A2 DESIGNATED STATE(S) : EFFECTIVE DATE : 20080724
WO09017837 A2	20090205	LSPB	+	published / reissued	
WO09017837 A9	20100203	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO09017837 A9	20100301	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2008282743 COUNTRY OF REF DOCUMENT : AU
WO09017837 A9	20100301	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 583651 COUNTRY OF REF DOCUMENT : NZ
WO09017837 A9	20100301	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2008795007 COUNTRY OF REF DOCUMENT : EP
WO09017837 A9	20100302	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1434/DELNP/2010 COUNTRY OF REF DOCUMENT : IN
WO09017837 A9	20100308	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2698749 COUNTRY OF REF DOCUMENT : CA
WO09017837 A9	20100325	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2008282743 COUNTRY OF REF DOCUMENT : AU DATE OF REF DOCUMENT : 20080801 KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :

71) Family number: 15371111 (US7458956B)

Title: APPARATUS FOR DELIVERY OF CONTROLLED DOSES OF THERAPEUTIC DRUGS IN ENDOLUMINAL PROCEDURES

Abstract: An improved method and apparatus for administering drugs during an endoluminal procedure is disclosed. An embodiment of the present invention utilizes a catheter having distal and proximal ends and a drug reservoir located within the catheter to efficiently and accurately deliver drugs during an endoluminal procedure.

Classifications:
International (IPC 8-9): A61B17/34 A61M25/00 A61M5/178 A61M5/315 A61M5/32 (Advanced/Invention);
A61B17/34 (Advanced/Non-invention);
A61M25/00 A61M5/315 A61M5/32 (Core/Invention);
A61B17/34 (Core/Non-invention)
International (IPC 1-7): A61M5/315 A61M5/32
CPC: A61B17/3478 A61M25/0075 A61M25/0082 A61M25/0084 A61M2025/0089
European: A61M25/00T40 A61M25/00T40A A61M25/00T5 K61B17/34Q K61M25/00T20A K61M25/00T40A3
US: 604/158



Family:

Publication number	Publication date	Application number	Application date
AU200110802 A1	20010530	AU20010010802	20001012
AU200110802 A5	20010530	AU20010010802D	20001012
CA2390377 AA	20020507	CA20002390377	20001012
CA2390377 C	20090609	CA20002390377	20001012
DE60028818 D1	20060727	DE20006028818	20001012
DE60028818 D1	20060727	DE20006028818T	20001012
DE60028818 T2	20061130	DE20006028818T	20001012
DK1242134 T3	20060911	DK20000972088T	20001012
EP1242134 A1	20020925	EP20000972088	20001012
EP1242134 B1	20060614	EP20000972088	20001012
US7458956 BA	20081202	US19990432579	19991112
WO0136029 A1	20010525	WO2000US28142	20001012

Priority:

US19990432579 19991112 WO2000US28142 20001012

Probable Assignee: BOSTON SCIENTIFIC SCIMED INC

Assignee(s): (std): BOSTON SCIENT LTD ; BOSTON SCIENT SCIMED INC ; BOSTON SCIENTIFIC LTD ; SCIMED LIFE SYSTEMS INC

Assignee(s): BOSTON SCIENTIFIC LTD ST MICHAEL ; ADAMS RONALD DAVID ; BOSTON SCIENTIFIC SCIMED INC ; BOSTON SCIENTIFIC LIMITED

Inventor(s): (std): ADAMS DAVID ; ADAMS RONALD DAVID

Inventor(s): RONALD DAVID ADAMS

Agent(s): SHELSTON IP PTY LTD; SHELSTON IP; MCCARTHY TETRAULT LLP; KENYON AND KENYON LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CR CU CY CZ DE DK DM DZ EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AU200110802 A1	20010530	LSPB	+	published / reissued	
AU200110802 A5	20030417	LSLE	-MK1	APPLICATION LAPSED SECTION 142(2)(A) - NO REQUEST FOR EXAMINATION IN RELEVANT PERIOD	
CA2390377 AA	20020507	LSPB	+	published / reissued	
CA2390377 AA	20021127	LSES	+EEER	EXAMINATION REQUEST	
CA2390377 C	20090609	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2390377 C	20121012	LSLE	-MKLA	LAPSED	
CA2390377 C	20201012	PEXP		Calculated Patent Term Expiry	
DE60028818 D1	20070705	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE60028818 D1	20070705	LSGT	+8364	NO OPPOSITION DURING	

				TERM OF OPPOSITION	
DE60028818 T2	20061130	LSGT	+	granted / extensions (spc, cpc, pte)	
DE60028818 T2	20070705	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE60028818 T2	20201012	PEXP		Calculated Patent Term Expiry	
DK1242134 T3	20060911	LSGT	+	granted / extensions (spc, cpc, pte)	
DK1242134 T3	20201012	PEXP		Calculated Patent Term Expiry	
EP1242134 A1	20020925	LSPB	+	published / reissued	
EP1242134 A1	20020925	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20020531
EP1242134 A1	20050216	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20041230
EP1242134 A1	20060118	LSRE	RTI1	TITLE (CORRECTION)	TEXT : APPARATUS FOR DELIVERY OF CONTROLLED DOSES OF THERAPEUTIC DRUGS IN ENDOLUMINAL PROCEDURES
EP1242134 B1	20060614	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1242134 B1	20060614	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
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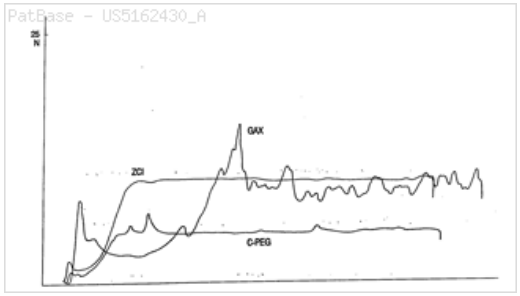
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US7458956 BA	20191112	PEXP		Calculated Patent Term Expiry	
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72) Family number: 29989118 (US5162430A)

Title: COLLAGEN-POLYMER CONJUGATES

Abstract: Collagen, particularly atelopeptide collagen, exhibits improved handling characteristics when chemically conjugated and/or crosslinked with a synthetic hydrophilic polymer.



Classifications:
International (IPC 8-9): A61F2/00 A61F2/06 A61F2/07 A61F2/14 A61K31/155 A61K31/165 A61K31/166 A61K31/33 A61K31/44 A61K31/47 A61K31/472 A61K31/715 A61K38/00 A61K38/17 A61K38/21 A61K38/22 A61K45/06 A61K47/42 A61K47/48 A61K9/22 A61K9/38 A61L15/22 A61L24/00 A61L24/08 A61L24/10 A61L26/00 A61L27/00 A61L27/18 A61L27/20 A61L27/24 A61L27/26 A61L27/34 A61L27/44 A61L27/54 A61L29/04 A61L29/06 A61L29/16 A61L31/00 A61L31/04 A61L31/10 A61L31/12 A61L31/16 A61P1/04 A61P1/16 A61P11/00 A61P13/08 A61P13/12 A61P17/00 A61P3/10 A61P35/00 A61P43/00 A61P7/02 A61P9/00 A61P9/02 A61P9/06 A61P9/08 A61P9/10 A61P9/12 C07C233/65 C07C277/00 C07C277/08 C07C279/18 C07C279/22 C07D207/337 C07D213/30 C07D213/56 C07D213/58 C07D215/14 C07D215/50 C07D217/16 C07D217/18 C07D217/24 C07D231/12 C07D263/32 C07D277/30 C07D307/54 C07D333/24 C07K1/113 C07K14/495 C07K14/52 C07K14/575 C07K14/78 C07K17/08 C08B37/00 C08B37/08 C08G65/32 C08G81/00 C08H1/00 C08H1/02 C08H1/06 C08L89/00 C08L89/06 C09J189/06 G02B1/04 (Advanced/Invention);
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A61F2/00 A61F2/06 A61K38/00 (Core/Non-invention)
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Probable Assignee: ANGIOTECH PHARMACEUTICALS US INC

Assignee(s): (std): ANGIOTECH BIOMATERIALS CORP ; COLLAGEN CORP ; BERG RICHARD A ; COHESION TECHNOLOGIES INC ; COHESION TECH INC ; HOECHST AG ; RHEE WOONZA M

Assignee(s): COLLAGEN A CORP OF DE CORP ; COLLAGEN CORP PALO ALTO ; COLLAGEN CORP PALO ALTO CALIF US ; COHESION TECHNOLOGIES INC PALO ALTO CALIF US ; BG SULZLE INC ; DELUSTRO FRANK ; BURNS RAMON A JR ; CHU GEORGE H ; CREDIT SUISSE AS COLLATERAL AGENT ; HOECHST 65929 FRANKFURT DE AG ; WELLS FARGO FOOTHILL LLC AGENT AS ; WELLS FARGO CAPITAL FINANCE LLC ADMINISTRATIVE AGE ; MANAN MEDICAL PRODUCTS INC ; MEDICAL DEVICE TECHNOLOGIES INC ; QUILL MEDICAL INC ; SURGICAL SPECIALTIES CORP ; FRIES LOUIS ; MICHAELS ALAN S ; WALLACE DONALD G ; RHEE WOONZA ; WELLS FARGO CAPITAL FINANCE LLC ADMINISTRATIVE AGENT AS ; SAKAI NAOMI ; HARNER CAROL F H ; DELUSTRO FRANK A ; SCHROEDER JACQUELINE A ; RAO PREMA R ; SCHOLZ WOLFGANG ; WEICHERT ANDREAS ; LANG HANS JOCHEN ; KLEEMANN HEINZ WERNER ; SCHWARK JAN ROBERT ; WELLS FARGO FOOTHILL LLC AS AGENT ; SURGICAL SPECIALTIES US INC CORP WAS KNOWN AS ANGIOTECH PHARMACEUTICALS US INC.. ; HOECHST GMBH ; COLLAGEN AESTHETICS INC ; COLLAGN CORP ; CREDIT SUISSE COLLATERAL AGENT AS ; ANGIOTECH AMERICA INC ; ANGIOTECH BIOCOATINGS CORP ; ANGIOTECH INT HOLDINGS CORP ; BENTZ HANNE ; ANGIOTECH PHARMACEUTICALS (US) INC ; ANGIOTECH PHARMACEUTICALS INC ; ANGIODEVICE INT GMBH ; ANGIOTECH PHARMACEUTICALS US INC ; ABLECO FINANCE LLC AGENT AS ; ABLECO FINANCE LLC AS AGENT ; ALBUS UDO ; AMERICAN MEDICAL INSTRUMENTS HOLDINGS INC ; ANGIODEVICE INT

Inventor(s): (std): HEINZ WERNER KLEEMANN ; WOONZA RHEE ; WOLFGANG SCHOLZ ; DRKLEEMANN HEINZ WERNER ; DONALD G WALLACE ; DRSCHWARK JAN ROBERT ; ANDREAS WEICHERT ; FRANK DELUSTRO ; DRLANG HANS JOCHEN ; LOUIS FRIES ; DRSCHOLZ WOLFGANG ; ALAN S MICHAELS ; KIMBERLY MCCULLOUGH ; WOONZA M RHEE ; RICHARD A BERG ; UDO ALBUS ; DRALBUS UDO ; SCHOLZ WOLFGANG AND ; JAN ROBERT SCHWARK ; RAMON A BURNS JR ; DRWEICHERT ANDREAS ; BURNS RAMON A ; RAMESH DAMANI ; HANNE BENTZ ; DR WEICHERT ANDREAS ; DR SCHWARK JAN ROBERT ; DR SCHOLZ WOLFGANG ; DR LANG HANS JOCHEN ; DR KLEEMANN HEINZ WERNER ; DR ALBUS UDO ; FREEMAN ABIGAL ; BURNS JR RAMON A ; SCHMIDT ROBERT R ; LANG HANS JOCHIN ; RICHIYAADO EI BAAGU ; UUNZA EMU RII ; JIYATSUKURIIN EI SHIYUROODAA ; NAOMI SAKAI ; KIYARORU EFU EICHI HAANAA ; FURANKU EI DERASUTORO ; JIYOOJI EICHI CHIYU ; PUREMA AARU RAO ; UOONZA EMU RII ; PURIMA AARU RAO ; UUDOO ARUBUSU ; BUORUFUGANGU SHIYORUTSU ; YANNROOBERUTO SHIYUBUARUKU ; HAINTSUUBUERUNAA KUREEMAN ; ANDOREEASU BUAIHIERUTO ; HANSUUYOOHEN RANGU ; RHEE WONZA M ; ALBUS UDO DR ; SCHOLZ WOLFGANG DR ; SCHWARK JAN ROBERT DR ; KLEEMANN HEINZ WERNER DR ; WEICHERT ANDREAS DR ; LANG HANS JOCHEN DR ; SCHROEDER JACQUELINE A ; SAKAI NAOMI ; HARNER CAROL F H ; DELUSTRO FRANK A ; CHU GEORGE H ; RAO PREMA R ; RHEE WOONZA M ; ALBUS UDO ; SCHOLZ WOLFGANG ; SCHWARK JAN ROBERT ; KLEEMANN HEINZ WERNER ; WEICHERT ANDREAS ; LANG HANS JOCHEN ; DAMANI RAMESH ; FREEMAN ABIGAIL ; SMESTAD THOMAS L ; BRAGA LARRY J ; TEFFT JACQUELINE A ; ROSENBLATT JOEL S ; MCCULLOUGH KIMBERLY ; BERG RICHARD A ; BENTZ HANNE ; DELUSTRO FRANK ; FRIES LOUIS ; BURNS RAMON A JR ; MICHAELS ALAN S ; WALLACE DONALD G ; RHEE WOONZA ; HANS JOCHEN LANG ; BURNS RAMON ; MICHAELS ALAN ; WALLACE DONALD

Inventor(s): HARNER CAROL FH ; BAANZU JUNIA RAMON EE ; FURAIZU RUISU ; MAIKERUZU ARAN ESU ; BENTSU HANNU ; DERASUTORO FURANKU ; UOORESU DONARUDO JII ; RII UNNZA ; DELUSTRO FRANK BELMONT CA 94002 US ; FRIES LOUIS LOS ALTOS CA 94002 US ; RHEE WOONZA PALO ALTO CA 94306 US ; BENTZ HANNE NEWARK CA 94560 US

Agent(s): FB RICE; FB RICE PTY LTD; WATERMARK PATENT AND TRADE MARKS ATTORNEYS; WATERMARK INTELLECTUAL PROPERTY PTY LTD; BATTISON WILLIAMS DUPUIS; BERESKIN AND PARR; ADE AND CO; EITAN PEARL LATZER AND COHEN ZEDEK

Designated states: AT AU BE CH DE DK ES FR GB GR IE IT JP LI LU MC NL PT SE

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT157351 E	19970915	LSGT	+	granted / extensions	

				(spc, cpc, pte)	
AT157351 E	20071115	LSLE	-REN	CEASED DUE TO NON-PAYMENT OF THE ANNUAL FEE	
AT157351 E	20140216	PEXP		Calculated Patent Term Expiry	
AT168708 E	19980815	LSGT	+	granted / extensions (spc, cpc, pte)	
AT168708 E	19991215	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	
AT168708 E	20020815	LSLE	-REN	CEASED DUE TO NON-PAYMENT OF THE ANNUAL FEE	
AT168708 E	20091121	PEXP		Calculated Patent Term Expiry	
AT197058 E	20001115	LSGT	+	granted / extensions (spc, cpc, pte)	
AT197058 E	20010415	LSLE	-RER	CEASED AS TO PARAGRAPH 5 LIT. 3 LAW INTRODUCING PATENT TREATIES	
AT197058 E	20150316	PEXP		Calculated Patent Term Expiry	
AT255918 E	20031215	LSGT	+	granted / extensions (spc, cpc, pte)	
AT255918 E	20040715	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	REF DOCUMENT NUMBER : 0747066 COUNTRY OF REF DOCUMENT : EP
AT255918 E	20060715	LSAS	EEFA	CHANGE OF THE COMPANY NAME	
AT255918 E	20160529	PEXP		Calculated Patent Term Expiry	
AU198946609 A1	19900612	LSPB	+	published / reissued	
AU199346620 A1	19940131	LSPB	+	published / reissued	
AU199455229 A1	19940825	LSPB	+	published / reissued	
AU199515075 A1	19951109	LSPB	+	published / reissued	
AU638687 B2	19930708	LSGT	+	granted / extensions (spc, cpc, pte)	
AU638687 B2	20010823	LSAS	PC	ASSIGNMENT REGISTERED	PARTYTYPE : OWNER OWNER : COHESION TECHNOLOGIES, INC. OLDPARTY : FORMER OWNER WAS: COLLAGEN CORPORATION
AU638687 B2	20091121	PEXP		Calculated Patent Term Expiry	
AU668265 B2	19960426	LSGT	+	granted / extensions (spc, cpc, pte)	
AU668265 B2	20140218	PEXP		Calculated Patent Term Expiry	
AU677789 B2	19970508	LSGT	+	granted / extensions (spc, cpc, pte)	
AU677789 B2	20130701	PEXP		Calculated Patent Term Expiry	
AU698233 B2	19981029	LSGT	+	granted / extensions (spc, cpc, pte)	
AU698233 B2	20011004	LSAS	PC	ASSIGNMENT REGISTERED	PARTYTYPE : OWNER OWNER : COHESION TECHNOLOGIES, INC. OLDPARTY : FORMER OWNER WAS: COLLAGEN CORPORATION
AU698233 B2	20150324	PEXP		Calculated Patent Term Expiry	
CA2003538 AA	19900521	LSPB	+	published / reissued	
CA2003538 AA	19911211	LSES	+EEER	EXAMINATION REQUEST	
CA2003538 C	20010206	LSGT	+	granted / extensions (spc, cpc, pte)	

CA2003538 C	20091121	LSLE	-MKLA	LAPSED	
CA2003538 C	20121202	LSRE	+MKEC	EXPIRY (CORRECTION)	
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CA2115967 AA	19940821	LSPB	+	published / reissued	
CA2115967 AA	20010216	LSES	+EEER	EXAMINATION REQUEST	
CA2115967 AA	20070824	LSLE	-FZDE	DEAD	
CA2134744 AA	19950504	LSPB	+	published / reissued	
CA2134744 AA	19970122	LSES	+EEER	EXAMINATION REQUEST	
CA2134744 AA	20000719	LSLE	-FZDE	DEAD	
CA2134745 AA	19950504	LSPB	+	published / reissued	
CA2134745 AA	20001031	LSLE	-FZDE	DEAD	
CA2143923 AA	19951103	LSPB	+	published / reissued	
CA2143923 AA	20030303	LSLE	-FZDE	DEAD	
CA2172906 AA	19961208	LSPB	+	published / reissued	
CA2172906 AA	20030520	LSES	+EEER	EXAMINATION REQUEST	
CA2172906 C	20100323	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2172906 C	20160531	LSLE	-MKEX	EXPIRY	EFFECTIVE DATE : 20160329
CA2172906 C	20160328	PEXP		Calculated Patent Term Expiry	
DE59403818 D1	19980924	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE68928754 D1	19981022	LSAS	8327	CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER	PARTYTYPE : OWNER OWNER : COHESION TECHNOLOGIES, INC., PALO ALTO, CALIF., US
DE68928754 D1	19990819	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
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DE68928754 D1	20080214	LSAS	8327	CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER	PARTYTYPE : OWNER OWNER : ANGIODEVICE INTERNATIONAL GMBH, ZUG, CH
DE68928754 D1	20090917	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
DE68928754 T2	19990114	LSGT	+	granted / extensions (spc, cpc, pte)	
DE69519124 D1	20010726	LSAS	8327	CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER	PARTYTYPE : OWNER OWNER : COHESION TECHNOLOGIES, INC., PALO ALTO, CALIF., US
DE69519124 D1	20060524	LSAS	8327	CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOMATERIALS CORP. (N.D.GES.D.STAATES DEL
DE69519124 D1	20080124	LSAS	8327	CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., (N.D.GES, US
DE69519124 D1	20080320	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE69519124 D1	20140318	LSAS	R081	CHANGE OF APPLICANT/PATENTEE	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS, INC., VANCOUVER, BRITISH COLUMBIA, CA

					OLDPARTY : ANGIOTECH PHARMACEUTICALS (US), INC., (N.D.GES.D.STAATES DELAWARE), NORTH BEND, WASH., US
DE69519124 D1	20150316	LSLE	-R071	EXPIRY OF RIGHT	
DE69519124 T2	20010517	LSGT	+	granted / extensions (spc, cpc, pte)	
DE69519124 T2	20150316	PEXP		Calculated Patent Term Expiry	
DE69630990 D1	20050203	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE69630990 D1	20060524	LSAS	8327	CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOMATERIALS CORP. (N.D.GES.D.STAATES DEL
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DE69630990 D1	20160529	LSLE	-R071	EXPIRY OF RIGHT	
DE69630990 T2	20041230	LSGT	+	granted / extensions (spc, cpc, pte)	
DE69630990 T2	20160529	PEXP		Calculated Patent Term Expiry	
DK0612723 T3	19980330	LSGT	+	granted / extensions (spc, cpc, pte)	
DK0612723 T3	20140216	PEXP		Calculated Patent Term Expiry	
EP0444157 A1	19910904	LSPB	+	published / reissued	
EP0444157 A1	19910904	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19910419
EP0444157 A1	19911113	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	EFFECTIVE DATE : 19910923
EP0444157 A1	19931110	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 19930923
EP0444157 A1	19980731	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP0444157 A1	19980916	LSAS	RAP2	RIGHTS OF A PATENT TRANSFERRED	PARTYTYPE : OWNER OWNER : COHESION TECHNOLOGIES, INC.
EP0444157 A1	19981016	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2119743 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP0444157 A1	19990714	LSGT	+26N	NO OPPOSITION FILED	
EP0444157 A1	20000929	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20000929 YEAR OF FEE PAYMENT : 12
EP0444157 A1	20001003	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20001003 YEAR OF FEE PAYMENT : 12
EP0444157 A1	20001103	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20001103 YEAR OF FEE PAYMENT : 12
EP0444157 A1	20001121	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20001121 YEAR OF FEE PAYMENT : 12

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EP0444157 A1	20011121	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20011121
EP0444157 A1	20011122	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20011122
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EP0444157 A1	20020702	LSLE	-EUG	SE: EUROPEAN PATENT HAS LAPSED	REF COUNTRY CODE : EP TEXT : 90901254.4
EP0444157 A1	20020715	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP0444157 A1	20020801	LSLE	-NLV4	NL: LAPSED OR ANULLED DUE TO NON-PAYMENT OF THE ANNUAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20020601

EP0444157 A1	20040401	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20021213
EP0444157 A1	20060616	LSAS	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : CD
EP0444157 A1	20080229	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20071129 YEAR OF FEE PAYMENT : 19
EP0444157 A1	20080430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20071119 YEAR OF FEE PAYMENT : 19
EP0444157 A1	20080430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20071128 YEAR OF FEE PAYMENT : 19
EP0444157 A1	20080530	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20071221 YEAR OF FEE PAYMENT : 19
EP0444157 A1	20090729	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20081121
EP0444157 A1	20090831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20081121
EP0444157 A1	20090911	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20090731
EP0444157 A1	20091030	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20090603
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EP0444157 B1	19980722	LSGT	+	granted / extensions (spc, cpc, pte)	
EP0444157 B1	20091121	PEXP		Calculated Patent Term Expiry	
EP0612723 A1	19940831	LSPB	+	published / reissued	
EP0612723 A1	19950426	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19950228
EP0612723 A1	19960626	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 19960513
EP0612723 B1	19970827	LSGT	+	granted / extensions (spc, cpc, pte)	
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EP0612723 B1	19971201	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2107698 COUNTRY OF REF DOCUMENT : ES

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EP0612723 B1	19980819	LSGT	+26N	NO OPPOSITION FILED	
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EP0612723 B1	20051216	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20051216 YEAR OF FEE PAYMENT : 13
EP0612723 B1	20051221	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20051221 YEAR OF FEE PAYMENT : 13
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EP0612723 B1	20060112	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20060112 YEAR OF FEE PAYMENT : 13
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EP0612723 B1	20060120	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20060120 YEAR OF FEE PAYMENT : 13
EP0612723 B1	20060215	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20060215 YEAR OF FEE PAYMENT : 13
EP0612723 B1	20070217	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20070217
EP0612723 B1	20070228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20070228
EP0612723 B1	20070228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM	COUNTRY OF REF DOCUMENT : LI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20070228

				NATIONAL OFFICE TO EPO]	
EP0612723 B1	20070816	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20070816
EP0612723 B1	20070903	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : PT REF LEGAL EVENT CODE : MM4A TEXT : LAPSE DUE TO NON-PAYMENT OF FEES EFFECTIVE DATE : 20070816
EP0612723 B1	20071015	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DK REF LEGAL EVENT CODE : EBP
EP0612723 B1	20071015	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP0612723 B1	20071023	LSLE	-EUG	SE: EUROPEAN PATENT HAS LAPSED	REF COUNTRY CODE : EP
EP0612723 B1	20071101	LSLE	-NLV4	NL: LAPSED OR ANULLED DUE TO NON-PAYMENT OF THE ANNUAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20070901
EP0612723 B1	20071124	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20070216
EP0612723 B1	20071128	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP0612723 B1	20071231	LSLE	-BERE	BE: LAPSED	PARTYTYPE : OWNER REF COUNTRY CODE : EP OWNER : *HOECHST A.G. EFFECTIVE DATE : 20070228
EP0612723 B1	20080102	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20070228
EP0612723 B1	20080131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20070228
EP0612723 B1	20080131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20070216
EP0612723 B1	20080131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20070901
EP0612723 B1	20080516	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20070217
EP0612723 B1	20080731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20070217
EP0612723 B1	20081031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20070904

				NATIONAL OFFICE TO EPO]	
EP0612723 B1	20090831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20070216
EP0612723 B1	20110531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20110218 YEAR OF FEE PAYMENT : 18
EP0612723 B1	20110729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20110216 YEAR OF FEE PAYMENT : 18
EP0612723 B1	20120531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20120229 YEAR OF FEE PAYMENT : 19
EP0612723 B1	20121024	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20120216
EP0612723 B1	20121123	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20121031
EP0612723 B1	20130131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120216
EP0612723 B1	20130131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120229
EP0612723 B1	20131212	LSDW	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R119 REF DOCUMENT NUMBER : 59403818 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20130903
EP0612723 B1	20140131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20130903
EP0612723 B1	20140216	PEXP		Calculated Patent Term Expiry	
EP0648239 A1	19950419	LSPB	+	published / reissued	
EP0648239 A1	19950419	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19950109
EP0648239 A4	19950927	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	
EP0648239 A4	19960313	LSES	+RA4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED (CORRECTED)	EFFECTIVE DATE : 19960119
EP0648239 A4	19970820	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 19970707
EP0648239 A4	19980722	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 19980120
EP0656214 A1	19950607	LSPB	+	published / reissued	
EP0656214 A1	19950927	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19950728
EP0656214 A1	19981014	LSES	+17Q	FIRST EXAMINATION	EFFECTIVE DATE : 19980831

				REPORT DESPATCHED	
EP0656214 A1	19991103	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 19990511
EP0656215 A1	19950607	LSPB	+	published / reissued	
EP0656215 A1	19950927	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19950728
EP0656215 A1	19981014	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 19980831
EP0656215 A1	19991103	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 19990311
EP0680990 A1	19951108	LSPB	+	published / reissued	
EP0680990 A1	19960131	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19951130
EP0680990 A1	19960814	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 19960702
EP0680990 A1	20001018	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20001018
EP0680990 A1	20001018	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES NOTIFICATIONOFLAPSE : THE PATENT HAS BEEN ANNULLED BY A DECISION OF A NATIONAL AUTHORITY LAPSED DATE : 20001018
EP0680990 A1	20001018	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20001018
EP0680990 A1	20010314	LSAS	RAP2	RIGHTS OF A PATENT TRANSFERRED	PARTYTYPE : OWNER OWNER : COHESION TECHNOLOGIES, INC.
EP0680990 A1	20011004	LSGT	+26N	NO OPPOSITION FILED	
EP0680990 A1	20060505	LSAS	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : CD
EP0680990 A1	20140424	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : DE OWNER : ANGIOTECH PHARMACEUTICALS, INC., CA REF LEGAL EVENT CODE : R081 REF DOCUMENT NUMBER : 69519124 COUNTRY OF REF DOCUMENT : DE OLDPARTY : FORMER OWNER: ANGIOTECH PHARMACEUTICALS (US), INC., (N.D.GES.D.STAATES DELAWARE), NORTH BEND, US EFFECTIVE DATE : 20140318
EP0680990 A1	20140424	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : DE OWNER : ANGIOTECH PHARMACEUTICALS, INC., VANCOUVER, CA REF LEGAL EVENT CODE : R081 REF DOCUMENT NUMBER : 69519124 COUNTRY OF REF DOCUMENT : DE OLDPARTY : FORMER OWNER: ANGIOTECH PHARMACEUTICALS (US), INC., (N.D.GES.D.STAATES DELAWARE), NORTH BEND, WASH., US EFFECTIVE DATE : 20140318
EP0680990 A1	20140530	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20140317 YEAR OF FEE PAYMENT : 20
EP0680990 A1	20140630	LSFE	+PGFP	ANNUAL FEE PAID TO	COUNTRY OF REF DOCUMENT : GB

				NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	PAYMENT DATE : 20140327 YEAR OF FEE PAYMENT : 20
EP0680990 A1	20140829	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20140327 YEAR OF FEE PAYMENT : 20
EP0680990 A1	20150316	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R071 REF DOCUMENT NUMBER : 69519124 COUNTRY OF REF DOCUMENT : DE
EP0680990 A1	20150317	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R071 REF DOCUMENT NUMBER : 69519124 COUNTRY OF REF DOCUMENT : DE
EP0680990 A1	20150408	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : PE20 EXPIRY DATE : 20150315
EP0680990 A1	20150529	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF EXPIRATION OF PROTECTION LAPSED DATE : 20150315
EP0680990 B1	20001018	LSGT	+	granted / extensions (spc, cpc, pte)	
EP0680990 B1	20150315	PEXP		Calculated Patent Term Expiry	
EP0680990 B1	20150316	PEXP		Calculated Patent Term Expiry	
EP0697218 A2	19960221	LSPB	+	published / reissued	
EP0697218 A3	19970122	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19961129
EP0697218 A3	19991103	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 19990915
EP0697218 A3	20001115	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20000526
EP0747066 A2	19961211	LSPB	+	published / reissued	
EP0747066 A2	19980121	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19971121
EP0747066 A2	20010207	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : COHESION TECHNOLOGIES, INC.
EP0747066 A2	20010530	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20010417
EP0747066 A2	20031210	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP0747066 A2	20031215	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP0747066 A2	20040716	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2211923 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP0747066 A2	20041201	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20040913
EP0747066 A2	20060501	LSAS	NLS	NL: ASSIGNMENTS OF EP-PATENTS	PARTYTYPE : OWNER REF COUNTRY CODE : EP OWNER : ANGIOTECH BIOMATERIALS CORP. EFFECTIVE DATE : 20060308
EP0747066 A2	20060505	LSAS	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : CD

EP0747066 A2	20060515	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : CH OWNER : ANGIOTECH BIOMATERIALS CORP. REF LEGAL EVENT CODE : PFA OLDPARTY : COHESION TECHNOLOGIES, INC.#2500 FABER PLACE#PALO ALTO, CA 94303 (US) -TRANSFER TO- ANGIOTECH BIOMATERIALS CORP.#2500 FABER PLACE#PALO ALTO, CA 94303 (US)
EP0747066 A2	20060816	LSAS	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : PC2A
EP0747066 A2	20150519	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 20
EP0747066 A2	20150731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20150527 YEAR OF FEE PAYMENT : 20
EP0747066 A2	20150731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20150527 YEAR OF FEE PAYMENT : 20
EP0747066 A2	20150731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20150526 YEAR OF FEE PAYMENT : 20
EP0747066 A2	20150731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20150528 YEAR OF FEE PAYMENT : 20
EP0747066 A2	20150831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20150505 YEAR OF FEE PAYMENT : 20
EP0747066 A2	20150831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20150519 YEAR OF FEE PAYMENT : 20
EP0747066 A2	20150831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20150527 YEAR OF FEE PAYMENT : 20
EP0747066 A2	20150831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20150526 YEAR OF FEE PAYMENT : 20
EP0747066 A2	20160529	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R071 REF DOCUMENT NUMBER : 69630990 COUNTRY OF REF DOCUMENT : DE
EP0747066 A2	20160531	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP0747066 A2	20160622	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : PE20 EXPIRY DATE : 20160528
EP0747066 A2	20160715	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MK07 REF DOCUMENT NUMBER : 255918 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20160529
EP0747066 A2	20160729	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT	COUNTRY OF REF DOCUMENT : GB NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF EXPIRATION OF PROTECTION

				INFORMATION FROM NATIONAL OFFICE TO EPO]	LAPSED DATE : 20160528
EP0747066 A2	20160905	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20160905
EP0747066 A2	20161130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF EXPIRATION OF PROTECTION LAPSED DATE : 20160530
EP0747066 B1	20031210	LSGT	+	granted / extensions (spc, cpc, pte)	
EP0747066 B1	20160528	PEXP		Calculated Patent Term Expiry	
EP0747066 B1	20160529	PEXP		Calculated Patent Term Expiry	
ES2107698 T3	19971201	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2107698 T3	19971201	LSGT	+FG2A	DEFINITIVE PROTECTION	REF DOCUMENT NUMBER : 612723 COUNTRY OF REF DOCUMENT : ES
ES2107698 T3	20140216	PEXP		Calculated Patent Term Expiry	
ES2119743 T3	19981016	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2119743 T3	19981016	LSGT	+FG2A	DEFINITIVE PROTECTION	REF DOCUMENT NUMBER : 444157 COUNTRY OF REF DOCUMENT : ES
ES2119743 T3	20091121	PEXP		Calculated Patent Term Expiry	
ES2211923 T3	20040716	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2211923 T3	20160529	PEXP		Calculated Patent Term Expiry	
FI114467 B	20041029	LSPB	+	published / reissued	
FI114467 B	20041029	LSGT	+FG	PATENT GRANTED	REF DOCUMENT NUMBER : 114467 COUNTRY OF REF DOCUMENT : FI
FI114467 B	20140217	PEXP		Calculated Patent Term Expiry	
FI940756 A	19940821	LSPB	+	published / reissued	
GR3024855 T3	19980130	LSGT	+	granted / extensions (spc, cpc, pte)	
GR3024855 T3	20170924	PEXP		Calculated Patent Term Expiry	
HU218915 B	20001228	LSGT	+	granted / extensions (spc, cpc, pte)	
HU218915 B	20140218	PEXP		Calculated Patent Term Expiry	
HU70535 A2	19951030	LSPB	+	published / reissued	
IL108697 A1	20000716	LSPB	+	published / reissued	
IL108697 A1	20001121	LSGT	+FF	PATENT GRANTED	
IL108697 A1	20010430	LSFE	+KB	PATENT RENEWED	
IL108697 A1	20040512	LSFE	+KB	PATENT RENEWED	
IL108697 A1	20090211	LSLE	-MM9K	PATENT NOT IN FORCE DUE TO NON-PAYMENT OF RENEWAL FEES	
IL108697 A1	20100414	LSLE	-MM9K	PATENT NOT IN FORCE DUE TO NON-PAYMENT OF RENEWAL FEES	
JP2004189755 A2	20040708	LSPB	+	published / reissued	
JP2004189755 A2	20040325	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20040324
JP2004189755 A2	20051220	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131

					EFFECTIVE DATE : 20051220
JP2004189755 A2	20060321	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20060320
JP2004189755 A2	20060407	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2004189755 A2	20060418	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20060418
JP2004189755 A2	20060518	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20060512
JP2004189755 A2	20060519	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP2005320552 A2	20051117	LSPB	+	published / reissued	
JP2005320552 A2	20060807	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20060804
JP2005320552 A2	20070203	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20070202
JP2005320552 A2	20070903	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20070831
JP2005320552 A2	20080709	LSWD	-A761	WRITTEN WITHDRAWAL OF APPLICATION	TEXT : JAPANESE INTERMEDIATE CODE: A761 EFFECTIVE DATE : 20080708
JP2006257428 A2	20060928	LSPB	+	published / reissued	
JP2006257428 A2	20080328	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20080327
JP2006257428 A2	20080625	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20080624
JP2006257428 A2	20081015	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2006257428 A2	20081020	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20081017
JP2006257428 A2	20081023	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01
JP2006257428 A2	20081106	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20081030
JP2006257428 A2	20081107	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP2006257428 A2	20081107	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP2007296401 A2	20071115	LSPB	+	published / reissued	
JP2007296401 A2	20070824	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20070822
JP2007296401 A2	20110201	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131

					EFFECTIVE DATE : 20110131
JP2007296401 A2	20110730	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20110729
JP2007296401 A2	20111102	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20111101
JP2007296401 A2	20120112	LSWD	-A761	WRITTEN WITHDRAWAL OF APPLICATION	TEXT : JAPANESE INTERMEDIATE CODE: A761 EFFECTIVE DATE : 20120111
JP2008110229 A2	20080515	LSPB	+	published / reissued	
JP2008110229 A2	20110401	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20110331
JP2008110229 A2	20110623	LSWD	-A761	WRITTEN WITHDRAWAL OF APPLICATION	TEXT : JAPANESE INTERMEDIATE CODE: A761 EFFECTIVE DATE : 20110622
JP2505312 B2	19960605	LSGT	+	granted / extensions (spc, cpc, pte)	
JP2505312 B2	20091121	PEXP		Calculated Patent Term Expiry	
JP3554352 B2	20040818	LSGT	+	granted / extensions (spc, cpc, pte)	
JP3554352 B2	20070515	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP3554352 B2	20080507	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 5
JP3554352 B2	20090507	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 6
JP3554352 B2	20100511	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 7
JP3554352 B2	20110428	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 7
JP3554352 B2	20110510	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 8
JP3554352 B2	20120515	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 9
JP3554352 B2	20130514	LSLE	-LAPS	CANCELLATION BECAUSE OF NO PAYMENT OF ANNUAL FEES	
JP3554352 B2	20140218	PEXP		Calculated Patent Term Expiry	
JP3806431 B2	20060809	LSGT	+	granted / extensions (spc, cpc, pte)	
JP3806431 B2	20090507	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 4
JP3806431 B2	20100511	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 5
JP3806431 B2	20110428	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 5
JP3806431 B2	20110510	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS	YEAR OF FEE PAYMENT : 6

				RENEWAL DATE OF DATABASE)	
JP3806431 B2	20120515	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 7
JP3806431 B2	20130519	LSLE	-LAPS	CANCELLATION BECAUSE OF NO PAYMENT OF ANNUAL FEES	
JP3806431 B2	20240324	PEXP		Calculated Patent Term Expiry	
JP4213723 B2	20090121	LSGT	+	granted / extensions (spc, cpc, pte)	
JP4213723 B2	20081104	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP4213723 B2	20111027	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4213723 B2	20111101	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 4
JP4213723 B2	20121101	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 4
JP4213723 B2	20121106	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 5
JP4213723 B2	20131031	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4213723 B2	20131105	LSFE	+R250	年金領収書, 年金領収書 (分納) (Pension receipt, annuity receipt (scheduled))	
JP4213723 B2	20141030	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4213723 B2	20141104	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4213723 B2	20150427	LSLE	-EXPY	CANCELLATION BECAUSE OF COMPLETION OF TERM	
JP4213723 B2	20260322	PEXP		Calculated Patent Term Expiry	
JP4502027 T2	19920409	LSPB	+	published / reissued	
JP4831848 B2	20111207	LSGT	+	granted / extensions (spc, cpc, pte)	
JP4831848 B2	20110927	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP4831848 B2	20120516	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP4831848 B2	20120516	LSAS	S111	REQUEST FOR CHANGE OF OWNERSHIP OR PART OF OWNERSHIP	TEXT : JAPANESE INTERMEDIATE CODE: R313113
JP4831848 B2	20120530	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP4831848 B2	20120530	LSAS	R350	WRITTEN NOTIFICATION OF REGISTRATION OF TRANSFER	TEXT : JAPANESE INTERMEDIATE CODE: R350
JP4831848 B2	20140911	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4831848 B2	20140916	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4831848 B2	20150910	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4831848 B2	20151001	LSLE	R280	納付書補充指令書 (Payment refilling order form)	

JP4831848 B2	20151008	LSFE	R21	特許料納付書 (補充) (Patent fee payment form (replenishment))	
JP4831848 B2	20151020	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4831848 B2	20160531	LSLE	-EXPY	CANCELLATION BECAUSE OF COMPLETION OF TERM	
JP4831848 B2	20160531	PEXP		Calculated Patent Term Expiry	
JP6256291 A2	19940913	LSPB	+	published / reissued	
JP6256291 A2	20040325	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20040324
JP6256291 A2	20040405	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP6256291 A2	20040413	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20040413
JP6256291 A2	20040513	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20040507
JP6256291 A2	20040514	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP7278203 A2	19951024	LSPB	+	published / reissued	
JP7278203 A2	20020115	LSWD	-A300	WITHDRAWAL OF APPLICATION BECAUSE OF NO REQUEST FOR EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A300 EFFECTIVE DATE : 20020115
JP7278312 A2	19951024	LSPB	+	published / reissued	
JP7278312 A2	20020115	LSWD	-A300	WITHDRAWAL OF APPLICATION BECAUSE OF NO REQUEST FOR EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A300 EFFECTIVE DATE : 20020115
JP8053548 A2	19960227	LSPB	+	published / reissued	
JP8053548 A2	20050121	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20050120
JP8053548 A2	20050720	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20050719
JP8053548 A2	20051125	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20051124
JP8053548 A2	20060323	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20060322
JP8053548 A2	20060407	LSAL	A911	TRANSFER OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A911 EFFECTIVE DATE : 20060406
JP8053548 A2	20060522	LSAL	-A912	REMOVAL OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A912 EFFECTIVE DATE : 20060519
JP8053548 A2	20070113	LSWD	-A761	WRITTEN WITHDRAWAL OF APPLICATION	TEXT : JAPANESE INTERMEDIATE CODE: A761 EFFECTIVE DATE : 20070112
JP8502082 T2	19960305	LSPB	+	published / reissued	
JP9099052 A2	19970415	LSPB	+	published / reissued	
JP9099052 A2	20070223	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20070222

JP9099052 A2	20070823	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20070822
JP9099052 A2	20080805	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20080804
JP9099052 A2	20081129	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20081128
JP9099052 A2	20081209	LSAL	A911	TRANSFER OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A911 EFFECTIVE DATE : 20081208
JP9099052 A2	20090223	LSAL	-A912	REMOVAL OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A912 EFFECTIVE DATE : 20090220
JP9099052 A2	20110915	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01
JP9099052 A2	20110929	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20110920
JP9099052 A2	20110930	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP9099052 A2	20111003	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
NO300322 B1	19970512	LSGT	+	granted / extensions (spc, cpc, pte)	
NO300322 B1	20140218	PEXP		Calculated Patent Term Expiry	
NO940563 A	19940822	LSPB	+	published / reissued	
NZ250919 A	19960126	LSPB	+	published / reissued	
NZ250919 A	20040130	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	
TW420659 B	20010201	LSGT	+	granted / extensions (spc, cpc, pte)	
TW420659 B	20010620	LSGT	+GD4A	ISSUE OF PATENT CERTIFICATE FOR GRANTED INVENTION PATENT	
TW420659 B	20140401	PEXP		Calculated Patent Term Expiry	
US5162430 A	19921110	LSGT	+	granted / extensions (spc, cpc, pte)	
US5162430 A	19900208	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLAGEN CORPORATION, A CORP. OF DE, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNORS:RHEE, WOONZA; WALLACE, DONALD G.; MICHAELS, ALAN S.; AND OTHERS; REEL/FRAME:005235/0328; SIGNING DATES FROM 19891111 TO 19891214
US5162430 A	19921028	LSGT	PAT1	Patented Case	
US5162430 A	19921028	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5162430 A	19960510	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5162430 A	19981224	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COHESION TECHNOLOGIES, INC., CALIFORNIA

					OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:009648/0228 EFFECTIVE DATE : 19981104
US5162430 A	20000428	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5162430 A	20040423	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLAGEN AESTHETICS, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:014615/0778 EFFECTIVE DATE : 19980809
US5162430 A	20040510	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5162430 A	20050621	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOMATERIALS CORP., WASHINGTON OLDPARTY : CHANGE OF NAME; ASSIGNOR:COHESION TECHNOLOGIES, INC.; REEL/FRAME:016369/0932 EFFECTIVE DATE : 20041221
US5162430 A	20060313	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIODEVICE INTERNATIONAL GMBH, SWITZERLAND OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ANGIOTECH BIOMATERIALS CORPORATION; REEL/FRAME:017299/0949 EFFECTIVE DATE : 20051102
US5162430 A	20091114	PEXP		Calculated Patent Term Expiry	
US5264214 A	19931123	LSGT	+	granted / extensions (spc, cpc, pte)	
US5264214 A	19931112	LSGT	PAT1	Patented Case	
US5264214 A	19931112	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5264214 A	19970501	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5264214 A	19981224	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COHESION TECHNOLOGIES, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:009648/0228 EFFECTIVE DATE : 19981104
US5264214 A	20010503	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5264214 A	20040423	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLAGEN AESTHETICS, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:014615/0778 EFFECTIVE DATE : 19980809
US5264214 A	20050523	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5264214 A	20050621	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOMATERIALS CORP., WASHINGTON OLDPARTY : CHANGE OF NAME; ASSIGNOR:COHESION TECHNOLOGIES, INC.; REEL/FRAME:016369/0932 EFFECTIVE DATE : 20041221
US5264214 A	20060313	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER

					OWNER : ANGIODEVICE INTERNATIONAL GMBH, SWITZERLAND OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ANGIOTECH BIOMATERIALS CORPORATION; REEL/FRAME:017299/0949 EFFECTIVE DATE : 20051102
US5264214 A	20120814	PEXP		Calculated Patent Term Expiry	
US5292802 A	19940308	LSGT	+	granted / extensions (spc, cpc, pte)	
US5292802 A	19930222	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLAGEN CORPORATION, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNORS:RHEE, WOONZA; MCCULLOUGH, KIMBERLY; REEL/FRAME:006434/0301 EFFECTIVE DATE : 19930208
US5292802 A	19940225	LSGT	PAT1	Patented Case	
US5292802 A	19940225	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5292802 A	19970828	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5292802 A	19981224	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COHESION TECHNOLOGIES, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:009648/0228 EFFECTIVE DATE : 19981104
US5292802 A	20010816	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5292802 A	20040423	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLAGEN AESTHETICS, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:014615/0778 EFFECTIVE DATE : 19980809
US5292802 A	20050621	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOMATERIALS CORP., WASHINGTON OLDPARTY : CHANGE OF NAME; ASSIGNOR:COHESION TECHNOLOGIES, INC.; REEL/FRAME:016369/0932 EFFECTIVE DATE : 20041221
US5292802 A	20050908	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5292802 A	20060313	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., WASHINGTON OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ANGIOTECH BIOMATERIALS CORPORATION; REEL/FRAME:017299/0010 EFFECTIVE DATE : 20051102
US5292802 A	20060411	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CREDIT SUISSE, AS COLLATERAL AGENT, NEW YORK OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:ANGIOTECH PHARMACEUTICALS (US), INC.; REEL/FRAME:017448/0600 EFFECTIVE DATE : 20060323
US5292802 A	20061211	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH

					PHARMACEUTICALS (US), INC., WASHINGTON OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:CREDIT SUISSE; REEL/FRAME:018606/0616 EFFECTIVE DATE : 20061211
US5292802 A	20090302	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO FOOTHILL, LLC AS AGENT, GEORGIA OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:ANGIOTECH PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC.; AND OTHERS; REEL/FRAME:022329/0310 EFFECTIVE DATE : 20090227
US5292802 A	20090302	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO FOOTHILL, LLC AS AGENT,GEORGIA OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:ANGIOTECH PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC.; AND OTHERS; REEL/FRAME:022329/0310 EFFECTIVE DATE : 20090227
US5292802 A	20110513	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO CAPITAL FINANCE, LLC, AS ADMINISTRATIV OLDPARTY : PATENT SECURITY AGREEMENT; ASSIGNORS:ANGIOTECH PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC.; AND OTHERS; REEL/FRAME:026275/0507 EFFECTIVE DATE : 20110512
US5292802 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MANAN MEDICAL PRODUCTS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5292802 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MEDICAL DEVICE TECHNOLOGIES, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5292802 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SURGICAL SPECIALTIES CORPORATION, CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5292802 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5292802 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH INTERNATIONAL HOLDINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479

					EFFECTIVE DATE : 20130412
US5292802 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : QUILL MEDICAL, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5292802 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5292802 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : B.G. SULZLE, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5292802 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC., CANAD OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5292802 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH AMERICA, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5292802 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOCOATINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5292802 A	20121202	PEXP		Calculated Patent Term Expiry	
US5304595 A	19940419	LSGT	+	granted / extensions (spc, cpc, pte)	
US5304595 A	19940407	LSGT	PAT1	Patented Case	
US5304595 A	19940407	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5304595 A	19970922	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5304595 A	19981224	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COHESION TECHNOLOGIES, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:009648/0228 EFFECTIVE DATE : 19981104
US5304595 A	20011019	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5304595 A	20040423	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLAGEN AESTHETICS, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:014615/0778

					EFFECTIVE DATE : 19980809
US5304595 A	20050621	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOMATERIALS CORP., WASHINGTON OLDPARTY : CHANGE OF NAME; ASSIGNOR:COHESION TECHNOLOGIES, INC.; REEL/FRAME:016369/0932 EFFECTIVE DATE : 20041221
US5304595 A	20051019	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5304595 A	20060313	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIODEVICE INTERNATIONAL GMBH, SWITZERLAND OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ANGIOTECH BIOMATERIALS CORPORATION; REEL/FRAME:017299/0949 EFFECTIVE DATE : 20051102
US5304595 A	20121230	PEXP		Calculated Patent Term Expiry	
US5306500 A	19940426	LSGT	+	granted / extensions (spc, cpc, pte)	
US5306500 A	19940413	LSGT	PAT1	Patented Case	
US5306500 A	19940413	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5306500 A	19970922	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5306500 A	19981224	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COHESION TECHNOLOGIES, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:009648/0228 EFFECTIVE DATE : 19981104
US5306500 A	20011025	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5306500 A	20040423	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLAGEN AESTHETICS, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:014615/0778 EFFECTIVE DATE : 19980809
US5306500 A	20050621	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOMATERIALS CORP., WASHINGTON OLDPARTY : CHANGE OF NAME; ASSIGNOR:COHESION TECHNOLOGIES, INC.; REEL/FRAME:016369/0932 EFFECTIVE DATE : 20041221
US5306500 A	20051026	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5306500 A	20060313	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., WASHINGTON OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ANGIOTECH BIOMATERIALS CORPORATION; REEL/FRAME:017299/0010 EFFECTIVE DATE : 20051102
US5306500 A	20060411	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CREDIT SUISSE, AS COLLATERAL AGENT, NEW YORK OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:ANGIOTECH PHARMACEUTICALS (US), INC.;

					REEL/FRAME:017448/0600 EFFECTIVE DATE : 20060323
US5306500 A	20061211	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., WASHINGTON OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:CREDIT SUISSE; REEL/FRAME:018606/0616 EFFECTIVE DATE : 20061211
US5306500 A	20090302	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO FOOTHILL, LLC AS AGENT, GEORGIA OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:ANGIOTECH PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC.; AND OTHERS; REEL/FRAME:022329/0310 EFFECTIVE DATE : 20090227
US5306500 A	20090302	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO FOOTHILL, LLC AS AGENT,GEORGIA OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:ANGIOTECH PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC.; AND OTHERS; REEL/FRAME:022329/0310 EFFECTIVE DATE : 20090227
US5306500 A	20110513	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO CAPITAL FINANCE, LLC, AS ADMINISTRATIV OLDPARTY : PATENT SECURITY AGREEMENT; ASSIGNORS:ANGIOTECH PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC.; AND OTHERS; REEL/FRAME:026275/0507 EFFECTIVE DATE : 20110512
US5306500 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MANAN MEDICAL PRODUCTS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5306500 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH AMERICA, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5306500 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5306500 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MEDICAL DEVICE TECHNOLOGIES, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5306500 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH

					PHARMACEUTICALS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5306500 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC., CANAD OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5306500 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : QUILL MEDICAL, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5306500 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SURGICAL SPECIALTIES CORPORATION, CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5306500 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : B.G. SULZLE, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5306500 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH INTERNATIONAL HOLDINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5306500 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOCOATINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5306500 A	20130823	PEXP		Calculated Patent Term Expiry	
US5308889 A	19940503	LSGT	+	granted / extensions (spc, cpc, pte)	
US5308889 A	19930305	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLAGEN CORPORATION, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNOR:FRIES, LOUIS; REEL/FRAME:006414/0971 EFFECTIVE DATE : 19930218
US5308889 A	19930305	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLAGEN CORPORATION, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNOR:DAMANI, RAMESH; REEL/FRAME:006452/0476 EFFECTIVE DATE : 19930211
US5308889 A	19930305	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLAGEN CORPORATION, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNORS:RHEE, WOONZA;

					MCCULLOUGH, KIMBERLY; DELUSTRO, FRANK; REEL/FRAME:006452/0470 EFFECTIVE DATE : 19930208
US5308889 A	19940420	LSGT	PAT1	Patented Case	
US5308889 A	19940420	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5308889 A	19971028	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5308889 A	19981224	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COHESION TECHNOLOGIES, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:009648/0228 EFFECTIVE DATE : 19981104
US5308889 A	20011025	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5308889 A	20040423	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLAGEN AESTHETICS, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:014615/0778 EFFECTIVE DATE : 19980809
US5308889 A	20050621	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOMATERIALS CORP., WASHINGTON OLDPARTY : CHANGE OF NAME; ASSIGNOR:COHESION TECHNOLOGIES, INC.; REEL/FRAME:016369/0932 EFFECTIVE DATE : 20041221
US5308889 A	20051103	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5308889 A	20060313	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., WASHINGTON OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ANGIOTECH BIOMATERIALS CORPORATION; REEL/FRAME:017299/0010 EFFECTIVE DATE : 20051102
US5308889 A	20060411	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CREDIT SUISSE, AS COLLATERAL AGENT, NEW YORK OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:ANGIOTECH PHARMACEUTICALS (US), INC.; REEL/FRAME:017448/0600 EFFECTIVE DATE : 20060323
US5308889 A	20061211	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., WASHINGTON OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:CREDIT SUISSE; REEL/FRAME:018606/0616 EFFECTIVE DATE : 20061211
US5308889 A	20090302	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO FOOTHILL, LLC AS AGENT, GEORGIA OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:ANGIOTECH PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC.; AND OTHERS; REEL/FRAME:022329/0310 EFFECTIVE DATE : 20090227

US5308889 A	20090302	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO FOOTHILL, LLC AS AGENT,GEORGIA OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:ANGIOTECH PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC.; AND OTHERS; REEL/FRAME:022329/0310 EFFECTIVE DATE : 20090227
US5308889 A	20110513	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO CAPITAL FINANCE, LLC, AS ADMINISTRATIV OLDPARTY : PATENT SECURITY AGREEMENT; ASSIGNORS:ANGIOTECH PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC.; AND OTHERS; REEL/FRAME:026275/0507 EFFECTIVE DATE : 20110512
US5308889 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SURGICAL SPECIALTIES CORPORATION, CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5308889 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC., CANAD OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5308889 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MANAN MEDICAL PRODUCTS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5308889 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5308889 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH AMERICA, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5308889 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5308889 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOCOATINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412

US5308889 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MEDICAL DEVICE TECHNOLOGIES, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5308889 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH INTERNATIONAL HOLDINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5308889 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : B.G. SULZLE, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5308889 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : QUILL MEDICAL, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5308889 A	20121202	PEXP		Calculated Patent Term Expiry	
US5324775 A	19940628	LSGT	+	granted / extensions (spc, cpc, pte)	
US5324775 A	19921214	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLAGEN CORPORATION, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNOR:WALLACE, DONALD G.; REEL/FRAME:006337/0645 EFFECTIVE DATE : 19920908
US5324775 A	19921214	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLAGEN CORPORATION, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNORS:RHEE, WOONZA; DELUSTRO, FRANK; REEL/FRAME:006344/0590 EFFECTIVE DATE : 19921014
US5324775 A	19930805	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLAGEN CORPORATION OLDPARTY : TO CORRECT SERIAL NUMBER PREVIOUSLY RECORDED 12/14/92 ON REEL 6344 FRAME 0559; ASSIGNOR:FRIES, LOUIS; REEL/FRAME:006635/0807 EFFECTIVE DATE : 19920908
US5324775 A	19930805	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLAGEN CORPORATION OLDPARTY : TO CORRECT SERIAL NUMBER PREVIOUSLY RECORDED 12/14/92 ON REEL 6337/FRAME 0641; ASSIGNOR:MICHAELS, ALAN S.; REEL/FRAME:006635/0812 EFFECTIVE DATE : 19920809
US5324775 A	19930805	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLAGEN CORPORATION OLDPARTY : TO CORRECT SERIAL NUMBER PREVIOUSLY SUBMITTED BUT NOT RECORDED.; ASSIGNOR:BENTZ, HANNE; REEL/FRAME:006638/0160 EFFECTIVE DATE : 19920904

US5324775 A	19930805	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLAGEN CORPORATION, CALIFORNIA OLDPARTY : RE-RECORD TO CORRECT SERIAL NUMBER PREVIOUSLY RECORDED ON REEL 6337 FRAME 637.; ASSIGNOR:BURNS, RAMON A. JR.; REEL/FRAME:006652/0134 EFFECTIVE DATE : 19920929
US5324775 A	19940617	LSGT	PAT1	Patented Case	
US5324775 A	19940617	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5324775 A	19971215	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5324775 A	19981224	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COHESION TECHNOLOGIES, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:009648/0228 EFFECTIVE DATE : 19981104
US5324775 A	20011206	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5324775 A	20040423	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLAGEN AESTHETICS, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:014615/0778 EFFECTIVE DATE : 19980809
US5324775 A	20050621	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOMATERIALS CORP., WASHINGTON OLDPARTY : CHANGE OF NAME; ASSIGNOR:COHESION TECHNOLOGIES, INC.; REEL/FRAME:016369/0932 EFFECTIVE DATE : 20041221
US5324775 A	20051228	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5324775 A	20060313	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIODEVICE INTERNATIONAL GMBH, SWITZERLAND OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ANGIOTECH BIOMATERIALS CORPORATION; REEL/FRAME:017299/0949 EFFECTIVE DATE : 20051102
US5324775 A	20120702	PEXP		Calculated Patent Term Expiry	
US5328955 A	19940712	LSGT	+	granted / extensions (spc, cpc, pte)	
US5328955 A	19930812	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLAGEN CORPORATION, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:MICHAELS, ALAN S.; REEL/FRAME:006690/0085 EFFECTIVE DATE : 19920908
US5328955 A	19930812	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLAGEN CORPORATION, CALIFORNIA OLDPARTY : TO CORRECT SERIAL NUMBER PREVIOUSLY RECORDED ON REEL 6334 FRAME 466.; ASSIGNOR:FRIES, LOUIS; REEL/FRAME:006646/0798 EFFECTIVE DATE : 19920908
US5328955 A	19930812	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLAGEN

					CORPORATION, CALIFORNIA OLDPARTY : TO CORRECT SERIAL NUMBER PREVIOUOSLY SUBMITTED, BUT NOT RECORDED.; ASSIGNOR:BURNS, RAMON A. JR.; REEL/FRAME:006651/0117 EFFECTIVE DATE : 19920929
US5328955 A	19930812	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLAGEN CORPORATION, CALIFORNIA OLDPARTY : TO CORRECT SERIAL NUMBER PREVIOUSLY SUBMITTED, BUT NOT RECORDED; ASSIGNORS:WOONZA, RHEE; DELUSTRO, FRANK; REEL/FRAME:006651/0122 EFFECTIVE DATE : 19921014
US5328955 A	19930812	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLAGEN CORPORATION, CALIFORNIA OLDPARTY : TO CORRECT SERIAL NUMBER PREVIOUSLY SUBMITTED, BUT NOT RECORDED.; ASSIGNOR:BENTZ, HANNE; REEL/FRAME:006651/0128 EFFECTIVE DATE : 19920904
US5328955 A	19930812	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLAGEN CORPORATION, CALIFORNIA OLDPARTY : TO CORRECT SERIAL NUMBER PREVIOUSLY SUBMITTED, BUT NOT RECORDED.; ASSIGNOR:WALLACE, DONALD G.; REEL/FRAME:006651/0135 EFFECTIVE DATE : 19920908
US5328955 A	19940701	LSGT	PAT1	Patented Case	
US5328955 A	19940701	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5328955 A	19971222	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5328955 A	19981224	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COHESION TECHNOLOGIES, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:009648/0228 EFFECTIVE DATE : 19981104
US5328955 A	20011220	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5328955 A	20040423	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLAGEN AESTHETICS, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:014615/0778 EFFECTIVE DATE : 19980809
US5328955 A	20050621	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOMATERIALS CORP., WASHINGTON OLDPARTY : CHANGE OF NAME; ASSIGNOR:COHESION TECHNOLOGIES, INC.; REEL/FRAME:016369/0932 EFFECTIVE DATE : 20041221
US5328955 A	20060112	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5328955 A	20060313	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., WASHINGTON OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ANGIOTECH BIOMATERIALS CORPORATION; REEL/FRAME:017299/0010 EFFECTIVE DATE : 20051102

US5328955 A	20060411	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CREDIT SUISSE, AS COLLATERAL AGENT, NEW YORK OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:ANGIOTECH PHARMACEUTICALS (US), INC.; REEL/FRAME:017448/0600 EFFECTIVE DATE : 20060323
US5328955 A	20061211	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., WASHINGTON OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:CREDIT SUISSE; REEL/FRAME:018606/0616 EFFECTIVE DATE : 20061211
US5328955 A	20090302	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO FOOTHILL, LLC AS AGENT, GEORGIA OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:ANGIOTECH PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC.; AND OTHERS; REEL/FRAME:022329/0310 EFFECTIVE DATE : 20090227
US5328955 A	20090302	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO FOOTHILL, LLC AS AGENT,GEORGIA OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:ANGIOTECH PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC.; AND OTHERS; REEL/FRAME:022329/0310 EFFECTIVE DATE : 20090227
US5328955 A	20110513	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO CAPITAL FINANCE, LLC, AS ADMINISTRATIV OLDPARTY : PATENT SECURITY AGREEMENT; ASSIGNORS:ANGIOTECH PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC.; AND OTHERS; REEL/FRAME:026275/0507 EFFECTIVE DATE : 20110512
US5328955 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MANAN MEDICAL PRODUCTS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5328955 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5328955 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SURGICAL SPECIALTIES CORPORATION, CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5328955 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MEDICAL DEVICE

					TECHNOLOGIES, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5328955 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC., CANAD OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5328955 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : QUILL MEDICAL, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5328955 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : B.G. SULZLE, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5328955 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH AMERICA, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5328955 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOCOATINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5328955 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH INTERNATIONAL HOLDINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5328955 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5328955 A	20120730	PEXP		Calculated Patent Term Expiry	
US5376375 A	19941227	LSGT	+	granted / extensions (spc, cpc, pte)	
US5376375 A	19941216	LSGT	PAT1	Patented Case	
US5376375 A	19941216	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5376375 A	19980615	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5376375 A	19981224	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COHESION TECHNOLOGIES, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST;

					ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:009648/0228 EFFECTIVE DATE : 19981104
US5376375 A	20020626	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5376375 A	20040423	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLAGEN AESTHETICS, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:014615/0778 EFFECTIVE DATE : 19980809
US5376375 A	20050621	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOMATERIALS CORP., WASHINGTON OLDPARTY : CHANGE OF NAME; ASSIGNOR:COHESION TECHNOLOGIES, INC.; REEL/FRAME:016369/0932 EFFECTIVE DATE : 20041221
US5376375 A	20060313	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., WASHINGTON OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ANGIOTECH BIOMATERIALS CORPORATION; REEL/FRAME:017299/0010 EFFECTIVE DATE : 20051102
US5376375 A	20060411	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CREDIT SUISSE, AS COLLATERAL AGENT, NEW YORK OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:ANGIOTECH PHARMACEUTICALS (US), INC.; REEL/FRAME:017448/0600 EFFECTIVE DATE : 20060323
US5376375 A	20060627	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5376375 A	20061211	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., WASHINGTON OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:CREDIT SUISSE; REEL/FRAME:018606/0616 EFFECTIVE DATE : 20061211
US5376375 A	20090302	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO FOOTHILL, LLC AS AGENT, GEORGIA OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:ANGIOTECH PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC.; AND OTHERS; REEL/FRAME:022329/0310 EFFECTIVE DATE : 20090227
US5376375 A	20090302	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO FOOTHILL, LLC AS AGENT,GEORGIA OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:ANGIOTECH PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC.; AND OTHERS; REEL/FRAME:022329/0310 EFFECTIVE DATE : 20090227
US5376375 A	20110513	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO CAPITAL FINANCE, LLC, AS ADMINISTRATIV OLDPARTY : PATENT SECURITY AGREEMENT;

					ASSIGNORS:ANGIOTECH PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC.; AND OTHERS; REEL/FRAME:026275/0507 EFFECTIVE DATE : 20110512
US5376375 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5376375 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH INTERNATIONAL HOLDINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5376375 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC., CANAD OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5376375 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : B.G. SULZLE, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5376375 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MEDICAL DEVICE TECHNOLOGIES, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5376375 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SURGICAL SPECIALTIES CORPORATION, CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5376375 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5376375 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MANAN MEDICAL PRODUCTS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5376375 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOCOATINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412

US5376375 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH AMERICA, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5376375 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : QUILL MEDICAL, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5376375 A	20140105	PEXP		Calculated Patent Term Expiry	
US5413791 A	19950509	LSGT	+	granted / extensions (spc, cpc, pte)	
US5413791 A	19950428	LSGT	PAT1	Patented Case	
US5413791 A	19950428	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5413791 A	19981030	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5413791 A	19981224	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COHESION TECHNOLOGIES, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:009648/0228 EFFECTIVE DATE : 19981104
US5413791 A	20020919	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5413791 A	20040423	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLAGEN AESTHETICS, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:014615/0778 EFFECTIVE DATE : 19980809
US5413791 A	20050621	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOMATERIALS CORP., WASHINGTON OLDPARTY : CHANGE OF NAME; ASSIGNOR:COHESION TECHNOLOGIES, INC.; REEL/FRAME:016369/0932 EFFECTIVE DATE : 20041221
US5413791 A	20060313	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., WASHINGTON OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ANGIOTECH BIOMATERIALS CORPORATION; REEL/FRAME:017299/0010 EFFECTIVE DATE : 20051102
US5413791 A	20060411	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CREDIT SUISSE, AS COLLATERAL AGENT, NEW YORK OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:ANGIOTECH PHARMACEUTICALS (US), INC.; REEL/FRAME:017448/0600 EFFECTIVE DATE : 20060323
US5413791 A	20061109	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5413791 A	20061211	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., WASHINGTON OLDPARTY : RELEASE BY SECURED

					PARTY; ASSIGNOR:CREDIT SUISSE; REEL/FRAME:018606/0616 EFFECTIVE DATE : 20061211
US5413791 A	20090302	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO FOOTHILL, LLC AS AGENT, GEORGIA OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:ANGIOTECH PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC.; AND OTHERS; REEL/FRAME:022329/0310 EFFECTIVE DATE : 20090227
US5413791 A	20090302	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO FOOTHILL, LLC AS AGENT,GEORGIA OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:ANGIOTECH PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC.; AND OTHERS; REEL/FRAME:022329/0310 EFFECTIVE DATE : 20090227
US5413791 A	20110513	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO CAPITAL FINANCE, LLC, AS ADMINISTRATIV OLDPARTY : PATENT SECURITY AGREEMENT; ASSIGNORS:ANGIOTECH PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC.; AND OTHERS; REEL/FRAME:026275/0507 EFFECTIVE DATE : 20110512
US5413791 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOCOATINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5413791 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5413791 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC., CANAD OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5413791 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5413791 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH INTERNATIONAL HOLDINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412

US5413791 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SURGICAL SPECIALTIES CORPORATION, CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5413791 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : QUILL MEDICAL, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5413791 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : B.G. SULZLE, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5413791 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MEDICAL DEVICE TECHNOLOGIES, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5413791 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MANAN MEDICAL PRODUCTS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5413791 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH AMERICA, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5413791 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH AMERICA, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5413791 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MANAN MEDICAL PRODUCTS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5413791 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH INTERNATIONAL HOLDINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5413791 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : B.G. SULZLE, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412

US5413791 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MEDICAL DEVICE TECHNOLOGIES, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5413791 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : QUILL MEDICAL, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5413791 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC., CANAD OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5413791 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5413791 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5413791 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SURGICAL SPECIALTIES CORPORATION, CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5413791 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOCOATINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5413791 A	20140217	PEXP		Calculated Patent Term Expiry	
US5446091 A	19950829	LSGT	+	granted / extensions (spc, cpc, pte)	
US5446091 A	19950818	LSGT	PAT1	Patented Case	
US5446091 A	19950818	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5446091 A	19981207	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5446091 A	19981224	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COHESION TECHNOLOGIES, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:009648/0228 EFFECTIVE DATE : 19981104
US5446091 A	20030228	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8

US5446091 A	20040423	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLAGEN AESTHETICS, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:014615/0778 EFFECTIVE DATE : 19980809
US5446091 A	20050621	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOMATERIALS CORP., WASHINGTON OLDPARTY : CHANGE OF NAME; ASSIGNOR:COHESION TECHNOLOGIES, INC.; REEL/FRAME:016369/0932 EFFECTIVE DATE : 20041221
US5446091 A	20060313	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., WASHINGTON OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ANGIOTECH BIOMATERIALS CORPORATION; REEL/FRAME:017299/0010 EFFECTIVE DATE : 20051102
US5446091 A	20060411	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CREDIT SUISSE, AS COLLATERAL AGENT, NEW YORK OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:ANGIOTECH PHARMACEUTICALS (US), INC.; REEL/FRAME:017448/0600 EFFECTIVE DATE : 20060323
US5446091 A	20061211	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., WASHINGTON OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:CREDIT SUISSE; REEL/FRAME:018606/0616 EFFECTIVE DATE : 20061211
US5446091 A	20070228	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5446091 A	20090302	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO FOOTHILL, LLC AS AGENT, GEORGIA OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:ANGIOTECH PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC.; AND OTHERS; REEL/FRAME:022329/0310 EFFECTIVE DATE : 20090227
US5446091 A	20090302	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO FOOTHILL, LLC AS AGENT,GEORGIA OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:ANGIOTECH PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC.; AND OTHERS; REEL/FRAME:022329/0310 EFFECTIVE DATE : 20090227
US5446091 A	20110513	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO CAPITAL FINANCE, LLC, AS ADMINISTRATIV OLDPARTY : PATENT SECURITY AGREEMENT; ASSIGNORS:ANGIOTECH PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC.; AND OTHERS; REEL/FRAME:026275/0507 EFFECTIVE DATE : 20110512

US5446091 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SURGICAL SPECIALTIES CORPORATION, CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5446091 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOCOATINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5446091 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : B.G. SULZLE, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5446091 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5446091 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH AMERICA, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5446091 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC., CANAD OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5446091 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MANAN MEDICAL PRODUCTS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5446091 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : QUILL MEDICAL, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5446091 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MEDICAL DEVICE TECHNOLOGIES, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5446091 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412

US5446091 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH INTERNATIONAL HOLDINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5446091 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5446091 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH INTERNATIONAL HOLDINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5446091 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC., CANAD OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5446091 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MANAN MEDICAL PRODUCTS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5446091 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : B.G. SULZLE, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5446091 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SURGICAL SPECIALTIES CORPORATION, CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5446091 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MEDICAL DEVICE TECHNOLOGIES, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5446091 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : QUILL MEDICAL, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5446091 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY;

					REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5446091 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOCOATINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5446091 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH AMERICA, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5446091 A	20150105	PEXP		Calculated Patent Term Expiry	
US5470911 A	19951128	LSGT	+	granted / extensions (spc, cpc, pte)	
US5470911 A	19951116	LSGT	PAT1	Patented Case	
US5470911 A	19951116	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5470911 A	19981224	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COHESION TECHNOLOGIES, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:009648/0228 EFFECTIVE DATE : 19981104
US5470911 A	19990526	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5470911 A	20030506	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5470911 A	20040423	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLAGEN AESTHETICS, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:014615/0778 EFFECTIVE DATE : 19980809
US5470911 A	20050621	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOMATERIALS CORP., WASHINGTON OLDPARTY : CHANGE OF NAME; ASSIGNOR:COHESION TECHNOLOGIES, INC.; REEL/FRAME:016369/0932 EFFECTIVE DATE : 20041221
US5470911 A	20060313	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., WASHINGTON OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ANGIOTECH BIOMATERIALS CORPORATION; REEL/FRAME:017299/0010 EFFECTIVE DATE : 20051102
US5470911 A	20060411	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CREDIT SUISSE, AS COLLATERAL AGENT, NEW YORK OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:ANGIOTECH PHARMACEUTICALS (US), INC.; REEL/FRAME:017448/0600 EFFECTIVE DATE : 20060323
US5470911 A	20061211	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC.,

					WASHINGTON OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:CREDIT SUISSE; REEL/FRAME:018606/0616 EFFECTIVE DATE : 20061211
US5470911 A	20070529	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5470911 A	20090302	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO FOOTHILL, LLC AS AGENT, GEORGIA OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:ANGIOTECH PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC.; AND OTHERS; REEL/FRAME:022329/0310 EFFECTIVE DATE : 20090227
US5470911 A	20090302	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO FOOTHILL, LLC AS AGENT,GEORGIA OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:ANGIOTECH PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC.; AND OTHERS; REEL/FRAME:022329/0310 EFFECTIVE DATE : 20090227
US5470911 A	20110513	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO CAPITAL FINANCE, LLC, AS ADMINISTRATIV OLDPARTY : PATENT SECURITY AGREEMENT; ASSIGNORS:ANGIOTECH PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC.; AND OTHERS; REEL/FRAME:026275/0507 EFFECTIVE DATE : 20110512
US5470911 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MANAN MEDICAL PRODUCTS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5470911 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5470911 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SURGICAL SPECIALTIES CORPORATION, CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5470911 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5470911 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : QUILL MEDICAL, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC;

					REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5470911 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH INTERNATIONAL HOLDINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5470911 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH AMERICA, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5470911 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOCOATINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5470911 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : B.G. SULZLE, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5470911 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC., CANAD OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5470911 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MEDICAL DEVICE TECHNOLOGIES, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5470911 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : B.G. SULZLE, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5470911 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SURGICAL SPECIALTIES CORPORATION, CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5470911 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH AMERICA, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5470911 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MEDICAL DEVICE TECHNOLOGIES, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE

					BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5470911 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MANAN MEDICAL PRODUCTS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5470911 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH INTERNATIONAL HOLDINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5470911 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOCOATINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5470911 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5470911 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC., CANAD OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5470911 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5470911 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : QUILL MEDICAL, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5470911 A	20150504	PEXP		Calculated Patent Term Expiry	
US5475052 A	19951212	LSGT	+	granted / extensions (spc, cpc, pte)	
US5475052 A	19940912	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLAGEN CORPORATION, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:RHEE, WOONZA M.; BERG, RICHARD A.; REEL/FRAME:007124/0677; SIGNING DATES FROM 19940830 TO 19940831
US5475052 A	19951201	LSGT	PAT1	Patented Case	
US5475052 A	19951201	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE

US5475052 A	19981224	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COHESION TECHNOLOGIES, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:009648/0228 EFFECTIVE DATE : 19981104
US5475052 A	19990610	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5475052 A	20030609	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5475052 A	20040423	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLAGEN AESTHETICS, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:014615/0778 EFFECTIVE DATE : 19980809
US5475052 A	20050621	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOMATERIALS CORP., WASHINGTON OLDPARTY : CHANGE OF NAME; ASSIGNOR:COHESION TECHNOLOGIES, INC.; REEL/FRAME:016369/0932 EFFECTIVE DATE : 20041221
US5475052 A	20060313	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., WASHINGTON OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ANGIOTECH BIOMATERIALS CORPORATION; REEL/FRAME:017299/0010 EFFECTIVE DATE : 20051102
US5475052 A	20060411	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CREDIT SUISSE, AS COLLATERAL AGENT, NEW YORK OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:ANGIOTECH PHARMACEUTICALS (US), INC.; REEL/FRAME:017448/0600 EFFECTIVE DATE : 20060323
US5475052 A	20061211	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., WASHINGTON OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:CREDIT SUISSE; REEL/FRAME:018606/0616 EFFECTIVE DATE : 20061211
US5475052 A	20070612	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5475052 A	20090302	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO FOOTHILL, LLC AS AGENT, GEORGIA OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:ANGIOTECH PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC.; AND OTHERS; REEL/FRAME:022329/0310 EFFECTIVE DATE : 20090227
US5475052 A	20090302	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO FOOTHILL, LLC AS AGENT,GEORGIA OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:ANGIOTECH PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS

					HOLDINGS, INC.; AND OTHERS; REEL/FRAME:022329/0310 EFFECTIVE DATE : 20090227
US5475052 A	20110513	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO CAPITAL FINANCE, LLC, AS ADMINISTRATIV OLDPARTY : PATENT SECURITY AGREEMENT; ASSIGNORS:ANGIOTECH PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC.; AND OTHERS; REEL/FRAME:026275/0507 EFFECTIVE DATE : 20110512
US5475052 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : B.G. SULZLE, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5475052 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SURGICAL SPECIALTIES CORPORATION, CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5475052 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : QUILL MEDICAL, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5475052 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH INTERNATIONAL HOLDINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5475052 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC., CANAD OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5475052 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5475052 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH AMERICA, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5475052 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOCOATINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412

US5475052 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MANAN MEDICAL PRODUCTS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5475052 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5475052 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MEDICAL DEVICE TECHNOLOGIES, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5475052 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : QUILL MEDICAL, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5475052 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOCOATINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5475052 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5475052 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC., CANAD OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5475052 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SURGICAL SPECIALTIES CORPORATION, CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5475052 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH AMERICA, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5475052 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MANAN MEDICAL PRODUCTS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412

US5475052 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MEDICAL DEVICE TECHNOLOGIES, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5475052 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : B.G. SULZLE, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5475052 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5475052 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH INTERNATIONAL HOLDINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5475052 A	20140502	PEXP		Calculated Patent Term Expiry	
US5476666 A	19951219	LSGT	+	granted / extensions (spc, cpc, pte)	
US5476666 A	19951113	LSGT	PAT1	Patented Case	
US5476666 A	19951113	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5476666 A	19981224	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COHESION TECHNOLOGIES, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:009648/0228 EFFECTIVE DATE : 19981104
US5476666 A	19990324	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5476666 A	20030617	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5476666 A	20040423	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLAGEN AESTHETICS, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:014615/0778 EFFECTIVE DATE : 19980809
US5476666 A	20050621	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOMATERIALS CORP., WASHINGTON OLDPARTY : CHANGE OF NAME; ASSIGNOR:COHESION TECHNOLOGIES, INC.; REEL/FRAME:016369/0932 EFFECTIVE DATE : 20041221
US5476666 A	20060313	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., WASHINGTON OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ANGIOTECH BIOMATERIALS CORPORATION; REEL/FRAME:017299/0010 EFFECTIVE DATE : 20051102

US5476666 A	20060411	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CREDIT SUISSE, AS COLLATERAL AGENT, NEW YORK OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:ANGIOTECH PHARMACEUTICALS (US), INC.; REEL/FRAME:017448/0600 EFFECTIVE DATE : 20060323
US5476666 A	20061211	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., WASHINGTON OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:CREDIT SUISSE; REEL/FRAME:018606/0616 EFFECTIVE DATE : 20061211
US5476666 A	20070619	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5476666 A	20090302	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO FOOTHILL, LLC AS AGENT, GEORGIA OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:ANGIOTECH PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC.; AND OTHERS; REEL/FRAME:022329/0310 EFFECTIVE DATE : 20090227
US5476666 A	20090302	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO FOOTHILL, LLC AS AGENT,GEORGIA OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:ANGIOTECH PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC.; AND OTHERS; REEL/FRAME:022329/0310 EFFECTIVE DATE : 20090227
US5476666 A	20110513	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO CAPITAL FINANCE, LLC, AS ADMINISTRATIV OLDPARTY : PATENT SECURITY AGREEMENT; ASSIGNORS:ANGIOTECH PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC.; AND OTHERS; REEL/FRAME:026275/0507 EFFECTIVE DATE : 20110512
US5476666 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MEDICAL DEVICE TECHNOLOGIES, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5476666 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOCOATINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5476666 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MANAN MEDICAL PRODUCTS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5476666 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER

					OWNER : B.G. SULZLE, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5476666 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH INTERNATIONAL HOLDINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5476666 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5476666 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5476666 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SURGICAL SPECIALTIES CORPORATION, CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5476666 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH AMERICA, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5476666 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC., CANAD OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5476666 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : QUILL MEDICAL, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5476666 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : QUILL MEDICAL, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5476666 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SURGICAL SPECIALTIES CORPORATION, CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412

US5476666 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH INTERNATIONAL HOLDINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5476666 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MANAN MEDICAL PRODUCTS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5476666 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : B.G. SULZLE, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5476666 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH AMERICA, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5476666 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5476666 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MEDICAL DEVICE TECHNOLOGIES, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5476666 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOCOATINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5476666 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5476666 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC., CANAD OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5476666 A	20150504	PEXP		Calculated Patent Term Expiry	
US5510121 A	19960423	LSGT	+	granted / extensions (spc, cpc, pte)	
US5510121 A	19960412	LSGT	PAT1	Patented Case	
US5510121 A	19960412	LSGT	STCF	INFORMATION ON	TEXT : PATENTED CASE

				STATUS: PATENT GRANT	
US5510121 A	19981224	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COHESION TECHNOLOGIES, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:009648/0228 EFFECTIVE DATE : 19981104
US5510121 A	19990920	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5510121 A	20030929	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5510121 A	20040423	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLAGEN AESTHETICS, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:014615/0778 EFFECTIVE DATE : 19980809
US5510121 A	20050621	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOMATERIALS CORP., WASHINGTON OLDPARTY : CHANGE OF NAME; ASSIGNOR:COHESION TECHNOLOGIES, INC.; REEL/FRAME:016369/0932 EFFECTIVE DATE : 20041221
US5510121 A	20060313	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., WASHINGTON OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ANGIOTECH BIOMATERIALS CORPORATION; REEL/FRAME:017299/0010 EFFECTIVE DATE : 20051102
US5510121 A	20060411	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CREDIT SUISSE, AS COLLATERAL AGENT, NEW YORK OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:ANGIOTECH PHARMACEUTICALS (US), INC.; REEL/FRAME:017448/0600 EFFECTIVE DATE : 20060323
US5510121 A	20061211	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., WASHINGTON OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:CREDIT SUISSE; REEL/FRAME:018606/0616 EFFECTIVE DATE : 20061211
US5510121 A	20070926	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5510121 A	20090302	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO FOOTHILL, LLC AS AGENT, GEORGIA OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:ANGIOTECH PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC.; AND OTHERS; REEL/FRAME:022329/0310 EFFECTIVE DATE : 20090227
US5510121 A	20090302	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO FOOTHILL, LLC AS AGENT,GEORGIA OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:ANGIOTECH

					PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC.; AND OTHERS; REEL/FRAME:022329/0310 EFFECTIVE DATE : 20090227
US5510121 A	20110513	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO CAPITAL FINANCE, LLC, AS ADMINISTRATIV OLDPARTY : PATENT SECURITY AGREEMENT; ASSIGNORS:ANGIOTECH PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC.; AND OTHERS; REEL/FRAME:026275/0507 EFFECTIVE DATE : 20110512
US5510121 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH AMERICA, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5510121 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MANAN MEDICAL PRODUCTS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5510121 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH INTERNATIONAL HOLDINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5510121 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : B.G. SULZLE, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5510121 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOCOATINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5510121 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : QUILL MEDICAL, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5510121 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC., CANAD OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5510121 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MEDICAL DEVICE TECHNOLOGIES, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412

US5510121 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5510121 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SURGICAL SPECIALTIES CORPORATION, CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5510121 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5510121 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : QUILL MEDICAL, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5510121 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MANAN MEDICAL PRODUCTS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5510121 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOCOATINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5510121 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : B.G. SULZLE, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5510121 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5510121 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MEDICAL DEVICE TECHNOLOGIES, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5510121 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC., CANAD OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY;

					REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5510121 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5510121 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SURGICAL SPECIALTIES CORPORATION, CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5510121 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH INTERNATIONAL HOLDINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5510121 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH AMERICA, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5510121 A	20150504	PEXP		Calculated Patent Term Expiry	
US5510418 A	19960423	LSGT	+	granted / extensions (spc, cpc, pte)	
US5510418 A	19940314	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLAGEN CORPORATION, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:RHEE, WOONZA M.; BERG, RICHARD A.; REEL/FRAME:006894/0794 EFFECTIVE DATE : 19940301
US5510418 A	19960412	LSGT	PAT1	Patented Case	
US5510418 A	19960412	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5510418 A	19981224	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COHESION TECHNOLOGIES, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:009648/0228 EFFECTIVE DATE : 19981104
US5510418 A	19990920	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5510418 A	20030929	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5510418 A	20040423	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLAGEN AESTHETICS, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:014615/0778 EFFECTIVE DATE : 19980809
US5510418 A	20050621	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOMATERIALS CORP., WASHINGTON OLDPARTY : CHANGE OF NAME;

					ASSIGNOR:COHESION TECHNOLOGIES, INC.; REEL/FRAME:016369/0932 EFFECTIVE DATE : 20041221
US5510418 A	20060313	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., WASHINGTON OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ANGIOTECH BIOMATERIALS CORPORATION; REEL/FRAME:017299/0010 EFFECTIVE DATE : 20051102
US5510418 A	20060411	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CREDIT SUISSE, AS COLLATERAL AGENT, NEW YORK OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:ANGIOTECH PHARMACEUTICALS (US), INC.; REEL/FRAME:017448/0600 EFFECTIVE DATE : 20060323
US5510418 A	20061211	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., WASHINGTON OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:CREDIT SUISSE; REEL/FRAME:018606/0616 EFFECTIVE DATE : 20061211
US5510418 A	20070926	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5510418 A	20090302	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO FOOTHILL, LLC AS AGENT, GEORGIA OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:ANGIOTECH PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC.; AND OTHERS; REEL/FRAME:022329/0310 EFFECTIVE DATE : 20090227
US5510418 A	20090302	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO FOOTHILL, LLC AS AGENT,GEORGIA OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:ANGIOTECH PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC.; AND OTHERS; REEL/FRAME:022329/0310 EFFECTIVE DATE : 20090227
US5510418 A	20110513	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO CAPITAL FINANCE, LLC, AS ADMINISTRATIV OLDPARTY : PATENT SECURITY AGREEMENT; ASSIGNORS:ANGIOTECH PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC.; AND OTHERS; REEL/FRAME:026275/0507 EFFECTIVE DATE : 20110512
US5510418 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MEDICAL DEVICE TECHNOLOGIES, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5510418 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., CANADA

					OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5510418 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MANAN MEDICAL PRODUCTS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5510418 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH INTERNATIONAL HOLDINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5510418 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SURGICAL SPECIALTIES CORPORATION, CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5510418 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOCOATINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5510418 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC., CANAD OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5510418 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : B.G. SULZLE, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5510418 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5510418 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : QUILL MEDICAL, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5510418 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH AMERICA, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5510418 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC.,

					CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5510418 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH AMERICA, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5510418 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MANAN MEDICAL PRODUCTS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5510418 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH INTERNATIONAL HOLDINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5510418 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOCOATINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5510418 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MEDICAL DEVICE TECHNOLOGIES, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5510418 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SURGICAL SPECIALTIES CORPORATION, CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5510418 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC., CANAD OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5510418 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : QUILL MEDICAL, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5510418 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5510418 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : B.G. SULZLE, INC.,

					CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5510418 A	20131103	PEXP		Calculated Patent Term Expiry	
US5523348 A	19960604	LSGT	+	granted / extensions (spc, cpc, pte)	
US5523348 A	19960523	LSGT	PAT1	Patented Case	
US5523348 A	19960523	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5523348 A	19981224	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COHESION TECHNOLOGIES, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:009648/0228 EFFECTIVE DATE : 19981104
US5523348 A	19990920	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5523348 A	20031112	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5523348 A	20040423	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLAGEN AESTHETICS, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:014615/0778 EFFECTIVE DATE : 19980809
US5523348 A	20050621	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOMATERIALS CORP., WASHINGTON OLDPARTY : CHANGE OF NAME; ASSIGNOR:COHESION TECHNOLOGIES, INC.; REEL/FRAME:016369/0932 EFFECTIVE DATE : 20041221
US5523348 A	20060313	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., WASHINGTON OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ANGIOTECH BIOMATERIALS CORPORATION; REEL/FRAME:017299/0010 EFFECTIVE DATE : 20051102
US5523348 A	20060411	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CREDIT SUISSE, AS COLLATERAL AGENT, NEW YORK OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:ANGIOTECH PHARMACEUTICALS (US), INC.; REEL/FRAME:017448/0600 EFFECTIVE DATE : 20060323
US5523348 A	20061211	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., WASHINGTON OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:CREDIT SUISSE; REEL/FRAME:018606/0616 EFFECTIVE DATE : 20061211
US5523348 A	20070926	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5523348 A	20090302	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO FOOTHILL, LLC AS AGENT, GEORGIA OLDPARTY : SECURITY AGREEMENT;

					ASSIGNORS:ANGIOTECH PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC.; AND OTHERS; REEL/FRAME:022329/0310 EFFECTIVE DATE : 20090227
US5523348 A	20090302	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO FOOTHILL, LLC AS AGENT,GEORGIA OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:ANGIOTECH PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC.; AND OTHERS; REEL/FRAME:022329/0310 EFFECTIVE DATE : 20090227
US5523348 A	20110513	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO CAPITAL FINANCE, LLC, AS ADMINISTRATIV OLDPARTY : PATENT SECURITY AGREEMENT; ASSIGNORS:ANGIOTECH PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC.; AND OTHERS; REEL/FRAME:026275/0507 EFFECTIVE DATE : 20110512
US5523348 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC., CANAD OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5523348 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : QUILL MEDICAL, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5523348 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5523348 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH INTERNATIONAL HOLDINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5523348 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MEDICAL DEVICE TECHNOLOGIES, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5523348 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOCOATINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5523348 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : B.G. SULZLE, INC.,

					CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5523348 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MANAN MEDICAL PRODUCTS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5523348 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5523348 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SURGICAL SPECIALTIES CORPORATION, CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5523348 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH AMERICA, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5523348 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOCOATINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5523348 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5523348 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MANAN MEDICAL PRODUCTS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5523348 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH AMERICA, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5523348 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC., CANAD OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5523348 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : QUILL MEDICAL, INC.,

					CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5523348 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH INTERNATIONAL HOLDINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5523348 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MEDICAL DEVICE TECHNOLOGIES, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5523348 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : B.G. SULZLE, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5523348 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5523348 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SURGICAL SPECIALTIES CORPORATION, CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5523348 A	20140818	PEXP		Calculated Patent Term Expiry	
US5527856 A	19960618	LSGT	+	granted / extensions (spc, cpc, pte)	
US5527856 A	19960606	LSGT	PAT1	Patented Case	
US5527856 A	19960606	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5527856 A	19981224	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COHESION TECHNOLOGIES, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:009648/0228 EFFECTIVE DATE : 19981104
US5527856 A	19990920	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5527856 A	20031118	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5527856 A	20040423	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLAGEN AESTHETICS, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:014615/0778 EFFECTIVE DATE : 19980809
US5527856 A	20050621	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH

					BIOMATERIALS CORP., WASHINGTON OLDPARTY : CHANGE OF NAME; ASSIGNOR:COHESION TECHNOLOGIES, INC.; REEL/FRAME:016369/0932 EFFECTIVE DATE : 20041221
US5527856 A	20060313	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., WASHINGTON OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ANGIOTECH BIOMATERIALS CORPORATION; REEL/FRAME:017299/0010 EFFECTIVE DATE : 20051102
US5527856 A	20060411	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CREDIT SUISSE, AS COLLATERAL AGENT, NEW YORK OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:ANGIOTECH PHARMACEUTICALS (US), INC.; REEL/FRAME:017448/0600 EFFECTIVE DATE : 20060323
US5527856 A	20061211	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., WASHINGTON OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:CREDIT SUISSE; REEL/FRAME:018606/0616 EFFECTIVE DATE : 20061211
US5527856 A	20070926	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5527856 A	20090302	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO FOOTHILL, LLC AS AGENT, GEORGIA OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:ANGIOTECH PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC.; AND OTHERS; REEL/FRAME:022329/0310 EFFECTIVE DATE : 20090227
US5527856 A	20090302	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO FOOTHILL, LLC AS AGENT,GEORGIA OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:ANGIOTECH PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC.; AND OTHERS; REEL/FRAME:022329/0310 EFFECTIVE DATE : 20090227
US5527856 A	20110513	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO CAPITAL FINANCE, LLC, AS ADMINISTRATIV OLDPARTY : PATENT SECURITY AGREEMENT; ASSIGNORS:ANGIOTECH PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC.; AND OTHERS; REEL/FRAME:026275/0507 EFFECTIVE DATE : 20110512
US5527856 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : B.G. SULZLE, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5527856 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER

					OWNER : MANAN MEDICAL PRODUCTS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5527856 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : QUILL MEDICAL, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5527856 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MEDICAL DEVICE TECHNOLOGIES, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5527856 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC., CANAD OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5527856 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH INTERNATIONAL HOLDINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5527856 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5527856 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH AMERICA, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5527856 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SURGICAL SPECIALTIES CORPORATION, CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5527856 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5527856 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOCOATINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412

US5527856 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5527856 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SURGICAL SPECIALTIES CORPORATION, CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5527856 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC., CANAD OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5527856 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MEDICAL DEVICE TECHNOLOGIES, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5527856 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOCOATINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5527856 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : B.G. SULZLE, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5527856 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MANAN MEDICAL PRODUCTS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5527856 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5527856 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH INTERNATIONAL HOLDINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5527856 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH AMERICA, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412

US5527856 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : QUILL MEDICAL, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5527856 A	20130904	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH INTERNATIONAL HOLDINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO FOOTHILL, LLC; REEL/FRAME:031157/0186 EFFECTIVE DATE : 20130805
US5527856 A	20130904	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO FOOTHILL, LLC; REEL/FRAME:031157/0186 EFFECTIVE DATE : 20130805
US5527856 A	20130904	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : B.G. SULZLE, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO FOOTHILL, LLC; REEL/FRAME:031157/0186 EFFECTIVE DATE : 20130805
US5527856 A	20130904	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SURGICAL SPECIALTIES CORPORATION (US), INC., FORME OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO FOOTHILL, LLC; REEL/FRAME:031157/0186 EFFECTIVE DATE : 20130805
US5527856 A	20130904	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : QUILL MEDICAL, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO FOOTHILL, LLC; REEL/FRAME:031157/0186 EFFECTIVE DATE : 20130805
US5527856 A	20130904	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SURGICAL SPECIALTIES CORPORATION, CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO FOOTHILL, LLC; REEL/FRAME:031157/0186 EFFECTIVE DATE : 20130805
US5527856 A	20130904	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH AMERICA, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO FOOTHILL, LLC; REEL/FRAME:031157/0186 EFFECTIVE DATE : 20130805
US5527856 A	20150512	PEXP		Calculated Patent Term Expiry	
US5543441 A	19960806	LSGT	+	granted / extensions (spc, cpc, pte)	
US5543441 A	19960726	LSGT	PAT1	Patented Case	
US5543441 A	19960726	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5543441 A	19981224	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COHESION TECHNOLOGIES, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST;

					ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:009648/0228 EFFECTIVE DATE : 19981104
US5543441 A	20000107	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5543441 A	20040204	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5543441 A	20040423	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLAGEN AESTHETICS, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:014615/0778 EFFECTIVE DATE : 19980809
US5543441 A	20050621	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOMATERIALS CORP., WASHINGTON OLDPARTY : CHANGE OF NAME; ASSIGNOR:COHESION TECHNOLOGIES, INC.; REEL/FRAME:016369/0932 EFFECTIVE DATE : 20041221
US5543441 A	20060313	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., WASHINGTON OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ANGIOTECH BIOMATERIALS CORPORATION; REEL/FRAME:017299/0010 EFFECTIVE DATE : 20051102
US5543441 A	20060411	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CREDIT SUISSE, AS COLLATERAL AGENT, NEW YORK OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:ANGIOTECH PHARMACEUTICALS (US), INC.; REEL/FRAME:017448/0600 EFFECTIVE DATE : 20060323
US5543441 A	20061211	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., WASHINGTON OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:CREDIT SUISSE; REEL/FRAME:018606/0616 EFFECTIVE DATE : 20061211
US5543441 A	20070927	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5543441 A	20090302	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO FOOTHILL, LLC AS AGENT, GEORGIA OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:ANGIOTECH PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC.; AND OTHERS; REEL/FRAME:022329/0310 EFFECTIVE DATE : 20090227
US5543441 A	20090302	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO FOOTHILL, LLC AS AGENT,GEORGIA OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:ANGIOTECH PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC.; AND OTHERS; REEL/FRAME:022329/0310 EFFECTIVE DATE : 20090227
US5543441 A	20110513	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO CAPITAL

					FINANCE, LLC, AS ADMINISTRATIV OLDPARTY : PATENT SECURITY AGREEMENT; ASSIGNORS:ANGIOTECH PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC.; AND OTHERS; REEL/FRAME:026275/0507 EFFECTIVE DATE : 20110512
US5543441 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MANAN MEDICAL PRODUCTS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5543441 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SURGICAL SPECIALTIES CORPORATION, CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5543441 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH AMERICA, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5543441 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5543441 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC., CANAD OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5543441 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOCOATINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5543441 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : B.G. SULZLE, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5543441 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5543441 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH INTERNATIONAL HOLDINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC;

					REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5543441 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : QUILL MEDICAL, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5543441 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MEDICAL DEVICE TECHNOLOGIES, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5543441 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH AMERICA, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5543441 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : B.G. SULZLE, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5543441 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH INTERNATIONAL HOLDINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5543441 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC., CANAD OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5543441 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MEDICAL DEVICE TECHNOLOGIES, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5543441 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOCOATINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5543441 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5543441 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE

					BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5543441 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : QUILL MEDICAL, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5543441 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SURGICAL SPECIALTIES CORPORATION, CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5543441 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MANAN MEDICAL PRODUCTS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5543441 A	20130904	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : B.G. SULZLE, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO FOOTHILL, LLC; REEL/FRAME:031157/0186 EFFECTIVE DATE : 20130805
US5543441 A	20130904	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH AMERICA, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO FOOTHILL, LLC; REEL/FRAME:031157/0186 EFFECTIVE DATE : 20130805
US5543441 A	20130904	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SURGICAL SPECIALTIES CORPORATION (US), INC., FORME OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO FOOTHILL, LLC; REEL/FRAME:031157/0186 EFFECTIVE DATE : 20130805
US5543441 A	20130904	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : QUILL MEDICAL, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO FOOTHILL, LLC; REEL/FRAME:031157/0186 EFFECTIVE DATE : 20130805
US5543441 A	20130904	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO FOOTHILL, LLC; REEL/FRAME:031157/0186 EFFECTIVE DATE : 20130805
US5543441 A	20130904	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH INTERNATIONAL HOLDINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO FOOTHILL, LLC; REEL/FRAME:031157/0186 EFFECTIVE DATE : 20130805
US5543441 A	20130904	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SURGICAL SPECIALTIES CORPORATION, CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO FOOTHILL, LLC;

					REEL/FRAME:031157/0186 EFFECTIVE DATE : 20130805
US5543441 A	20150424	PEXP		Calculated Patent Term Expiry	
US5550187 A	19960827	LSGT	+	granted / extensions (spc, cpc, pte)	
US5550187 A	19941017	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLAGEN CORPORATION, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:RHEE, WOONZA; BERG, RICHARD; ROSENBLATT, JOEL; AND OTHERS; REEL/FRAME:007170/0628; SIGNING DATES FROM 19941007 TO 19941014
US5550187 A	19941017	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLAGEN CORPORATION, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:RHEE, WOONZA; BERG, RICHARD; ROSENBLATT, JOEL; AND OTHERS; REEL/FRAME:007170/0622 EFFECTIVE DATE : 19941014
US5550187 A	19960816	LSGT	PAT1	Patented Case	
US5550187 A	19960816	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5550187 A	19981224	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COHESION TECHNOLOGIES, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:009648/0228 EFFECTIVE DATE : 19981104
US5550187 A	20000107	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5550187 A	20040227	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5550187 A	20040423	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLAGEN AESTHETICS, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:014615/0778 EFFECTIVE DATE : 19980809
US5550187 A	20050621	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOMATERIALS CORP., WASHINGTON OLDPARTY : CHANGE OF NAME; ASSIGNOR:COHESION TECHNOLOGIES, INC.; REEL/FRAME:016369/0932 EFFECTIVE DATE : 20041221
US5550187 A	20060313	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., WASHINGTON OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ANGIOTECH BIOMATERIALS CORPORATION; REEL/FRAME:017299/0010 EFFECTIVE DATE : 20051102
US5550187 A	20060411	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CREDIT SUISSE, AS COLLATERAL AGENT, NEW YORK OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:ANGIOTECH PHARMACEUTICALS (US), INC.; REEL/FRAME:017448/0600 EFFECTIVE DATE : 20060323

US5550187 A	20061211	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., WASHINGTON OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:CREDIT SUISSE; REEL/FRAME:018606/0616 EFFECTIVE DATE : 20061211
US5550187 A	20070927	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5550187 A	20090302	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO FOOTHILL, LLC AS AGENT, GEORGIA OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:ANGIOTECH PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC.; AND OTHERS; REEL/FRAME:022329/0310 EFFECTIVE DATE : 20090227
US5550187 A	20090302	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO FOOTHILL, LLC AS AGENT,GEORGIA OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:ANGIOTECH PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC.; AND OTHERS; REEL/FRAME:022329/0310 EFFECTIVE DATE : 20090227
US5550187 A	20110513	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO CAPITAL FINANCE, LLC, AS ADMINISTRATIV OLDPARTY : PATENT SECURITY AGREEMENT; ASSIGNORS:ANGIOTECH PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC.; AND OTHERS; REEL/FRAME:026275/0507 EFFECTIVE DATE : 20110512
US5550187 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC., CANAD OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5550187 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH INTERNATIONAL HOLDINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5550187 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5550187 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH AMERICA, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5550187 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER

					OWNER : B.G. SULZLE, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5550187 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SURGICAL SPECIALTIES CORPORATION, CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5550187 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOCOATINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5550187 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5550187 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : QUILL MEDICAL, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5550187 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MANAN MEDICAL PRODUCTS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5550187 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MEDICAL DEVICE TECHNOLOGIES, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5550187 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5550187 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : B.G. SULZLE, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5550187 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : QUILL MEDICAL, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5550187 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH AMERICA,

					INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5550187 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC., CANAD OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5550187 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MEDICAL DEVICE TECHNOLOGIES, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5550187 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SURGICAL SPECIALTIES CORPORATION, CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5550187 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOCOATINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5550187 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH INTERNATIONAL HOLDINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5550187 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5550187 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MANAN MEDICAL PRODUCTS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5550187 A	20130904	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : B.G. SULZLE, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO FOOTHILL, LLC; REEL/FRAME:031157/0186 EFFECTIVE DATE : 20130805
US5550187 A	20130904	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH AMERICA, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO FOOTHILL, LLC; REEL/FRAME:031157/0186 EFFECTIVE DATE : 20130805

US5550187 A	20130904	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : QUILL MEDICAL, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO FOOTHILL, LLC; REEL/FRAME:031157/0186 EFFECTIVE DATE : 20130805
US5550187 A	20130904	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SURGICAL SPECIALTIES CORPORATION (US), INC., FORME OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO FOOTHILL, LLC; REEL/FRAME:031157/0186 EFFECTIVE DATE : 20130805
US5550187 A	20130904	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SURGICAL SPECIALTIES CORPORATION, CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO FOOTHILL, LLC; REEL/FRAME:031157/0186 EFFECTIVE DATE : 20130805
US5550187 A	20130904	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH INTERNATIONAL HOLDINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO FOOTHILL, LLC; REEL/FRAME:031157/0186 EFFECTIVE DATE : 20130805
US5550187 A	20130904	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO FOOTHILL, LLC; REEL/FRAME:031157/0186 EFFECTIVE DATE : 20130805
US5550187 A	20140808	PEXP		Calculated Patent Term Expiry	
US5550188 A	19960827	LSGT	+	granted / extensions (spc, cpc, pte)	
US5550188 A	19960816	LSGT	PAT1	Patented Case	
US5550188 A	19960816	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5550188 A	19961105	LSRE	CC	CERTIFICATE OF CORRECTION	
US5550188 A	19991021	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ABLECO FINANCE LLC, AS AGENT, NEW YORK OLDPARTY : SECURITY INTEREST; ASSIGNOR:COLLAGEN AESTHETICS, INC.; REEL/FRAME:010327/0239 EFFECTIVE DATE : 19990901
US5550188 A	20000107	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5550188 A	20040227	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5550188 A	20050621	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOMATERIALS CORP., WASHINGTON OLDPARTY : CHANGE OF NAME; ASSIGNOR:COHESION TECHNOLOGIES, INC.; REEL/FRAME:016369/0932 EFFECTIVE DATE : 20041221
US5550188 A	20060313	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., WASHINGTON OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ANGIOTECH BIOMATERIALS CORPORATION; REEL/FRAME:017299/0010

					EFFECTIVE DATE : 20051102
US5550188 A	20060411	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CREDIT SUISSE, AS COLLATERAL AGENT, NEW YORK OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:ANGIOTECH PHARMACEUTICALS (US), INC.; REEL/FRAME:017448/0600 EFFECTIVE DATE : 20060323
US5550188 A	20061211	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., WASHINGTON OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:CREDIT SUISSE; REEL/FRAME:018606/0616 EFFECTIVE DATE : 20061211
US5550188 A	20070927	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5550188 A	20090302	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO FOOTHILL, LLC AS AGENT, GEORGIA OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:ANGIOTECH PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC.; AND OTHERS; REEL/FRAME:022329/0310 EFFECTIVE DATE : 20090227
US5550188 A	20090302	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO FOOTHILL, LLC AS AGENT,GEORGIA OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:ANGIOTECH PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC.; AND OTHERS; REEL/FRAME:022329/0310 EFFECTIVE DATE : 20090227
US5550188 A	20110513	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO CAPITAL FINANCE, LLC, AS ADMINISTRATIV OLDPARTY : PATENT SECURITY AGREEMENT; ASSIGNORS:ANGIOTECH PHARMACEUTICALS, INC.; AFMEDICA, INC.; AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC.; AND OTHERS; REEL/FRAME:026275/0507 EFFECTIVE DATE : 20110512
US5550188 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : QUILL MEDICAL, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5550188 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH INTERNATIONAL HOLDINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5550188 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SURGICAL SPECIALTIES CORPORATION, CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412

US5550188 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5550188 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MANAN MEDICAL PRODUCTS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5550188 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MEDICAL DEVICE TECHNOLOGIES, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5550188 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOCOATINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5550188 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : B.G. SULZLE, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5550188 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH AMERICA, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5550188 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5550188 A	20130412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC., CANAD OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO CAPITAL FINANCE, LLC; REEL/FRAME:030211/0479 EFFECTIVE DATE : 20130412
US5550188 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5550188 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : B.G. SULZLE, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412

US5550188 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMERICAN MEDICAL INSTRUMENTS HOLDINGS, INC., CANAD OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5550188 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MEDICAL DEVICE TECHNOLOGIES, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5550188 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SURGICAL SPECIALTIES CORPORATION, CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5550188 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH INTERNATIONAL HOLDINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5550188 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5550188 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH AMERICA, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5550188 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MANAN MEDICAL PRODUCTS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5550188 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOCOATINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5550188 A	20130415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : QUILL MEDICAL, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:DEUTSCHE BANK NATIONAL TRUST COMPANY; REEL/FRAME:030218/0820 EFFECTIVE DATE : 20130412
US5550188 A	20130904	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO FOOTHILL, LLC; REEL/FRAME:031157/0186

					EFFECTIVE DATE : 20130805
US5550188 A	20130904	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH INTERNATIONAL HOLDINGS CORP., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO FOOTHILL, LLC; REEL/FRAME:031157/0186 EFFECTIVE DATE : 20130805
US5550188 A	20130904	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : B.G. SULZLE, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO FOOTHILL, LLC; REEL/FRAME:031157/0186 EFFECTIVE DATE : 20130805
US5550188 A	20130904	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SURGICAL SPECIALTIES CORPORATION (US), INC., FORME OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO FOOTHILL, LLC; REEL/FRAME:031157/0186 EFFECTIVE DATE : 20130805
US5550188 A	20130904	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH AMERICA, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO FOOTHILL, LLC; REEL/FRAME:031157/0186 EFFECTIVE DATE : 20130805
US5550188 A	20130904	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : QUILL MEDICAL, INC., CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO FOOTHILL, LLC; REEL/FRAME:031157/0186 EFFECTIVE DATE : 20130805
US5550188 A	20130904	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SURGICAL SPECIALTIES CORPORATION, CANADA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:WELLS FARGO FOOTHILL, LLC; REEL/FRAME:031157/0186 EFFECTIVE DATE : 20130805
US5550188 A	20150607	PEXP		Calculated Patent Term Expiry	
US5565519 A	19961015	LSGT	+	granted / extensions (spc, cpc, pte)	
US5565519 A	19940314	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLAGEN CORPORATION, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:RHEE, WOONZA M.; RAO, PREMA R.; CHU, GEORGE H.; AND OTHERS; REEL/FRAME:006886/0924 EFFECTIVE DATE : 19940301
US5565519 A	19961003	LSGT	PAT1	Patented Case	
US5565519 A	19961003	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5565519 A	19981224	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COHESION TECHNOLOGIES, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:009648/0228 EFFECTIVE DATE : 19981104
US5565519 A	20000329	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4

US5565519 A	20040415	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5565519 A	20040423	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLAGEN AESTHETICS, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:014615/0778 EFFECTIVE DATE : 19980809
US5565519 A	20050621	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOMATERIALS CORP., WASHINGTON OLDPARTY : CHANGE OF NAME; ASSIGNOR:COHESION TECHNOLOGIES, INC.; REEL/FRAME:016369/0932 EFFECTIVE DATE : 20041221
US5565519 A	20060313	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIODEVICE INTERNATIONAL GMBH, SWITZERLAND OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ANGIOTECH BIOMATERIALS CORPORATION; REEL/FRAME:017299/0949 EFFECTIVE DATE : 20051102
US5565519 A	20080415	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5565519 A	20131103	PEXP		Calculated Patent Term Expiry	
US5614587 A	19970325	LSGT	+	granted / extensions (spc, cpc, pte)	
US5614587 A	19951107	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLAGEN CORPORATION, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:RHEE, WOONZA M.; RAO, PREMA R.; CHU, GEORGE H.; AND OTHERS; REEL/FRAME:007708/0007; SIGNING DATES FROM 19951006 TO 19951106
US5614587 A	19970314	LSGT	PAT1	Patented Case	
US5614587 A	19970314	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5614587 A	19981224	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COHESION TECHNOLOGIES, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:009648/0228 EFFECTIVE DATE : 19981104
US5614587 A	20010321	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5614587 A	20040423	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLAGEN AESTHETICS, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:014615/0778 EFFECTIVE DATE : 19980809
US5614587 A	20040927	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5614587 A	20050621	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOMATERIALS CORP., WASHINGTON OLDPARTY : CHANGE OF NAME; ASSIGNOR:COHESION TECHNOLOGIES, INC.;

					REEL/FRAME:016369/0932 EFFECTIVE DATE : 20041221
US5614587 A	20060313	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIODEVICE INTERNATIONAL GMBH, SWITZERLAND OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ANGIOTECH BIOMATERIALS CORPORATION; REEL/FRAME:017299/0949 EFFECTIVE DATE : 20051102
US5614587 A	20080925	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5614587 A	20150607	PEXP		Calculated Patent Term Expiry	
US5643464 A	19970701	LSGT	+	granted / extensions (spc, cpc, pte)	
US5643464 A	19950907	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLAGEN CORPORATION, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:RHEE, WOONZA M.; BERG, RICHARD A.; ROSENBLATT, JOEL S.; AND OTHERS; REEL/FRAME:007646/0453 EFFECTIVE DATE : 19950823
US5643464 A	19981224	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COHESION TECHNOLOGIES, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:009648/0228 EFFECTIVE DATE : 19981104
US5643464 A	20010329	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5643464 A	20040423	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLAGEN AESTHETICS, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:014615/0778 EFFECTIVE DATE : 19980809
US5643464 A	20050103	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5643464 A	20050621	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOMATERIALS CORP., WASHINGTON OLDPARTY : CHANGE OF NAME; ASSIGNOR:COHESION TECHNOLOGIES, INC.; REEL/FRAME:016369/0932 EFFECTIVE DATE : 20041221
US5643464 A	20060313	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIODEVICE INTERNATIONAL GMBH, SWITZERLAND OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ANGIOTECH BIOMATERIALS CORPORATION; REEL/FRAME:017299/0949 EFFECTIVE DATE : 20051102
US5643464 A	20090701	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5643464 A	20090727	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US5643464 A	20090727	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US5643464 A	20090818	LSLE	-FP	EXPIRED DUE TO	EFFECTIVE DATE : 20090701

				FAILURE TO PAY MAINTENANCE FEE	
US5643464 A	20150630	PEXP		Calculated Patent Term Expiry	
US5744545 A	19980428	LSGT	+	granted / extensions (spc, cpc, pte)	
US5744545 A	19981224	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COHESION TECHNOLOGIES, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:009648/0228 EFFECTIVE DATE : 19981104
US5744545 A	20010926	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5744545 A	20040423	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLAGEN AESTHETICS, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:014615/0778 EFFECTIVE DATE : 19980809
US5744545 A	20050621	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOMATERIALS CORP., WASHINGTON OLDPARTY : CHANGE OF NAME; ASSIGNOR:COHESION TECHNOLOGIES, INC.; REEL/FRAME:016369/0932 EFFECTIVE DATE : 20041221
US5744545 A	20051028	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5744545 A	20060313	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., WASHINGTON OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ANGIOTECH BIOMATERIALS CORPORATION; REEL/FRAME:017299/0010 EFFECTIVE DATE : 20051102
US5744545 A	20060411	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CREDIT SUISSE, AS COLLATERAL AGENT, NEW YORK OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:ANGIOTECH PHARMACEUTICALS (US), INC.; REEL/FRAME:017448/0600 EFFECTIVE DATE : 20060323
US5744545 A	20061211	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., WASHINGTON OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:CREDIT SUISSE; REEL/FRAME:018606/0616 EFFECTIVE DATE : 20061211
US5744545 A	20100428	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5744545 A	20100524	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US5744545 A	20100524	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US5744545 A	20100615	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20100428
US5744545 A	20170508	PEXP		Calculated Patent Term Expiry	

US5786421 A	19980728	LSGT	+	granted / extensions (spc, cpc, pte)	
US5786421 A	19981224	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COHESION TECHNOLOGIES, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:009648/0228 EFFECTIVE DATE : 19981104
US5786421 A	20020104	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5786421 A	20040423	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLAGEN AESTHETICS, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:014615/0778 EFFECTIVE DATE : 19980809
US5786421 A	20050621	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH BIOMATERIALS CORP., WASHINGTON OLDPARTY : CHANGE OF NAME; ASSIGNOR:COHESION TECHNOLOGIES, INC.; REEL/FRAME:016369/0932 EFFECTIVE DATE : 20041221
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US5786421 A	20060313	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., WASHINGTON OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ANGIOTECH BIOMATERIALS CORPORATION; REEL/FRAME:017299/0010 EFFECTIVE DATE : 20051102
US5786421 A	20060411	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CREDIT SUISSE, AS COLLATERAL AGENT, NEW YORK OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:ANGIOTECH PHARMACEUTICALS (US), INC.; REEL/FRAME:017448/0600 EFFECTIVE DATE : 20060323
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US5786421 A	20100823	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US5786421 A	20100823	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US5786421 A	20100914	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20100728
US5786421 A	20170506	PEXP		Calculated Patent Term Expiry	
US5800541 A	19980901	LSGT	+	granted / extensions (spc, cpc, pte)	
US5800541 A	19981224	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COHESION TECHNOLOGIES, INC.,

					CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:009648/0228 EFFECTIVE DATE : 19981104
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US5800541 A	20060411	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CREDIT SUISSE, AS COLLATERAL AGENT, NEW YORK OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:ANGIOTECH PHARMACEUTICALS (US), INC.; REEL/FRAME:017448/0600 EFFECTIVE DATE : 20060323
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US5800541 A	20170108	PEXP		Calculated Patent Term Expiry	
US5866610 A	19990202	LSGT	+	granted / extensions (spc, cpc, pte)	
US5866610 A	19990126	LSGT	PAT1	Patented Case	
US5866610 A	19990126	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
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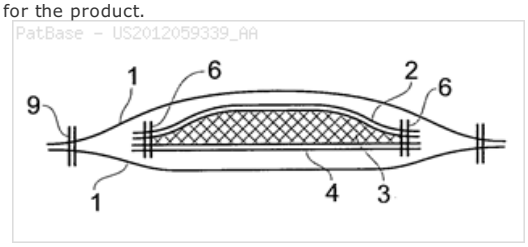
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US5936035 A	19981224	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COHESION TECHNOLOGIES, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:009648/0228 EFFECTIVE DATE : 19981104
US5936035 A	20030130	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5936035 A	20040423	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLAGEN AESTHETICS, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:COLLAGEN CORPORATION; REEL/FRAME:014615/0778 EFFECTIVE DATE : 19980809
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US5936035 A	20061211	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ANGIOTECH PHARMACEUTICALS (US), INC., WASHINGTON OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:CREDIT SUISSE; REEL/FRAME:018606/0616 EFFECTIVE DATE : 20061211
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US5936035 A	20110905	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US5936035 A	20110927	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20110810
US5936035 A	20151218	PEXP		Calculated Patent Term Expiry	
WO9005755 A1	19900531	LSPB	+	published / reissued	
WO9005755 A1	19910419	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1990901254 COUNTRY OF REF DOCUMENT : EP
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WO9005755 A1	19980722	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1990901254 COUNTRY OF REF DOCUMENT : EP
WO9401483 A1	19940120	LSPB	+	published / reissued	
WO9401483 A1	19950109	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1993916926 COUNTRY OF REF DOCUMENT : EP
WO9401483 A1	19950419	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1993916926 COUNTRY OF REF DOCUMENT : EP
WO9401483 A1	19980120	LSWD	-WWW	WIPO INFORMATION: WITHDRAWN IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1993916926 COUNTRY OF REF DOCUMENT : EP
ZA9401119 A	19940830	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA9401119 A	20140217	PEXP		Calculated Patent Term Expiry	

73) Family number: 46806121 (US2012059339A)

Title: PAD WITH FLUID BARRIER

Abstract: The present invention relates to a device for applying at least one product in a controlled manner onto a surface. The device comprises several layers, where a bottom layer and at least a storage layer are welded together during the manufacturing of the device in order to create a temporary **liquid** barrier in the storage layer. The temporary **liquid** barrier will form at least one closed chamber in the storage layer, where the purpose of the temporary **liquid** barrier is to delay the **liquid** running over the barrier after the storage layer has been filled with the **liquid** that is to be applied. This delay of the **liquid** running over the temporary **liquid** barrier will ensure that the rest of the different layers of the device can be joined together inside and around their outer peripheries, in order to create a **liquid** tight storage chamber for the product.



Classifications:
International (IPC 8-9): A45D34/04 A45D37/00 A61F13/00 A61K8/02 A61K9/70 A61M35/00 A61Q19/00 A61Q3/04 B43M11/06 B65D75/30 (Advanced/Invention);
A45D34/04 A45D40/00 A61K8/00 A61K9/70 A61M35/00 A61Q1/14 A61Q3/04 (Advanced/Non-invention);
A45D37/00 A61F13/00 A61K8/02 A61K9/70 A61Q19/00 A61Q3/04 (Core/Invention)
CPC: A45D34/04 A45D40/0087 A45D2200/1018 A45D2200/1036 A61F13/00 A61F2013/00297 A61F2013/00906 A61K9/703 A45D37/00
European: A45D34/04 A61F13/00 K45D200/10B2 K45D200/10B6 K45D40/00S K61F13/00J23 K61F13/00L12A K61K9/70E2
US: 1/1 401/261 401/261S 604/304 604/304P

Family:

Publication number	Publication date	Application number	Application date
CN102421399 A	20120418	CN201080019584	20100301
CN102421399 B	20150429	CN201080019584	20100301
DE602010021399 D1	20150226	DE201060021399T	20100301
EP2403446 A1	20120111	EP20100710688	20100301
EP2403446 B1	20141231	EP20100710688	20100301
JP2012519531 T2	20120830	JP20110552900T	20100301
JP5656089 B2	20150121	JP20110552900T	20100301
KR101775499 B1	20170919	KR20117023155	20100301
KR20120002986 A	20120109	KR20117023155	20100301
NO20090965 A	20100906	NO20090000965	20090303
NO20090965 L	20100906	NO20090000965	20090303
NO330398 B1	20110404	NO20090000965	20090303
US2012059339 AA	20120308	US20100254459	20100301
US9161603 BB	20151020	US20100254459	20100301
WO10101472 A1	20100910	WO2010NO00080	20100301

Priority:
NO20090000965 20090303 EP20100710688 20100301 WO2010NO00080 20100301

Probable Assignee: PADTECH AS

Assignee(s): (std): GUNDERSEN DAG H ; PADTECH AS

Inventor(s): (std): GUNDERSEN DAG H ; BRADVAREVIC STANKO

Agent(s): ONSAGERS AS; CHRISTIAN; ONSAGERS AS ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
CN102421399 A	20120418	LSPB	+	published / reissued	
CN102421399 A	20120418	LSPB	+C06	PUBLICATION	
CN102421399 B	20150429	LSGT	+	granted / extensions (spc, cpc, pte)	
CN102421399 B	20150429	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN102421399 B	20180320	LSLE	-CF01	TERMINATION OF PATENT RIGHT DUE TO NON-PAYMENT OF ANNUAL FEE	
CN102421399 B	20300301	PEXP		Calculated Patent Term Expiry	
EP2403446 A1	20120111	LSPB	+	published / reissued	
EP2403446 A1	20120111	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20111004

EP2403446 A1	20120815	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20120711
EP2403446 A1	20140820	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20140721
EP2403446 B1	20141231	LSGT	+	granted / extensions (spc, cpc, pte)	
EP2403446 B1	20141231	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
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EP2403446 B1	20150128	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP2403446 B1	20150215	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 703918 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20150215
EP2403446 B1	20150226	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602010021399 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20150226
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EP2403446 B1	20150525	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : LT REF LEGAL EVENT CODE : MG4D
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EP2403446 B1	20160129	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20150331
EP2403446 B1	20160129	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20150301
EP2403446 B1	20160129	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20150331
EP2403446 B1	20160229	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20141231
EP2403446 B1	20160321	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 7
EP2403446 B1	20160531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20141231
EP2403446 B1	20160531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20160321 YEAR OF FEE PAYMENT : 7

EP2403446 B1	20160531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20160321 YEAR OF FEE PAYMENT : 7
EP2403446 B1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20160330 YEAR OF FEE PAYMENT : 7
EP2403446 B1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20160324 YEAR OF FEE PAYMENT : 7
EP2403446 B1	20161230	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20141231
EP2403446 B1	20170531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT; INVALID AB INITIO LAPSED DATE : 20100301
EP2403446 B1	20170531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SM NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20141231
EP2403446 B1	20170531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20141231
EP2403446 B1	20170630	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20141231
EP2403446 B1	20170731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20150501
EP2403446 B1	20170831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20141231
EP2403446 B1	20171003	LSDW	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R119 REF DOCUMENT NUMBER : 602010021399 COUNTRY OF REF DOCUMENT : DE
EP2403446 B1	20171129	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20170301
EP2403446 B1	20171229	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20171130
EP2403446 B1	20180131	LSLE	-PG25	LAPSED IN A	COUNTRY OF REF DOCUMENT : FR

				CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20170331
EP2403446 B1	20180131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20171003
EP2403446 B1	20180228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20170301
EP2403446 B1	20180228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20170301
EP2403446 B1	20180629	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20141231
EP2403446 B1	20300301	PEXP		Calculated Patent Term Expiry	
JP2012519531 T2	20120830	LSPB	+	published / reissued	
JP2012519531 T2	20130320	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20130301
JP2012519531 T2	20130417	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20130416
JP2012519531 T2	20130509	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20130508
JP2012519531 T2	20140415	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20140415
JP2012519531 T2	20140523	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20140522
JP2012519531 T2	20141006	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2012519531 T2	20141014	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20141014
JP2012519531 T2	20141204	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20141112
JP2012519531 T2	20141205	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 5656089 COUNTRY OF REF DOCUMENT : JP
JP5656089 B2	20150121	LSGT	+	granted / extensions (spc, cpc, pte)	
JP5656089 B2	20141016	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP5656089 B2	20141202	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP5656089 B2	20141205	LSGT	+R150	特許証 (Patent	

				certificate)	
JP5656089 B2	20171205	LSLE	-LAPS	CANCELLATION BECAUSE OF NO PAYMENT OF ANNUAL FEES	
JP5656089 B2	20300301	PEXP		Calculated Patent Term Expiry	
KR101775499 B1	20170919	LSGT	+	granted / extensions (spc, cpc, pte)	
KR101775499 B1	20300301	PEXP		Calculated Patent Term Expiry	
KR20120002986 A	20120109	LSPB	+	published / reissued	
KR20120002986 A	20150302	LSES	A201	REQUEST FOR EXAMINATION	
KR20120002986 A	20160519	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR20120002986 A	20161129	LSRV	-E90F	NOTIFICATION OF REASON FOR FINAL REFUSAL	
KR20120002986 A	20170711	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
NO20090965 A	20100906	LSPB	+	published / reissued	
NO330398 B1	20110404	LSGT	+	granted / extensions (spc, cpc, pte)	
NO330398 B1	20171023	LSLE	-MM1K	LAPSED BY NOT PAYING THE ANNUAL FEES	
NO330398 B1	20290303	PEXP		Calculated Patent Term Expiry	
US2012059339 AA	20120308	LSPB	+	published / reissued	
US2012059339 AA	20150930	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US9161603 BB	20151020	LSGT	+	granted / extensions (spc, cpc, pte)	
US9161603 BB	20111116	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PADTECH AS, NORWAY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:GUNDERSEN, DAG H.; REEL/FRAME:027232/0854 EFFECTIVE DATE : 20110930
US9161603 BB	20150930	LSGT	PAT1	Patented Case	
US9161603 BB	20190610	LSFE	FEPP	FEE PAYMENT PROCEDURE	TEXT : MAINTENANCE FEE REMINDER MAILED (ORIGINAL EVENT CODE: REM.); ENTITY STATUS OF PATENT OWNER: SMALL ENTITY
US9161603 BB	20321202	PEXP		Calculated Patent Term Expiry (PTA 1007 days)	
WO10101472 A1	20100910	LSPB	+	published / reissued	
WO10101472 A1	20100301	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 201080019584.7 COUNTRY OF REF DOCUMENT : CN
WO10101472 A1	20110902	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2011552900 COUNTRY OF REF DOCUMENT : JP
WO10101472 A1	20110905	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO10101472 A1	20110926	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2010710688 COUNTRY OF REF DOCUMENT : EP
WO10101472 A1	20110930	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 20117023155 COUNTRY OF REF DOCUMENT : KR KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :

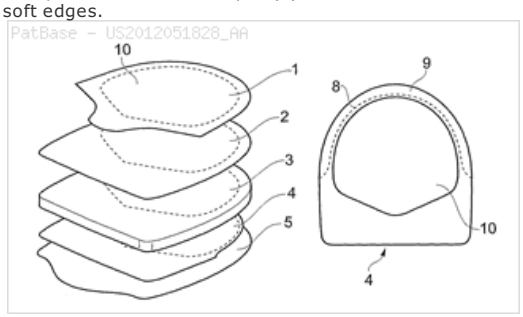
WO10101472 A1	20111116	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 13254459 COUNTRY OF REF DOCUMENT : US

74) Family number: 46806122 (US2012051828A)

Title: SOFT EDGE PAD

Abstract: The present invention relates to a device for applying at least one product at a de-sired place or spot. The device comprises several layers, where an impermeable top layer (1) and an impermeable bottom layer (4) will form the outer surfaces of the device, between which two outer surfaces a storage layer (3) and a contact layer (2) are arranged. The bottom layer (4), storage layer and contact layer (2) are welded together inside their edges to form a closed storage chamber (10) for the product and further being connected (6) around their common edges, where at least a part of the bottom layer (4) outside and around the closed storage chamber (10) is cut away, in order to create a device with soft edges.

Classifications:
International (IPC 8-9): A45D34/00 A45D34/04 A45D37/00 A61F13/00 A61K8/00 A61K8/02 A61K9/70 A61Q19/00 A61Q3/04 B65D75/30 (Advanced/Invention);
A45D34/04 A61M35/00 (Advanced/Non-invention);
A45D37/00 A61F13/00 A61K8/00 A61K8/02 A61K9/70 A61Q19/00 A61Q3/04 (Core/Invention)
CPC: A45D37/00 A45D2200/1018 A45D2200/1036 A45D2200/1045 A61F13/00 A61F2013/0017 A61F2013/00297 A45D34/04
European: A45D37/00 A61F13/00 K45D200/10B2 K45D200/10B6 K45D200/10B6B K61F13/00J23 K61F13/00J8
US: 1/1 401/261 401/261S 401/7 401/7P



Family:

Publication number	Publication date	Application number	Application date
CN102361608 A	20120222	CN201080010326	20100302
CN102361608 B	20150715	CN201080010326	20100302
DE602010004532 D1	20130314	DE201060004532T	20100302
EP2403445 A1	20120111	EP20100710469	20100302
EP2403445 B1	20130109	EP20100710469	20100302
JP2012519684 T2	20120830	JP20110552901T	20100302
JP5660398 B2	20150128	JP20110552901T	20100302
KR101756788 B1	20170711	KR20117023080	20100302
KR20120002983 A	20120109	KR20117023080	20100302
NO20090967 A	20100906	NO20090000967	20090303
NO20090967 L	20100906	NO20090000967	20090303
NO330404 B1	20110404	NO20090000967	20090303
US2012051828 AA	20120301	US20100203981	20100302
US9185961 BB	20151117	US20100203981	20100302
WO10101474 A1	20100910	WO2010NO00082	20100302

Priority:
NO20090000967 20090303 EP20100710469 20100302 WO2010NO00082 20100302

Probable Assignee: PADTECH AS

Assignee(s): (std): GUNDERSEN DAG H ; PADTECH AS

Inventor(s): (std): GUNDERSEN DAG H ; BRADVAREVIC STANCO

Agent(s): Onsagers AS; CHRISTIAN; ONSAGERS AS ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
CN102361608 A	20120222	LSPB	+	published / reissued	
CN102361608 A	20120222	LSPB	+C06	PUBLICATION	
CN102361608 B	20150715	LSGT	+	granted / extensions (spc, cpc, pte)	
CN102361608 B	20150715	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN102361608 B	20180320	LSLE	-CF01	TERMINATION OF PATENT RIGHT DUE TO NON-PAYMENT OF ANNUAL FEE	
CN102361608 B	20300302	PEXP		Calculated Patent Term Expiry	
EP2403445 A1	20120111	LSPB	+	published / reissued	
EP2403445 A1	20120111	LSES	+17P	REQUEST FOR	EFFECTIVE DATE : 20111004

				EXAMINATION FILED	
EP2403445 A1	20121226	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : PADTECH AS
EP2403445 B1	20130109	LSGT	+	granted / extensions (spc, cpc, pte)	
EP2403445 B1	20130109	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP2403445 B1	20130115	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP2403445 B1	20130115	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 592310 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20130115
EP2403445 B1	20130213	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP2403445 B1	20130314	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602010004532 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20130314
EP2403445 B1	20130531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20130109
EP2403445 B1	20130612	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : VDEP EFFECTIVE DATE : 20130109
EP2403445 B1	20130615	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MK05 REF DOCUMENT NUMBER : 592310 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20130109
EP2403445 B1	20130625	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : LT REF LEGAL EVENT CODE : MG4D
EP2403445 B1	20130731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20130109
EP2403445 B1	20130731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NO NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20130409
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				CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20130420
EP2403445 B1	20130731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20130409
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EP2403445 B1	20130830	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20130410
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EP2403445 B1	20130830	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LV NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20130109
EP2403445 B1	20130830	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20130109
EP2403445 B1	20130930	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20130109
EP2403445 B1	20131031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT	COUNTRY OF REF DOCUMENT : RO NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION

				INFORMATION FROM NATIONAL OFFICE TO EPO]	OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20130109
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EP2403445 B1	20131031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20130109
EP2403445 B1	20131031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20130109
EP2403445 B1	20131031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20130331
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EP2403445 B1	20131218	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20131010
EP2403445 B1	20140101	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP2403445 B1	20140130	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 602010004532 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20131010
EP2403445 B1	20140131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20130302
EP2403445 B1	20140731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20130109
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EP2403445 B1	20150630	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20130109
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EP2403445 B1	20150731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20130109
EP2403445 B1	20160321	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 7
EP2403445 B1	20160531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20160321 YEAR OF FEE PAYMENT : 7
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EP2403445 B1	20171229	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20171130
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EP2403445 B1	20180228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20170302
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EP2403445 B1	20300302	PEXP		Calculated Patent Term Expiry	
JP2012519684 T2	20120830	LSPB	+	published / reissued	
JP2012519684 T2	20130320	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20130301
JP2012519684 T2	20130523	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20130522
JP2012519684 T2	20140701	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20140701
JP2012519684 T2	20140920	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20140919
JP2012519684 T2	20141009	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2012519684 T2	20141021	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20141021
JP2012519684 T2	20141211	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20141119
JP2012519684 T2	20141212	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 5660398 COUNTRY OF REF DOCUMENT : JP
JP5660398 B2	20150128	LSGT	+	granted / extensions (spc, cpc, pte)	
JP5660398 B2	20141023	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP5660398 B2	20141209	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP5660398 B2	20141212	LSGT	+R150	特許証 (Patent certificate)	
JP5660398 B2	20171212	LSLE	-LAPS	CANCELLATION BECAUSE OF NO PAYMENT OF ANNUAL FEES	
JP5660398 B2	20300302	PEXP		Calculated Patent Term Expiry	
KR101756788 B1	20170711	LSGT	+	granted / extensions (spc, cpc, pte)	
KR101756788 B1	20150302	LSES	A201	REQUEST FOR EXAMINATION	

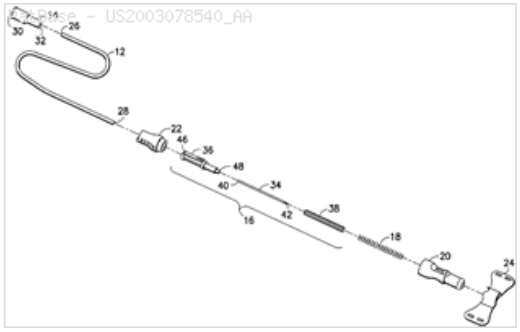
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KR101756788 B1	20161124	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
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KR101756788 B1	20300302	PEXP		Calculated Patent Term Expiry	
KR20120002983 A	20120109	LSPB	+	published / reissued	
KR20120002983 A	20150302	LSES	A201	REQUEST FOR EXAMINATION	
KR20120002983 A	20160519	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR20120002983 A	20161124	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
NO20090967 A	20100906	LSPB	+	published / reissued	
NO330404 B1	20110404	LSGT	+	granted / extensions (spc, cpc, pte)	
NO330404 B1	20171023	LSLE	-MM1K	LAPSED BY NOT PAYING THE ANNUAL FEES	
NO330404 B1	20290303	PEXP		Calculated Patent Term Expiry	
US2012051828 AA	20120301	LSPB	+	published / reissued	
US2012051828 AA	20151028	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US9185961 BB	20151117	LSGT	+	granted / extensions (spc, cpc, pte)	
US9185961 BB	20111116	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PADTECH AS, NORWAY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:GUNDERSEN, DAG H.; REEL/FRAME:027232/0208 EFFECTIVE DATE : 20110930
US9185961 BB	20151028	LSGT	PAT1	Patented Case	
US9185961 BB	20190708	LSFE	FEPP	FEE PAYMENT PROCEDURE	TEXT : MAINTENANCE FEE REMINDER MAILED (ORIGINAL EVENT CODE: REM.); ENTITY STATUS OF PATENT OWNER: SMALL ENTITY
US9185961 BB	20321225	PEXP		Calculated Patent Term Expiry (PTA 1029 days)	
WO10101474 A1	20100910	LSPB	+	published / reissued	
WO10101474 A1	20100302	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 201080010326.2 COUNTRY OF REF DOCUMENT : CN
WO10101474 A1	20110831	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2011552901 COUNTRY OF REF DOCUMENT : JP
WO10101474 A1	20110905	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO10101474 A1	20110926	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2010710469 COUNTRY OF REF DOCUMENT : EP
WO10101474 A1	20110930	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 20117023080 COUNTRY OF REF DOCUMENT : KR KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO10101474 A1	20111116	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 13203981 COUNTRY OF REF DOCUMENT : US

75) Family number: 28453123 (US2003078540A)

Title: RETRACTABLE NEEDLE ASSEMBLY

Abstract: A fluid collection or infusion set is provided. The set includes flexible tubing with a fitting attached to a proximal end and a needle assembly attached to the distal end. The needle assembly includes a needle hub and a needle cannula secured in the hub. An actuator arm extends proximally and outwardly from the needle hub and has an actuator button at its free end. The needle assembly is disposed in a barrel and can move from a distal position where the needle cannula is exposed to a proximal position where the needle cannula is shielded. A spring is disposed in the barrel for propelling the needle assembly to the proximal position. The barrel includes an actuating aperture that receives the actuator button for locking the spring in a compressed condition. Depression of the actuator button enables the spring to propel the needle assembly into its proximal shielded position.

Classifications:
International (IPC 8-9): A61B5/15 A61B5/151 A61M25/06 A61M5/00 A61M5/158 A61M5/31 A61M5/32 A61M5/50 (Advanced/Invention); A61M5/32 (Advanced/Non-invention);
A61B5/15 A61M25/06 A61M5/00 A61M5/14 A61M5/32 A61M5/50 (Core/Invention);
A61M5/32 (Core/Non-invention)
International (IPC 1-7): A61B5/15 A61M5/00 A61M5/158 A61M5/31 A61M5/32
CPC: A61M25/0637 A61M5/3257 A61M25/0631 A61M2005/3247
European: A61M25/06D2 A61M25/06D3 K61M5/32C2H1C K61M5/32C2H1D K61M5/32C2H2
US: 604/110 604/110P 604/164.08 604/164.080S 604/177 604/263 604/263S



Family:

Publication number	Publication date	Application number	Application date
AT285807 E	20050115	AT20020023735T	20021023
AU2002301586 AA	20030612	AU20020301586	20021022
AU2002301586 BB	20091210	AU20020301586	20021022
AU2010200895 AA	20100401	AU20100200895	20100310
AU2010200895 BB	20120322	AU20100200895	20100310
AU2012202720 AA	20120531	AU20120202720	20120509
AU2012202720 BB	20131212	AU20120202720	20120509
CA2409306 AA	20030424	CA20022409306	20021022
CA2409306 C	20120501	CA20022409306	20021022
DE60202426 D1	20050203	DE20026002426	20021023
DE60202426 D1	20050203	DE20026002426T	20021023
DE60202426 T2	20060406	DE20026002426T	20021023
DK1306097 T3	20050404	DK20020023735T	20021023
EP1306097 A1	20030502	EP20020023735	20021023
EP1306097 B1	20041229	EP20020023735	20021023
EP1518576 A2	20050330	EP20040030848	20021023
EP1518576 A3	20050413	EP20040030848	20021023
EP1518577 A2	20050330	EP20040030849	20021023
EP1518577 A3	20050413	EP20040030849	20021023
EP1518578 A2	20050330	EP20040030850	20021023
EP1518578 A3	20050413	EP20040030850	20021023
EP1520598 A2	20050406	EP20040030851	20021023
EP1520598 A3	20050420	EP20040030851	20021023
ES2236421 T3	20050716	ES20020023735T	20021023
JP2003180829 A2	20030702	JP20020310253	20021024
JP2010000388 A2	20100107	JP20090231794	20091005
JP4741165 B2	20110803	JP20020310253	20021024
JP5036779 B2	20120926	JP20090231794	20091005
PT1306097 T	20050228	PT20020023735T	20021023
US2003078540 AA	20030424	US20020279190	20021023
US2008114296 AA	20080515	US20070868848	20071008
US7294118 BB	20071113	US20020279190	20021023
US8109905 BB	20120207	US20070868848	20071008

Priority:

US20010338910P 20011024
AU20020301586 20021022
EP20020023735 20021023
AU20100200895 20100310
US20020399318P 20020726
CA20022409306 20021022
JP20020310253 20021024
AU20120202720 20120509
US20020418787P 20021015
US20020279190 20021023
US20070868848 20071008

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Agent(s): FB RICE; FB RICE PTY LTD; GOWLING LAFLEUR HENDERSON LLP; DAVID W HIGHET VP AND CHIEF IP COUNSEL BECTON DICKINSON AND CO; MARK J; MARK; DAVID M

Designated states: AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
AT285807 E	20050115	LSGT	+	granted / extensions (spc, cpc, pte)	
AT285807 E	20050915	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	REF DOCUMENT NUMBER : 1306097 COUNTRY OF REF DOCUMENT : EP
AT285807 E	20221023	PEXP		Calculated Patent Term Expiry	
AU2002301586 AA	20030612	LSPB	+	published / reissued	
AU2002301586 BB	20091210	LSGT	+	granted / extensions (spc, cpc, pte)	
AU2002301586 BB	20100408	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU2002301586 BB	20221022	PEXP		Calculated Patent Term Expiry	
AU2010200895 AA	20100401	LSPB	+	published / reissued	
AU2010200895 BB	20120322	LSGT	+	granted / extensions (spc, cpc, pte)	
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AU2010200895 BB	20300310	PEXP		Calculated Patent Term Expiry	
AU2012202720 AA	20120531	LSPB	+	published / reissued	
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AU2012202720 BB	20140410	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU2012202720 BB	20320509	PEXP		Calculated Patent Term Expiry	
CA2409306 AA	20030424	LSPB	+	published / reissued	
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CA2409306 C	20120501	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2409306 C	20221022	PEXP		Calculated Patent Term Expiry	
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DE60202426 D1	20070419	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE60202426 T2	20060406	LSGT	+	granted / extensions (spc, cpc, pte)	
DE60202426 T2	20070419	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
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EP1306097 A1	20030502	LSPB	+	published / reissued	
EP1306097 A1	20030903	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20030703
EP1306097 A1	20031015	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20030902
EP1306097 A1	20040121	LSFE	+AKX	DESIGNATION FEES PAID	COUNTRY OF REF DOCUMENT : AT COUNTRY OF REF DOCUMENT : BE COUNTRY OF REF DOCUMENT : BG COUNTRY OF REF DOCUMENT : CH COUNTRY OF REF DOCUMENT : CY COUNTRY OF REF DOCUMENT : CZ COUNTRY OF REF DOCUMENT : DE COUNTRY OF REF DOCUMENT : DK COUNTRY OF REF DOCUMENT : EE COUNTRY OF REF DOCUMENT : ES COUNTRY OF REF DOCUMENT : FI COUNTRY OF REF DOCUMENT : FR COUNTRY OF REF DOCUMENT : GB COUNTRY OF REF DOCUMENT : GR COUNTRY OF REF DOCUMENT : IE COUNTRY OF REF DOCUMENT : IT COUNTRY OF REF DOCUMENT : LI COUNTRY OF REF DOCUMENT : LU COUNTRY OF REF DOCUMENT : MC COUNTRY OF REF DOCUMENT : NL COUNTRY OF REF DOCUMENT : PT COUNTRY OF REF DOCUMENT : SE COUNTRY OF REF DOCUMENT : SK COUNTRY OF REF DOCUMENT : TR
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EP1306097 A1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20160927 YEAR OF FEE PAYMENT : 15

EP1306097 A1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20160922 YEAR OF FEE PAYMENT : 15
EP1306097 A1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20160928 YEAR OF FEE PAYMENT : 15
EP1306097 A1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20160921 YEAR OF FEE PAYMENT : 15
EP1306097 A1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20160922 YEAR OF FEE PAYMENT : 15
EP1306097 A1	20170228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20160923 YEAR OF FEE PAYMENT : 15
EP1306097 B1	20041229	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1306097 B1	20041229	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20041229
EP1306097 B1	20041229	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20041229
EP1306097 B1	20041229	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20041229
EP1306097 B1	20041229	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20041229
EP1306097 B1	20041229	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP1306097 B1	20041231	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1306097 B1	20050126	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP1306097 B1	20050420	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : EP REF DOCUMENT NUMBER : 20050400884 COUNTRY OF REF DOCUMENT : GR
EP1306097 B1	20050716	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2236421 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :

EP1306097 B1	20051023	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20051023
EP1306097 B1	20051031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20051031
EP1306097 B1	20051031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20051031
EP1306097 B1	20051221	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20050930
EP1306097 B1	20160921	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 15
EP1306097 B1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20160922 YEAR OF FEE PAYMENT : 15
EP1306097 B1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20160923 YEAR OF FEE PAYMENT : 15
EP1306097 B1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20160922 YEAR OF FEE PAYMENT : 15
EP1306097 B1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20160928 YEAR OF FEE PAYMENT : 15
EP1306097 B1	20161230	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20160922 YEAR OF FEE PAYMENT : 15
EP1306097 B1	20161230	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20160923 YEAR OF FEE PAYMENT : 15
EP1306097 B1	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20160922 YEAR OF FEE PAYMENT : 15
EP1306097 B1	20170228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20160922 YEAR OF FEE PAYMENT : 15
EP1306097 B1	20170228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20161003 YEAR OF FEE PAYMENT : 15
EP1306097 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20161006

				OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	YEAR OF FEE PAYMENT : 15
EP1306097 B1	20170921	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 16
EP1306097 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20170921 YEAR OF FEE PAYMENT : 16
EP1306097 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20170921 YEAR OF FEE PAYMENT : 16
EP1306097 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20170929 YEAR OF FEE PAYMENT : 16
EP1306097 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20170926 YEAR OF FEE PAYMENT : 16
EP1306097 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170921 YEAR OF FEE PAYMENT : 16
EP1306097 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20170925 YEAR OF FEE PAYMENT : 16
EP1306097 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20170925 YEAR OF FEE PAYMENT : 16
EP1306097 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20170925 YEAR OF FEE PAYMENT : 16
EP1306097 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20170921 YEAR OF FEE PAYMENT : 16
EP1306097 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20170922 YEAR OF FEE PAYMENT : 16
EP1306097 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20170921 YEAR OF FEE PAYMENT : 16
EP1306097 B1	20180131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170920 YEAR OF FEE PAYMENT : 16
EP1306097 B1	20180131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20171016 YEAR OF FEE PAYMENT : 16
EP1306097 B1	20180228	LSFE	+PGFP	ANNUAL FEE PAID	COUNTRY OF REF DOCUMENT : PT

				TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	PAYMENT DATE : 20171002 YEAR OF FEE PAYMENT : 16
EP1306097 B1	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20171103 YEAR OF FEE PAYMENT : 16
EP1306097 B1	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20170921 YEAR OF FEE PAYMENT : 16
EP1306097 B1	20180920	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 17
EP1306097 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20180919 YEAR OF FEE PAYMENT : 17
EP1306097 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20180920 YEAR OF FEE PAYMENT : 17
EP1306097 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20180924 YEAR OF FEE PAYMENT : 17
EP1306097 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20180925 YEAR OF FEE PAYMENT : 17
EP1306097 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20180921 YEAR OF FEE PAYMENT : 17
EP1306097 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20180920 YEAR OF FEE PAYMENT : 17
EP1306097 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20180921 YEAR OF FEE PAYMENT : 17
EP1306097 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20180924 YEAR OF FEE PAYMENT : 17
EP1306097 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20180925 YEAR OF FEE PAYMENT : 17
EP1306097 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20180920 YEAR OF FEE PAYMENT : 17
EP1306097 B1	20181231	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20180920 YEAR OF FEE PAYMENT : 17

EP1306097 B1	20190131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180819 YEAR OF FEE PAYMENT : 17
EP1306097 B1	20190131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20180920 YEAR OF FEE PAYMENT : 17
EP1306097 B1	20190131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20181001 YEAR OF FEE PAYMENT : 17
EP1306097 B1	20190228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20181003 YEAR OF FEE PAYMENT : 17
EP1306097 B1	20190228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20181105 YEAR OF FEE PAYMENT : 17
EP1306097 B1	20221023	PEXP		Calculated Patent Term Expiry	
EP1518576 A2	20050330	LSPB	+	published / reissued	
EP1518576 A3	20051130	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20051006
EP1518576 A3	20060104	LSFE	+AKX	DESIGNATION FEES PAID	COUNTRY OF REF DOCUMENT : AT COUNTRY OF REF DOCUMENT : BE COUNTRY OF REF DOCUMENT : BG COUNTRY OF REF DOCUMENT : CH COUNTRY OF REF DOCUMENT : CY COUNTRY OF REF DOCUMENT : CZ COUNTRY OF REF DOCUMENT : DE COUNTRY OF REF DOCUMENT : DK COUNTRY OF REF DOCUMENT : EE COUNTRY OF REF DOCUMENT : ES COUNTRY OF REF DOCUMENT : FI COUNTRY OF REF DOCUMENT : FR COUNTRY OF REF DOCUMENT : GB COUNTRY OF REF DOCUMENT : GR COUNTRY OF REF DOCUMENT : IE COUNTRY OF REF DOCUMENT : IT COUNTRY OF REF DOCUMENT : LI COUNTRY OF REF DOCUMENT : LU COUNTRY OF REF DOCUMENT : MC COUNTRY OF REF DOCUMENT : NL COUNTRY OF REF DOCUMENT : PT COUNTRY OF REF DOCUMENT : SE COUNTRY OF REF DOCUMENT : SK COUNTRY OF REF DOCUMENT : TR
EP1518576 A3	20061227	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20061123
EP1518576 A3	20070926	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20070404
EP1518577 A2	20050330	LSPB	+	published / reissued	
EP1518577 A3	20051130	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20051006
EP1518577 A3	20060104	LSFE	+AKX	DESIGNATION FEES PAID	COUNTRY OF REF DOCUMENT : AT COUNTRY OF REF DOCUMENT : BE COUNTRY OF REF DOCUMENT : BG COUNTRY OF REF DOCUMENT : CH COUNTRY OF REF DOCUMENT : CY COUNTRY OF REF DOCUMENT : CZ COUNTRY OF REF DOCUMENT : DE COUNTRY OF REF DOCUMENT : DK COUNTRY OF REF DOCUMENT : EE COUNTRY OF REF DOCUMENT : ES COUNTRY OF REF DOCUMENT : FI COUNTRY OF REF DOCUMENT : FR COUNTRY OF REF DOCUMENT : GB COUNTRY OF REF DOCUMENT : GR COUNTRY OF REF DOCUMENT : IE

					COUNTRY OF REF DOCUMENT : IT COUNTRY OF REF DOCUMENT : LI COUNTRY OF REF DOCUMENT : LU COUNTRY OF REF DOCUMENT : MC COUNTRY OF REF DOCUMENT : NL COUNTRY OF REF DOCUMENT : PT COUNTRY OF REF DOCUMENT : SE COUNTRY OF REF DOCUMENT : SK COUNTRY OF REF DOCUMENT : TR
EP1518577 A3	20061227	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20061123
EP1518577 A3	20071205	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20070605
EP1518578 A2	20050330	LSPB	+	published / reissued	
EP1518578 A3	20051130	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20051006
EP1518578 A3	20060104	LSFE	+AKX	DESIGNATION FEES PAID	COUNTRY OF REF DOCUMENT : AT COUNTRY OF REF DOCUMENT : BE COUNTRY OF REF DOCUMENT : BG COUNTRY OF REF DOCUMENT : CH COUNTRY OF REF DOCUMENT : CY COUNTRY OF REF DOCUMENT : CZ COUNTRY OF REF DOCUMENT : DE COUNTRY OF REF DOCUMENT : DK COUNTRY OF REF DOCUMENT : EE COUNTRY OF REF DOCUMENT : ES COUNTRY OF REF DOCUMENT : FI COUNTRY OF REF DOCUMENT : FR COUNTRY OF REF DOCUMENT : GB COUNTRY OF REF DOCUMENT : GR COUNTRY OF REF DOCUMENT : IE COUNTRY OF REF DOCUMENT : IT COUNTRY OF REF DOCUMENT : LI COUNTRY OF REF DOCUMENT : LU COUNTRY OF REF DOCUMENT : MC COUNTRY OF REF DOCUMENT : NL COUNTRY OF REF DOCUMENT : PT COUNTRY OF REF DOCUMENT : SE COUNTRY OF REF DOCUMENT : SK COUNTRY OF REF DOCUMENT : TR
EP1518578 A3	20061227	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20061123
EP1518578 A3	20070926	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20070404
EP1520598 A2	20050406	LSPB	+	published / reissued	
EP1520598 A3	20051130	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20051006
EP1520598 A3	20060111	LSFE	+AKX	DESIGNATION FEES PAID	COUNTRY OF REF DOCUMENT : AT COUNTRY OF REF DOCUMENT : BE COUNTRY OF REF DOCUMENT : BG COUNTRY OF REF DOCUMENT : CH COUNTRY OF REF DOCUMENT : CY COUNTRY OF REF DOCUMENT : CZ COUNTRY OF REF DOCUMENT : DE COUNTRY OF REF DOCUMENT : DK COUNTRY OF REF DOCUMENT : EE COUNTRY OF REF DOCUMENT : ES COUNTRY OF REF DOCUMENT : FI COUNTRY OF REF DOCUMENT : FR COUNTRY OF REF DOCUMENT : GB COUNTRY OF REF DOCUMENT : GR COUNTRY OF REF DOCUMENT : IE COUNTRY OF REF DOCUMENT : IT COUNTRY OF REF DOCUMENT : LI COUNTRY OF REF DOCUMENT : LU COUNTRY OF REF DOCUMENT : MC COUNTRY OF REF DOCUMENT : NL COUNTRY OF REF DOCUMENT : PT COUNTRY OF REF DOCUMENT : SE COUNTRY OF REF DOCUMENT : SK COUNTRY OF REF DOCUMENT : TR
EP1520598 A3	20061220	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20061116
EP1520598 A3	20071121	LSDW	-18D	APPLICATION	EFFECTIVE DATE : 20070530

				DEEMED TO BE WITHDRAWN	
ES2236421 T3	20050716	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2236421 T3	20221023	PEXP		Calculated Patent Term Expiry	
JP2003180829 A2	20030702	LSPB	+	published / reissued	
JP2003180829 A2	20051018	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20051017
JP2003180829 A2	20081029	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20081028
JP2003180829 A2	20090429	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20090428
JP2003180829 A2	20090608	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20090605
JP2003180829 A2	20091006	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20091005
JP2003180829 A2	20091030	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A821 EFFECTIVE DATE : 20091009
JP2003180829 A2	20091106	LSAL	A911	TRANSFER OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A911 EFFECTIVE DATE : 20091105
JP2003180829 A2	20091207	LSAL	-A912	REMOVAL OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A912 EFFECTIVE DATE : 20091204
JP2003180829 A2	20110512	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20110506
JP2003180829 A2	20110513	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP2003180829 A2	20110516	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP2010000388 A2	20100107	LSPB	+	published / reissued	
JP2010000388 A2	20111128	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20111125
JP2010000388 A2	20120605	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2010000388 A2	20120611	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20120608
JP2010000388 A2	20120614	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01
JP2010000388 A2	20120712	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20120703

JP2010000388 A2	20120713	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP2010000388 A2	20120713	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP4741165 B2	20110803	LSGT	+	granted / extensions (spc, cpc, pte)	
JP4741165 B2	20110414	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP4741165 B2	20110510	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP4741165 B2	20140424	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4741165 B2	20140430	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4741165 B2	20150430	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4741165 B2	20150512	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4741165 B2	20160506	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4741165 B2	20160510	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4741165 B2	20170508	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4741165 B2	20170516	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4741165 B2	20180507	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4741165 B2	20180515	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4741165 B2	20190509	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4741165 B2	20190514	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4741165 B2	20221024	PEXP		Calculated Patent Term Expiry	
JP5036779 B2	20120926	LSGT	+	granted / extensions (spc, cpc, pte)	
JP5036779 B2	20091105	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20091104
JP5036779 B2	20120710	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP5036779 B2	20150625	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5036779 B2	20150630	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5036779 B2	20160707	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5036779 B2	20160712	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250

JP5036779 B2	20170706	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5036779 B2	20170711	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5036779 B2	20180705	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5036779 B2	20180710	LSFE	+R250	年金領収書, 年金領収書 (分納) (Pension receipt, annuity receipt (scheduled))	
JP5036779 B2	20190704	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5036779 B2	20190709	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5036779 B2	20291005	PEXP		Calculated Patent Term Expiry	
PT1306097 T	20050228	LSGT	+	granted / extensions (spc, cpc, pte)	
PT1306097 T	20221023	PEXP		Calculated Patent Term Expiry	
US2003078540 AA	20030424	LSPB	+	published / reissued	
US2003078540 AA	20071024	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2008114296 AA	20080515	LSPB	+	published / reissued	
US2008114296 AA	20120118	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US7294118 BB	20071113	LSGT	+	granted / extensions (spc, cpc, pte)	
US7294118 BB	20021023	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BECTON, DICKINSON AND COMPANY, NEW JERSEY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:SAULENAS, WILLIAM G.; WILKINSON, BRADLEY M.; NIERMANN, VOLKER; AND OTHERS; REEL/FRAME:013788/0311 EFFECTIVE DATE : 20021011
US7294118 BB	20071024	LSGT	PAT1	Patented Case	
US7294118 BB	20110513	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US7294118 BB	20150513	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US7294118 BB	20190423	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US7294118 BB	20221023	PEXP		Calculated Patent Term Expiry	
US8109905 BB	20120207	LSGT	+	granted / extensions (spc, cpc, pte)	
US8109905 BB	20080204	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BECTON, DICKINSON AND COMPANY, NEW JERSEY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:SAULENAS, WILLIAM E.; WILKINSON, BRADLEY M.; NIERMANN, VOLKER; AND OTHERS; REEL/FRAME:020458/0792; SIGNING DATES FROM 20080110 TO 20080123
US8109905 BB	20080204	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BECTON, DICKINSON AND COMPANY, NEW JERSEY OLDPARTY : ASSIGNMENT OF

					ASSIGNORS INTEREST; ASSIGNORS:SAULENAS, WILLIAM E.; WILKINSON, BRADLEY M.; NIERMANN, VOLKER; AND OTHERS; SIGNING DATES FROM 20080110 TO 20080123; REEL/FRAME:020458/0792
US8109905 BB	20120118	LSGT	PAT1	Patented Case	
US8109905 BB	20150728	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8109905 BB	20190722	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US8109905 BB	20300415	PEXP		Calculated Patent Term Expiry (PTA 920 days and a terminal disclaimer has been filed)	