PatBase - Search results 12 August 2020
Search query (8): FT=(DIE~ AND GELATIN OR SOFTGEL~) AND IC =(A61J)
Results: 2165

Search history

Search 1: FT=(DIE~ CUT~ AND GELATIN~ AND CAPSULES~ AND METHOD~ OR MANUFACTURING~) (Results 218)

Search 2: FT=(DIE~ CUT~ AND GELATIN OR JELLY~ AND CAPSULES OR MOLD~ AND METHOD~) AND IC =(A61J) (Results 22)

Search 3: FT=(DIE~ CUT~ AND GELATIN OR JELLY~ AND CAPSULES OR MOLD~) AND IC =(A61J) (Results 23)

Search 4: FT=(DIE~ CUT~ AND GELATIN~ AND CAPSULES~ OR MOLD~) (Results 556)

Search 5: FT=(DIE~ CUT~ AND GELATIN~ AND CAPSULES~ OR MOLD~) AND IC =(A61J) (Results 22)

Search 6: FT=(DIE~ AND GELATIN OR SOFTGEL~ AND CAPSULES~ OR CHAMBER~ AND MULTIPLE~ AND FILL~) AND IC =(A61J) (Results 754)

Search 7: FT=(DIE~ AND GELATIN OR SOFTGEL~ AND CHAMBER~ AND MULTIPLE~ AND FILL~) AND IC =(A61J) (Results 365)

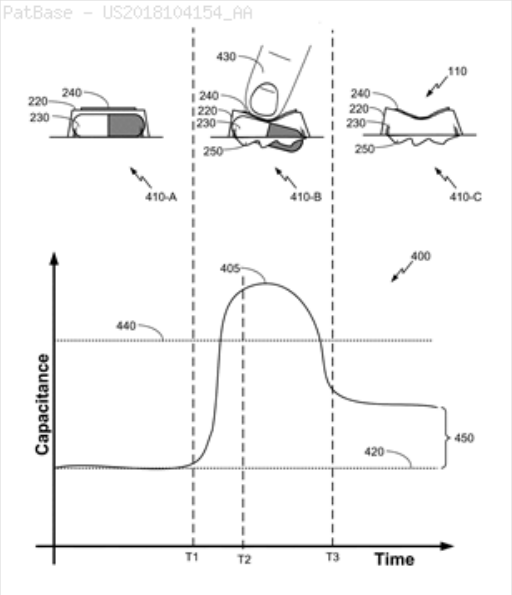
Search 8: FT=(DIE~ AND GELATIN OR SOFTGEL~) AND IC =(A61J) (Results 2165)

1) Family number: 69332000 (US2018104154A)

Title: SMART BLISTER PACK WITH SKIN PRESENCE TRIGGER

Abstract: Techniques provided herein are directed toward accurately determining when an item is removed from a blister pack by utilizing capacitive sensors. The capacitive sensors may be positioned on each blister of the blister and may detect the presence of the skin of the finger and/or the whether the blister has been deformed, which can occur when an item is removed from the blister. Some embodiments may determine whether skin was detected at the time of extraction to determine whether extraction was intentional.

Classifications:
International (IPC 8-9): A61J1/03 A61J7/04 G06F19/00 G06F3/044 (Advanced/Invention); G08B29/18 (Advanced/Non-invention)
CPC: A61J7/04 G08B29/181 A61J1/035 G06F19/3456 G16H40/67 G06F19/00 G06F19/3462 A61J7/0436 A61J2200/70 G16H20/10 G16H20/13
US: 1/1 340/568.1



Family:

Publication number	Publication date	Application number	Application date
US2018104154 AA	20180419	US20170673134	20170809
US10265246 BB	20190423	US20170673134	20170809
WO18075183 A1	20180426	WO2017US52416	20170920

Priority:

US20160409237P 20161017 US20170673134 20170809

Probable Assignee: CAPSULE TECHNOLOGIES INC

Assignee(s): (std): CAPSULE TECH INC ; QUALCOMM INC

Assignee(s): QUALCOMM LIFE INC ; TC LENDING LLC ; CAPSULE TECHNOLOGIES INC ; PHILIPS HEALTHCARE INFORMATICS INC

Inventor(s): (std): BALLAM ROBERT ; DANTSKER EUGENE ; GANTON ROBERT

Agent(s): MCMILLAN SCOTT L 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 DJ 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 JO JP KE KG KH KM KN KP KR KW 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 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)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
US10265246 BB	20190423	LSGT	+	granted / extensions (spc, cpc, pte)	
US10265246 BB	20170920	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : QUALCOMM INCORPORATED, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:DANTSKER, EUGENE; GANTON, ROBERT; BALLAM, ROBERT; SIGNING DATES FROM 20170902 TO 20170912; REEL/FRAME:043644/0227
US10265246 BB	20190403	LSGT	PAT1	Patented Case	
US10265246 BB	20200417	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CAPSULE TECHNOLOGIES, INC., CALIFORNIA OLDPARTY : RELEASE OF THE SECURITY INTEREST RECORDED AT REEL/FRAME 048301/0269; ASSIGNOR:TC LENDING, LLC, AS COLLATERAL AGENT;

					REEL/FRAME:052434/0262 EFFECTIVE DATE : 20200417
US10265246 BB	20200428	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PHILIPS HEALTHCARE INFORMATICS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:CAPSULE TECHNOLOGIES, INC.; REEL/FRAME:053262/0405 EFFECTIVE DATE : 20200417
US10265246 BB	20370809	PEXP		Calculated Patent Term Expiry	
US2018104154 AA	20180419	LSPB	+	published / reissued	
US2018104154 AA	20180112	LSES	NFA1	Non Final Action Mailed	
US2018104154 AA	20190211	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : TC LENDING, LLC, TEXAS OLDPARTY : SECURITY INTEREST; ASSIGNORS:CAPSULE TECHNOLOGIES, INC.; CAPSULETECH, INC.; REEL/FRAME:048301/0269 EFFECTIVE DATE : 20190211
US2018104154 AA	20190211	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : QUALCOMM LIFE, INC., CALIFORNIA OLDPARTY : PATENT ASSIGNMENT EFFECTIVE AS OF 02/11/2019; ASSIGNOR:QUALCOMM INCORPORATED; REEL/FRAME:048301/0902 EFFECTIVE DATE : 20190206
US2018104154 AA	20190213	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2018104154 AA	20190215	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CAPSULE TECHNOLOGIES, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:QUALCOMM LIFE, INC.; REEL/FRAME:048356/0787 EFFECTIVE DATE : 20190211
US2018104154 AA	20190307	LSFE	FEPP	FEE PAYMENT PROCEDURE	TEXT : ENTITY STATUS SET TO SMALL (ORIGINAL EVENT CODE: SMAL); ENTITY STATUS OF PATENT OWNER: SMALL ENTITY
US2018104154 AA	20190307	LSFE	+PPR1	Publications -- Issue Fee Payment Received	
US2018104154 AA	20190315	LSFE	+PPV1	Publications -- Issue Fee Payment Verified	
US2018104154 AA	20190403	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
WO18075183 A1	20180426	LSPB	+	published / reissued	
WO18075183 A1	20190418	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE	REF COUNTRY CODE : DE
WO18075183 A1	20191113	LSNE	-122	EP: PCT APPLICATION NON-ENTRY IN EUROPEAN PHASE	REF DOCUMENT NUMBER : 17784446 COUNTRY OF REF DOCUMENT : EP KIND CODE OF REF DOCUMENT : A1 DESIGNATED STATE(S) :

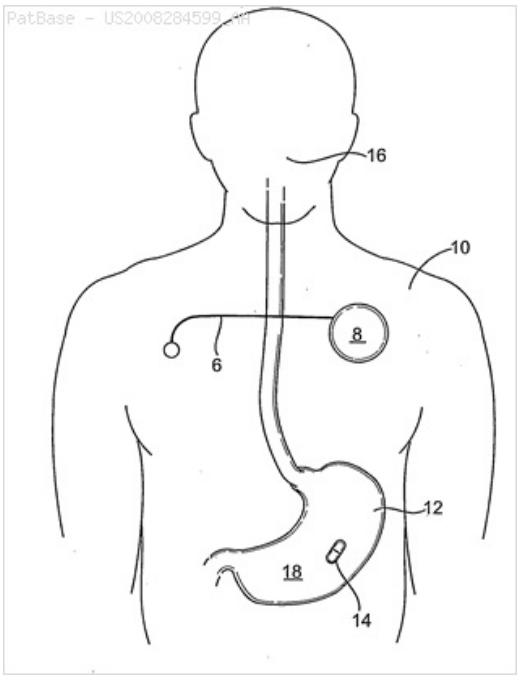
2) Family number: 33588001 (US2008284599A)

Title: PHARMA-INFORMATICS SYSTEM

Abstract: Compositions, systems and methods that allow for the detection of the actual physical delivery of a pharmaceutical agent to a body are provided. Embodiments of the compositions include an identifier and an active agent. The invention finds use in a variety of different applications, including but not limited to, monitoring of therapeutic regimen compliance, tracking the history of pharmaceutical agents, etc.

FDA Data:

Application number	Active ingredient	Proprietary name	Applicant	Date of approval
207202	ARIPIPRAZOLE	ABILIFY MYCITE KIT	OTSUKA PHARM CO LTD	Nov 13, 2017



Classifications:
International (IPC 8-9): A61B A61B1/00 A61B1/273 A61B5/00 A61B5/01 A61B5/026 A61B5/0265 A61B5/029 A61B5/04 A61B5/05 A61B5/053 A61B5/07 A61B5/145 A61B5/1473 A61G12/00 A61J A61J1/00 A61J3/00 A61J3/07 A61J7/00 A61J7/04 A61K A61K9/00 A61K9/48 A61L33/00 A61M37/00 A61M5/168 A61M5/172 A61N1/00 A61N1/36 A61N1/362 A61N1/365 A61N1/37 A61N1/372 A61N1/378 B05D5/12 B23P11/00 B32B38/04 B65D41/02 B65D51/24 B65D83/04 B67D7/06 C23C14/06 C23C14/24 C23C14/34 G02B23/24 G06F19/00 G06K7/10 G06Q50/22 G08B1/08 G08B13/14 G08B21/02 G08B21/18 G08C17/00 G16H20/10 H01M4/04 H01M4/06 H01M4/08 H01M4/36 H01M4/38 H01M4/58 H01M4/66 H01M6/32 H01M6/34 H01Q H01Q1/12 H01Q1/27 H01R43/00 H04B H04B1/02 H04B1/034 H04B1/06 H04B1/3816 H04B1/59 H04B13/00 H04B13/02 H04B7/24 H04Q5/22 (Advanced/Invention);
A61B5/00 A61B5/01 A61B5/03 A61B5/053 A61B5/07 A61B5/145 A61B5/1473 A61J7/04 A61K9/00 A61N1/372 G08C17/02 H01M4/36 H01M4/38 H01M4/58 H01M4/66 H01Q1/27 H04B1/38 H04B1/3888 (Advanced/Non-invention);
A61B1/273 A61B5/00 A61B5/026 A61B5/07 A61B5/145 A61J7/00 A61K9/00 A61K9/48 A61M37/00 A61N1/00 A61N1/362 G06F19/00 G08C17/00 H01M6/30 H01R43/00 H04B7/24 (Core/Invention);
A61B A61J A61K G06F G08B H01Q H04B H04Q (Subclass/Invention)
International (IPC 1-7): A61B1/273 G06F19/00 H04B7/24
CPC: H01M6/00 H04B1/0343 H04B13/005 A61B5/0008 A61B5/6801 A61B5/7285 A61B5/0538 A61B2562/18 G08B21/18 B65D41/02 A61J7/0084 A61J7/04 A61J7/0418 A61J2200/30 A61J2205/60 A61J7/0436 A61J7/0481 A61N1/37288 G06F19/3418 H02J50/20 Y02A90/26 A61B5/0022 A61B5/026 A61M5/172 A61N1/37217 A61B5/076 A61B5/681 A61B5/7282 A61B2560/0462 A61B2562/08 G06K7/10168 A61B2562/12 A61B2562/125 A61B2562/162 Y10T29/49002 Y10T156/1056 H01M4/0402 H01M4/06 H01M4/08 H01M4/366 H01M4/381 H01M4/582 H01M4/66 H01M6/34 H01M2220/30 G16H40/67 A61B5/6861 Y10T29/49117 A61B5/07 A61B5/4833 G16H20/13 A61B5/0002 A61B2560/0412 G06F19/3462 Y10T29/49826 A61B5/0028 A61B5/0031 A61B5/0215 A61B5/0265 A61B5/145 A61B5/14535 A61B5/415 A61B5/418 A61B5/6862 A61B5/6876 A61N1/37223 A61B5/01 A61B5/036 A61B5/1473 A61B2562/0214 H04B1/3888 H04B2001/3894 A61B5/073 A61B5/14539 A61B5/4839 A61B2560/0214 A61J3/007 H01Q1/273
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US: 1/1 156/252 156/252S 204/279 222/192 222/192S 222/23 222/23P 29/428 29/428S 29/592.1 29/825 29/825S 340/10.1 340/539.11 340/539.12 340/539.120P 340/572.1 340/572.100P 340/572.2 340/572.7 340/572.8 340/573.1 340/870.28 347/193 427/123 427/124 427/125 427/154 427/155 427/180 427/197 427/199 427/2.1 427/2.11 427/2.12 427/2.120S 427/2.13 427/202 427/209 427/210 427/248.1 427/250 427/255.11 427/255.15 427/255.7 427/258 427/259 427/269 427/270 427/271 427/272 427/282 427/287 427/299 427/331 427/372.2 427/383.1 427/383.3 427/383.5 427/384 427/385.5 427/402 427/404 427/405 427/419.1 427/534 427/58 427/596 427/8 427/96.1 427/96.2 427/96.5 427/96.6 427/97.1 427/97.3 427/97.4 427/97.5 427/97.6 427/98.4 427/98.5 427/98.6 427/99.2 427/99.4 429/119 455/39 455/39P 455/40 455/41.2 600/109 600/300 600/302 600/302P 600/309 600/309S 600/377 600/377P 600/407 600/505 600/505S 600/549 600/561 604/66 604/66S 604/891.1 604/93.01 604/93.010S 607/17 607/17S 607/32 607/32S 607/60

Family:

Publication number	Publication date	Application number	Application date
AU2006239221 AA	20061102	AU20060239221	20060428
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Priority:

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US20190719111	20191218				

Probable Assignee: PROTEUS DIGITAL HEALTH INC

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Assignee(s): O'REILLY DAVID ; PROTEUS DIGITAL HEALTH INC REDWOOD CITY

Inventor(s): (std): ADAM WHITWORTH ; ALEKSANDR PIKELNY ; ANDREW THOMPSON ; BEHZADI YASHAR ; AZEVEDO ROBERT ; BENEDICT COSTELLO ; COSTELLO BENEDICT ; BERKMAN JEFFREY ; DUCK ROBERT ; FRANK JEREMY ; BJELETICH PETER ; ERIC SNYDER ; DAVID O REILLY ; MARK ZDEBLICK ; HAFEZI HOOMAN ; JOHNSON PATRICIA ; MOON GREGORY ; O REILLY DAVID ; HATAMKHANY ZAHEDEH ; HOOMAN HAFEZI ; MARK J ZDEBLICK ; JONATHAN WITHRINGTON ; JEFFREY BERKMAN ; ILIYA PESIC ; JEREMY FRANK ; PIKELNY ALEKSANDR ; ZDEBLICK MARK ; THOMPSON ANDREW ; ROBERTSON TIMOTHY ; ZDEBLICK MARK J ; TIMOTHY ROBERTSON ; SAVAGE GEORGE ; THOMPSON TODD ; WHITWORTH ADAM ; WITHRINGTON JONATHAN ; PESIC ILIYA ; SNYDER ERIC ; PIKELNY ALEXANDER ; OREILLY DAVID ; PATRICIA JOHNSON ; PETER BJELETICH ; ROBERT DUCK ; ROBERT AZEVEDO ; ZAHEDEH HATAMKHANY ; ZDEBLICK MARK J J ; ROBERTSON TIMOTHY L

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Agent(s): PIZZEYS; K AND L GATES; PIZZEYS PATENT AND TRADE MARK ATTORNEYS; FB RICE; FB RICE PTY LTD; SMART AND BIGGAR; GOWLING LAFLEUR HENDERSON LLP; GOWLING WLG CANADA LLP; MURGITROYD AND CO; DUXBURY STEPHEN ET AL; BOERNER ROBERT; DUXBURY STEPHEN; HYLARIDES PAUL JACQUES; DE ELZABURU ALBERTO; ELLA CHEONG HONG KONG LTD; CHINA PATENT AGENT HK LTD; SANFORD TCOLB AND CO; KOHNO TAKAO; BOZICEVIC FIELD AND FRANCIS LLP PROTEUS BIOMEDICAL INC; PROTEUS BIOMEDICAL INC BOZICEVIC FIELD AND FRANCIS LLP; BOZICEVIC FIELD AND FRANCIS LLP; BRET E; K AND L GATES LLP; K AND L GATES LLC; 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 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 YU ZA ZM ZW

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
AU2006239221 AA	20061102	LSPB	+	published / reissued	
AU2006239221 BB	20120315	LSGT	+	granted / extensions (spc, cpc, pte)	
AU2006239221 BB	20120426	LSRE	DA2	APPLICATIONS FOR AMENDMENT SECTION 104	TEXT : THE NATURE OF THE AMENDMENT IS AS SHOWN IN THE STATEMENT(S) FILED 20 MAR 2012.
AU2006239221 BB	20260428	PEXP		Calculated Patent Term Expiry	
AU2006239221 CA	20120816	LSRE	DA3	AMENDMENTS MADE SECTION 104	TEXT : THE NATURE OF THE AMENDMENT IS AS SHOWN IN THE STATEMENT(S) FILED 20 MAR 2012
AU2006239221 CA	20120823	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU2006239221 CA	20121025	LSRE	DA2	APPLICATIONS FOR AMENDMENT SECTION 104	TEXT : THE NATURE OF THE AMENDMENT IS: AMEND THE PATENTEE TO READ PROTEUS DIGITAL HEALTH, INC. .
AU2011204798 AA	20110804	LSPB	+	published / reissued	
AU2011204798 BB	20110915	LSGT	+	granted / extensions (spc, cpc, pte)	
AU2011204798 BB	20110915	LSRE	DA2	APPLICATIONS FOR AMENDMENT SECTION 104	TEXT : THE NATURE OF THE AMENDMENT IS: AMEND THE INVENTION TITLE TO READ COMMUNICATION SYSTEM WITH PARTIAL POWER SOURCE.
AU2011204798 BB	20111222	LSRE	DA3	AMENDMENTS MADE SECTION 104	TEXT : THE NATURE OF THE AMENDMENT IS: AMEND THE

					INVENTION TITLE TO READ COMMUNICATION SYSTEM WITH PARTIAL POWER SOURCE
AU2011204798 BB	20310715	PEXP		Calculated Patent Term Expiry	
AU2011204798 CA	20120112	LSRE	DA3	AMENDMENTS MADE SECTION 104	TEXT : THE NATURE OF THE AMENDMENT IS AS SHOWN IN THE STATEMENT(S) FILED 26 AUG 2011
AU2011204798 CA	20120119	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU2011204798 CA	20121025	LSRE	DA2	APPLICATIONS FOR AMENDMENT SECTION 104	TEXT : THE NATURE OF THE AMENDMENT IS: AMEND THE PATENTEE TO READ PROTEUS DIGITAL HEALTH, INC. .
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AU2011250717 AA	20111215	LSRE	DA3	AMENDMENTS MADE SECTION 104	TEXT : THE NATURE OF THE AMENDMENT IS: AMEND THE NAME OF THE INVENTOR TO READ ZDEBLICK, MARK; THOMPSON, ANDREW; PIKELNY, ALEKSANDR; ROBERTSON, TIMOTHY AND HAFEZI, HOOMAN
AU2011250717 BB	20141218	LSGT	+	granted / extensions (spc, cpc, pte)	
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AU2011250717 BB	20311111	PEXP		Calculated Patent Term Expiry	
AU2012282690 AA	20130117	LSPB	+	published / reissued	
AU2012282690 AA	20170202	LSLE	-MK4	APPLICATION LAPSED SECTION 142(2)(D) - NO CONTINUATION FEE PAID FOR THE APPLICATION	
AU2012282772 AA	20130117	LSPB	+	published / reissued	
AU2012282772 AA	20150528	LSLE	-MK1	APPLICATION LAPSED SECTION 142(2)(A) - NO REQUEST FOR EXAMINATION IN RELEVANT PERIOD	
AU2012282776 AA	20130117	LSPB	+	published / reissued	
AU2012282776 AA	20170601	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU2012282776 BB	20170202	LSGT	+	granted / extensions (spc, cpc, pte)	
AU2012282776 BB	20320710	PEXP		Calculated Patent Term Expiry	
AU2012282777 AA	20130117	LSPB	+	published / reissued	
AU2012282777 AA	20140130	LSPB	+	published / reissued	
AU2012282777 AA	20170202	LSLE	-MK4	APPLICATION LAPSED SECTION 142(2)(D) - NO CONTINUATION FEE PAID FOR THE APPLICATION	
AU2012282777 AA	20170202	LSLE	-MK4	APPLICATION LAPSED SECTION 142(2)(D) - NO CONTINUATION FEE PAID FOR THE APPLICATION	

AU2015201291 AA	20150402	LSPB	+	published / reissued
AU2015201291 AA	20170316	LSLE	-MK5	APPLICATION LAPSED SECTION 142(2)(E) - PATENT REQUEST AND COMPL. SPECIFICATION NOT ACCEPTED
AU2017202754 AA	20170518	LSPB	+	published / reissued
AU2017202754 AA	20180208	LSLE	-MK4	APPLICATION LAPSED SECTION 142(2)(D) - NO CONTINUATION FEE PAID FOR THE APPLICATION
AU2017202754 BB	20190124	LSGT	+	granted / extensions (spc, cpc, pte)
AU2017202754 BB	20190523	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)
AU2017202754 BB	20370426	PEXP		Calculated Patent Term Expiry
BR112014000620 A2	20170404	LSRV	-B11A	DISMISSAL ACC. ART.33 OF IPL - EXAMINATION NOT REQUESTED WITHIN 36 MONTHS OF FILING
BR112014000620 A2	20170620	LSRV	-B11Y	DEFINITIVE DISMISSAL ACC. ARTICLE 33 OF IPL - EXTENSION OF TIME LIMIT FOR REQUEST OF EXAMINATION EXPIRED
BR112014000624 A2	20170404	LSRV	-B11A	DISMISSAL ACC. ART.33 OF IPL - EXAMINATION NOT REQUESTED WITHIN 36 MONTHS OF FILING
BR112014000624 A2	20170620	LSRV	-B11Y	DEFINITIVE DISMISSAL ACC. ARTICLE 33 OF IPL - EXTENSION OF TIME LIMIT FOR REQUEST OF EXAMINATION EXPIRED
BR112014000641 A2	20170523	LSFE	-B08F	APPLICATION FEES: DISMISSAL - ARTICLE 86 OF INDUSTRIAL PROPERTY LAW
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BR112014000645 A2	20170404	LSRV	-B11A	DISMISSAL ACC. ART.33 OF IPL - EXAMINATION NOT REQUESTED WITHIN 36 MONTHS OF FILING
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CA2608144 AA	20110428	LSES	+EEER	EXAMINATION REQUEST
CA2608144 C	20121113	LSGT	+	granted / extensions (spc, cpc, pte)
CA2608144 C	20260428	PEXP		Calculated Patent Term Expiry

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CA2789097 C	20260428	PEXP		Calculated Patent Term Expiry	
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CA2789262 C	20260428	PEXP		Calculated Patent Term Expiry	
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CA2841833 AA	20140109	LSPB	+	published / reissued	
CA2841833 AA	20180821	LSLE	-FZDE	DEAD	EFFECTIVE DATE : 20180710
CA2841904 AA	20140110	LSPB	+	published / reissued	
CA2841904 AA	20180821	LSLE	-FZDE	DEAD	EFFECTIVE DATE : 20180710
CA2841909 AA	20140110	LSPB	+	published / reissued	
CA2841909 AA	20170822	LSLE	-FZDE	DEAD	EFFECTIVE DATE : 20170711
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CN101287411 A	20081015	LSPB	+C06	PUBLICATION	
CN101287411 B	20130306	LSGT	+	granted / extensions (spc, cpc, pte)	
CN101287411 B	20130306	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN101287411 B	20130529	LSAS	C56	CHANGE IN THE NAME OR ADDRESS OF THE PATENTEE	
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CN101287411 B	20260428	PEXP		Calculated Patent Term Expiry	
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CN102379684 A	20121121	LSRE	C53	CORRECTION OF PATENT FOR INVENTION OR PATENT APPLICATION	
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				DATA	THOMPSON ANDREW PIKELNY ALEKSANDR ROBERTSON TIMOTHY TO: ZDEBLICK MARK T LUO BOSEN PIKELNY ALEKSANDR HAFEZI HOOMAN
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CN102379684 B	20260428	PEXP		Calculated Patent Term Expiry	
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CN103781411 A	20140507	LSPB	+C06	PUBLICATION	
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CN103781411 A	20170825	LSLE	-CF01	TERMINATION OF PATENT RIGHT DUE TO NON-PAYMENT OF ANNUAL FEE	
CN103781411 B	20160106	LSGT	+	granted / extensions (spc, cpc, pte)	
CN103781411 B	20320710	PEXP		Calculated Patent Term Expiry	
CN103781412 A	20140507	LSPB	+	published / reissued	
CN103781412 A	20140507	LSPB	+C06	PUBLICATION	
CN103781412 A	20160302	LSDW	-C02	DEEMED WITHDRAWAL OF PATENT APPLICATION AFTER PUBLICATION (PATENT LAW 2001)	
CN103781413 A	20140507	LSPB	+	published / reissued	
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CN103957773 A	20140730	LSPB	+C06	PUBLICATION	
CN103957773 A	20170426	LSDW	-WD01	INVENTION PATENT APPLICATION DEEMED WITHDRAWN AFTER PUBLICATION	
CY1116221 T1	20170208	LSGT	+	granted / extensions (spc, cpc, pte)	

DE602012017875 D1	20180201	LSDW	-R119	APPLICATION DEEMED WITHDRAWN, OR IP RIGHT LAPSED, DUE TO NON-PAYMENT OF RENEWAL FEE	
DK1889198 T3	20150209	LSGT	+	granted / extensions (spc, cpc, pte)	
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DK2392258 T3	20260428	PEXP		Calculated Patent Term Expiry	
EP1889198 A2	20080220	LSPB	+	published / reissued	
EP1889198 A2	20080220	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20071127
EP1889198 A2	20080227	LSES	R17D	DEFERRED SEARCH REPORT PUBLISHED (CORRECTED)	EFFECTIVE DATE : 20080117
EP1889198 A2	20160531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20160427 YEAR OF FEE PAYMENT : 11
EP1889198 A2	20160630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20160422 YEAR OF FEE PAYMENT : 11
EP1889198 A2	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20160519 YEAR OF FEE PAYMENT : 11
EP1889198 A2	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20160426 YEAR OF FEE PAYMENT : 11
EP1889198 A2	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20160426 YEAR OF FEE PAYMENT : 11
EP1889198 A2	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG PAYMENT DATE : 20160427 YEAR OF FEE PAYMENT : 11
EP1889198 A2	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20160422 YEAR OF FEE PAYMENT : 11
EP1889198 A2	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20160428 YEAR OF FEE PAYMENT : 11
EP1889198 A2	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20160429 YEAR OF FEE PAYMENT : 11
EP1889198 A2	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20160422 YEAR OF FEE PAYMENT : 11
EP1889198 A2	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20160422 YEAR OF FEE PAYMENT : 11

				TO EPO]	
EP1889198 A2	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20160427 YEAR OF FEE PAYMENT : 11
EP1889198 A2	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LV PAYMENT DATE : 20160429 YEAR OF FEE PAYMENT : 11
EP1889198 A2	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20160504 YEAR OF FEE PAYMENT : 11
EP1889198 A2	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20160422 YEAR OF FEE PAYMENT : 11
EP1889198 A2	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20160426 YEAR OF FEE PAYMENT : 11
EP1889198 A2	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20160422 YEAR OF FEE PAYMENT : 11
EP1889198 A2	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LT PAYMENT DATE : 20160425 YEAR OF FEE PAYMENT : 11
EP1889198 A2	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20160425 YEAR OF FEE PAYMENT : 11
EP1889198 A2	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK PAYMENT DATE : 20160425 YEAR OF FEE PAYMENT : 11
EP1889198 A2	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IS PAYMENT DATE : 20160429 YEAR OF FEE PAYMENT : 11
EP1889198 A2	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE PAYMENT DATE : 20160427 YEAR OF FEE PAYMENT : 11
EP1889198 A2	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 : 11
EP1889198 A2	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20160426 YEAR OF FEE PAYMENT : 11
EP1889198 A2	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20160425 YEAR OF FEE PAYMENT : 11
EP1889198 A2	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20160426 YEAR OF FEE PAYMENT : 11
EP1889198 A2	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL	COUNTRY OF REF DOCUMENT : RO

				OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	PAYMENT DATE : 20160425 YEAR OF FEE PAYMENT : 11
EP1889198 A2	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20160426 YEAR OF FEE PAYMENT : 11
EP1889198 A2	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20160426 YEAR OF FEE PAYMENT : 11
EP1889198 A2	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY PAYMENT DATE : 20160425 YEAR OF FEE PAYMENT : 11
EP1889198 A4	20101013	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	EFFECTIVE DATE : 20100914
EP1889198 A4	20111005	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20110901
EP1889198 A4	20120912	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : PROTEUS DIGITAL HEALTH, INC.
EP1889198 A4	20140604	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20140509
EP1889198 A4	20141105	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20141013
EP1889198 B1	20141126	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1889198 B1	20141126	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP1889198 B1	20141128	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1889198 B1	20141215	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 697710 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20141215
EP1889198 B1	20141217	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP1889198 B1	20150108	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602006043806 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20150108
EP1889198 B1	20150209	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : RO REF LEGAL EVENT CODE : EPE
EP1889198 B1	20150209	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2528403 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) : EFFECTIVE DATE : 20150209
EP1889198 B1	20150218	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : T3
EP1889198 B1	20150424	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : EP

					REF DOCUMENT NUMBER : 20150400391 COUNTRY OF REF DOCUMENT : GR EFFECTIVE DATE : 20150318
EP1889198 B1	20150728	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HU REF LEGAL EVENT CODE : AG4A REF DOCUMENT NUMBER : E023346 COUNTRY OF REF DOCUMENT : HU
EP1889198 B1	20150827	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 602006043806 COUNTRY OF REF DOCUMENT : DE
EP1889198 B1	20150911	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HK REF LEGAL EVENT CODE : GR REF DOCUMENT NUMBER : 1113652 COUNTRY OF REF DOCUMENT : HK
EP1889198 B1	20151104	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20150827
EP1889198 B1	20160426	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
EP1889198 B1	20160815	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : UEP REF DOCUMENT NUMBER : 697710 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20141126
EP1889198 B1	20170426	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 12
EP1889198 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LT PAYMENT DATE : 20170324 YEAR OF FEE PAYMENT : 12
EP1889198 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE PAYMENT DATE : 20170330 YEAR OF FEE PAYMENT : 12
EP1889198 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20170322 YEAR OF FEE PAYMENT : 12
EP1889198 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20170322 YEAR OF FEE PAYMENT : 12
EP1889198 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20170330 YEAR OF FEE PAYMENT : 12
EP1889198 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK PAYMENT DATE : 20170329 YEAR OF FEE PAYMENT : 12
EP1889198 B1	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 : 12

EP1889198 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY PAYMENT DATE : 20170331 YEAR OF FEE PAYMENT : 12
EP1889198 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170427 YEAR OF FEE PAYMENT : 12
EP1889198 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20170427 YEAR OF FEE PAYMENT : 12
EP1889198 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20170419 YEAR OF FEE PAYMENT : 12
EP1889198 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20170427 YEAR OF FEE PAYMENT : 12
EP1889198 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20170425 YEAR OF FEE PAYMENT : 12
EP1889198 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20170427 YEAR OF FEE PAYMENT : 12
EP1889198 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IS PAYMENT DATE : 20170428 YEAR OF FEE PAYMENT : 12
EP1889198 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170426 YEAR OF FEE PAYMENT : 12
EP1889198 B1	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 : 12
EP1889198 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG PAYMENT DATE : 20170420 YEAR OF FEE PAYMENT : 12
EP1889198 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20170331 YEAR OF FEE PAYMENT : 12
EP1889198 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LV PAYMENT DATE : 20170403 YEAR OF FEE PAYMENT : 12
EP1889198 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20170425 YEAR OF FEE PAYMENT : 12
EP1889198 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20170427 YEAR OF FEE PAYMENT : 12
EP1889198 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20170509

				[ANNOUNCED FROM NATIONAL OFFICE TO EPO]	YEAR OF FEE PAYMENT : 12
EP1889198 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20170412 YEAR OF FEE PAYMENT : 12
EP1889198 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20170412 YEAR OF FEE PAYMENT : 12
EP1889198 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20170419 YEAR OF FEE PAYMENT : 12
EP1889198 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20170425 YEAR OF FEE PAYMENT : 12
EP1889198 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20170403 YEAR OF FEE PAYMENT : 12
EP1889198 B1	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 : 12
EP1889198 B1	20170929	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20170423 YEAR OF FEE PAYMENT : 12
EP1889198 B1	20180501	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 13
EP1889198 B1	20180629	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20180430 YEAR OF FEE PAYMENT : 13
EP1889198 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20180430 YEAR OF FEE PAYMENT : 13
EP1889198 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE PAYMENT DATE : 20180502 YEAR OF FEE PAYMENT : 13
EP1889198 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 : 13
EP1889198 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20180503 YEAR OF FEE PAYMENT : 13
EP1889198 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20180430 YEAR OF FEE PAYMENT : 13
EP1889198 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20180516 YEAR OF FEE PAYMENT : 13
EP1889198 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL	COUNTRY OF REF DOCUMENT : LT

				OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	PAYMENT DATE : 20180425 YEAR OF FEE PAYMENT : 13
EP1889198 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20180430 YEAR OF FEE PAYMENT : 13
EP1889198 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180504 YEAR OF FEE PAYMENT : 13
EP1889198 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20180507 YEAR OF FEE PAYMENT : 13
EP1889198 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20180509 YEAR OF FEE PAYMENT : 13
EP1889198 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK PAYMENT DATE : 20180419 YEAR OF FEE PAYMENT : 13
EP1889198 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20180430 YEAR OF FEE PAYMENT : 13
EP1889198 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG PAYMENT DATE : 20180502 YEAR OF FEE PAYMENT : 13
EP1889198 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20180430 YEAR OF FEE PAYMENT : 13
EP1889198 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IS PAYMENT DATE : 20180501 YEAR OF FEE PAYMENT : 13
EP1889198 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20180509 YEAR OF FEE PAYMENT : 13
EP1889198 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20180426 YEAR OF FEE PAYMENT : 13
EP1889198 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20180501 YEAR OF FEE PAYMENT : 13
EP1889198 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20180430 YEAR OF FEE PAYMENT : 13
EP1889198 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20180430 YEAR OF FEE PAYMENT : 13
EP1889198 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LV PAYMENT DATE : 20180503 YEAR OF FEE PAYMENT : 13

EP1889198 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20180420 YEAR OF FEE PAYMENT : 13
EP1889198 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20180419 YEAR OF FEE PAYMENT : 13
EP1889198 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20180502 YEAR OF FEE PAYMENT : 13
EP1889198 B1	20180928	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20180430 YEAR OF FEE PAYMENT : 13
EP1889198 B1	20180928	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20180421 YEAR OF FEE PAYMENT : 13
EP1889198 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY PAYMENT DATE : 20180419 YEAR OF FEE PAYMENT : 13
EP1889198 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20180430 YEAR OF FEE PAYMENT : 13
EP1889198 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IS PAYMENT DATE : 20190322 YEAR OF FEE PAYMENT : 14
EP1889198 B1	20190531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20190329 YEAR OF FEE PAYMENT : 14
EP1889198 B1	20190531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE PAYMENT DATE : 20190327 YEAR OF FEE PAYMENT : 14
EP1889198 B1	20190628	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20190329 YEAR OF FEE PAYMENT : 14
EP1889198 B1	20190628	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20190430 YEAR OF FEE PAYMENT : 14
EP1889198 B1	20190731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LT PAYMENT DATE : 20190426 YEAR OF FEE PAYMENT : 14
EP1889198 B1	20190731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20190425 YEAR OF FEE PAYMENT : 14
EP1889198 B1	20190731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20190401 YEAR OF FEE PAYMENT : 14
EP1889198 B1	20190731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL	COUNTRY OF REF DOCUMENT : FI

				OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	PAYMENT DATE : 20190423 YEAR OF FEE PAYMENT : 14
EP1889198 B1	20190731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20190402 YEAR OF FEE PAYMENT : 14
EP1889198 B1	20190731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY PAYMENT DATE : 20190402 YEAR OF FEE PAYMENT : 14
EP1889198 B1	20190731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20190425 YEAR OF FEE PAYMENT : 14
EP1889198 B1	20190731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20190430 YEAR OF FEE PAYMENT : 14
EP1889198 B1	20190731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20190429 YEAR OF FEE PAYMENT : 14
EP1889198 B1	20190731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20190402 YEAR OF FEE PAYMENT : 14
EP1889198 B1	20190731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20190501 YEAR OF FEE PAYMENT : 14
EP1889198 B1	20190731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20190425 YEAR OF FEE PAYMENT : 14
EP1889198 B1	20190830	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20190430 YEAR OF FEE PAYMENT : 14
EP1889198 B1	20190830	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20190423 YEAR OF FEE PAYMENT : 14
EP1889198 B1	20190830	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20190401 YEAR OF FEE PAYMENT : 14
EP1889198 B1	20190830	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20190425 YEAR OF FEE PAYMENT : 14
EP1889198 B1	20190830	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LV PAYMENT DATE : 20190409 YEAR OF FEE PAYMENT : 14
EP1889198 B1	20190830	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20190405 YEAR OF FEE PAYMENT : 14
EP1889198 B1	20190830	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20190426 YEAR OF FEE PAYMENT : 14

EP1889198 B1	20190830	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20190430 YEAR OF FEE PAYMENT : 14
EP1889198 B1	20190830	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG PAYMENT DATE : 20190404 YEAR OF FEE PAYMENT : 14
EP1889198 B1	20190930	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20190426 YEAR OF FEE PAYMENT : 14
EP1889198 B1	20190930	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK PAYMENT DATE : 20190402 YEAR OF FEE PAYMENT : 14
EP1889198 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20190424 YEAR OF FEE PAYMENT : 14
EP1889198 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20190425 YEAR OF FEE PAYMENT : 14
EP1889198 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20200324 YEAR OF FEE PAYMENT : 15
EP1889198 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG PAYMENT DATE : 20200326 YEAR OF FEE PAYMENT : 15
EP1889198 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LV PAYMENT DATE : 20200330 YEAR OF FEE PAYMENT : 15
EP1889198 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20200330 YEAR OF FEE PAYMENT : 15
EP1889198 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20200325 YEAR OF FEE PAYMENT : 15
EP1889198 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LT PAYMENT DATE : 20200327 YEAR OF FEE PAYMENT : 15
EP1889198 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20200323 YEAR OF FEE PAYMENT : 15
EP1889198 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE PAYMENT DATE : 20200324 YEAR OF FEE PAYMENT : 15
EP1889198 B1	20200529	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK PAYMENT DATE : 20200325 YEAR OF FEE PAYMENT : 15
EP1889198 B1	20200529	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : IS PAYMENT DATE : 20200325

				[ANNOUNCED FROM NATIONAL OFFICE TO EPO]	YEAR OF FEE PAYMENT : 15
EP1889198 B1	20260428	PEXP		Calculated Patent Term Expiry	
EP1920418 A2	20080514	LSPB	+	published / reissued	
EP1920418 A2	20080514	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20080229
EP1920418 A2	20101229	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	EFFECTIVE DATE : 20101126
EP1920418 A2	20111005	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20110901
EP1920418 A2	20120912	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : PROTEUS DIGITAL HEALTH, INC.
EP1920418 A2	20170525	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R003
EP1920418 A2	20171004	LSRV	-18R	APPLICATION REFUSED	EFFECTIVE DATE : 20170525
EP2392258 A1	20111207	LSPB	+	published / reissued	
EP2392258 A1	20111207	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20110823
EP2392258 A1	20120905	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20120801
EP2392258 A1	20120912	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : PROTEUS DIGITAL HEALTH, INC.
EP2392258 A1	20140528	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20140430
EP2392258 A1	20160630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20160422 YEAR OF FEE PAYMENT : 11
EP2392258 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20160426 YEAR OF FEE PAYMENT : 11
EP2392258 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20160422 YEAR OF FEE PAYMENT : 11
EP2392258 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20160422 YEAR OF FEE PAYMENT : 11
EP2392258 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20160427 YEAR OF FEE PAYMENT : 11
EP2392258 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20160422 YEAR OF FEE PAYMENT : 11
EP2392258 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20160426 YEAR OF FEE PAYMENT : 11
EP2392258 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20160426

				[ANNOUNCED FROM NATIONAL OFFICE TO EPO]	YEAR OF FEE PAYMENT : 11
EP2392258 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 : 11
EP2392258 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20160422 YEAR OF FEE PAYMENT : 11
EP2392258 B1	20141008	LSGT	+	granted / extensions (spc, cpc, pte)	
EP2392258 B1	20141008	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP2392258 B1	20141015	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP2392258 B1	20141015	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 690136 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20141015
EP2392258 B1	20141105	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP2392258 B1	20141120	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602006043334 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20141120
EP2392258 B1	20150107	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : T3
EP2392258 B1	20150315	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MK05 REF DOCUMENT NUMBER : 690136 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20141008
EP2392258 B1	20150325	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : LT REF LEGAL EVENT CODE : MG4D
EP2392258 B1	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 FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20141008
EP2392258 B1	20150430	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 : 20141008
EP2392258 B1	20150430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO

				OFFICE TO EPO]	PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20150209
EP2392258 B1	20150430	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 : 20150208
EP2392258 B1	20150529	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 : 20141008
EP2392258 B1	20150529	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 : 20141008
EP2392258 B1	20150529	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 : 20141008
EP2392258 B1	20150529	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 : 20141008
EP2392258 B1	20150529	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 : 20150109
EP2392258 B1	20150709	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 602006043334 COUNTRY OF REF DOCUMENT : DE
EP2392258 B1	20150731	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 : 20141008
EP2392258 B1	20150731	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 : 20141008
EP2392258 B1	20150731	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 : 20141008
EP2392258 B1	20150731	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 : 20141008
EP2392258 B1	20150831	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 : 20141008
EP2392258 B1	20150916	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20150709
EP2392258 B1	20151106	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HK REF LEGAL EVENT CODE : GR REF DOCUMENT NUMBER : 1158920 COUNTRY OF REF DOCUMENT : HK
EP2392258 B1	20151130	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 : 20150428
EP2392258 B1	20151130	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 : 20141008
EP2392258 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 : 20141008
EP2392258 B1	20160426	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 11
EP2392258 B1	20170426	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 12
EP2392258 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 : 20141008
EP2392258 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 : 20060428
EP2392258 B1	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 : 12

EP2392258 B1	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 : 12
EP2392258 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20170425 YEAR OF FEE PAYMENT : 12
EP2392258 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170426 YEAR OF FEE PAYMENT : 12
EP2392258 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20170427 YEAR OF FEE PAYMENT : 12
EP2392258 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20170427 YEAR OF FEE PAYMENT : 12
EP2392258 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170427 YEAR OF FEE PAYMENT : 12
EP2392258 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 : 20141008
EP2392258 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20170425 YEAR OF FEE PAYMENT : 12
EP2392258 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20170425 YEAR OF FEE PAYMENT : 12
EP2392258 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20170412 YEAR OF FEE PAYMENT : 12
EP2392258 B1	20180501	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 13
EP2392258 B1	20180629	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20180430 YEAR OF FEE PAYMENT : 13
EP2392258 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180504 YEAR OF FEE PAYMENT : 13
EP2392258 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20180430 YEAR OF FEE PAYMENT : 13
EP2392258 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20180430 YEAR OF FEE PAYMENT : 13

EP2392258 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20180509 YEAR OF FEE PAYMENT : 13
EP2392258 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20180430 YEAR OF FEE PAYMENT : 13
EP2392258 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20180501 YEAR OF FEE PAYMENT : 13
EP2392258 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20180430 YEAR OF FEE PAYMENT : 13
EP2392258 B1	20180928	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20180430 YEAR OF FEE PAYMENT : 13
EP2392258 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20180430 YEAR OF FEE PAYMENT : 13
EP2392258 B1	20190628	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20190430 YEAR OF FEE PAYMENT : 14
EP2392258 B1	20190731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20190430 YEAR OF FEE PAYMENT : 14
EP2392258 B1	20190731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20190425 YEAR OF FEE PAYMENT : 14
EP2392258 B1	20190731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20190423 YEAR OF FEE PAYMENT : 14
EP2392258 B1	20190731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20190425 YEAR OF FEE PAYMENT : 14
EP2392258 B1	20190830	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20190430 YEAR OF FEE PAYMENT : 14
EP2392258 B1	20190830	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20190425 YEAR OF FEE PAYMENT : 14
EP2392258 B1	20190830	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20190430 YEAR OF FEE PAYMENT : 14
EP2392258 B1	20190930	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20190426 YEAR OF FEE PAYMENT : 14
EP2392258 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20190425 YEAR OF FEE PAYMENT : 14

				NATIONAL OFFICE TO EPO]	
EP2392258 B1	20260428	PEXP		Calculated Patent Term Expiry	
EP2671507 A2	20131211	LSPB	+	published / reissued	
EP2671507 A3	20140924	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20140819
EP2671507 A3	20171122	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20171018
EP2671508 A1	20131211	LSPB	+	published / reissued	
EP2671508 A1	20140723	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20140611
EP2671508 A1	20171122	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20171018
EP2671508 A1	20200513	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20200415
EP2731489 A2	20140521	LSPB	+	published / reissued	
EP2731489 A2	20140521	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20140110
EP2731489 A4	20150930	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	EFFECTIVE DATE : 20150827
EP2731489 A4	20170517	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20170412
EP2731489 A4	20180124	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20170823
EP2731494 A2	20140521	LSPB	+	published / reissued	
EP2731494 A2	20140521	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20140110
EP2731494 A4	20150805	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	EFFECTIVE DATE : 20150703
EP2731494 A4	20180718	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20180201
EP2731495 A2	20140521	LSPB	+	published / reissued	
EP2731495 A2	20140521	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20140110
EP2731495 A4	20150805	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	EFFECTIVE DATE : 20150703
EP2731495 A4	20151007	LSWD	-18W	APPLICATION WITHDRAWN	EFFECTIVE DATE : 20150807
EP2731496 A2	20140521	LSPB	+	published / reissued	
EP2731496 A2	20140521	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20140110
EP2731496 A4	20141217	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	EFFECTIVE DATE : 20141113
EP2731496 A4	20150819	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20150722
EP2731496 A4	20160113	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20151207
EP2731496 B1	20160210	LSGT	+	granted / extensions (spc, cpc, pte)	
EP2731496 B1	20160210	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE :

					FG4D
EP2731496 B1	20160215	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP2731496 B1	20160215	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 774243 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20160215
EP2731496 B1	20160309	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP2731496 B1	20160324	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602012014776 COUNTRY OF REF DOCUMENT : DE
EP2731496 B1	20160610	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : LT REF LEGAL EVENT CODE : MG4D
EP2731496 B1	20160715	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MK05 REF DOCUMENT NUMBER : 774243 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20160210
EP2731496 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 : 20160510
EP2731496 B1	20160729	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 : 20160210
EP2731496 B1	20160729	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 : 20160210
EP2731496 B1	20160729	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 : 20160511
EP2731496 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 : 20160210
EP2731496 B1	20160729	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED	COUNTRY OF REF DOCUMENT : IT NOTIFICATIONOFLAPSE :

				VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160210
EP2731496 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 : 20160210
EP2731496 B1	20160831	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 : 20160210
EP2731496 B1	20160831	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 : 20160210
EP2731496 B1	20160831	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 : 20160613
EP2731496 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 : 20160210
EP2731496 B1	20160831	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 : 20160210
EP2731496 B1	20160831	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 : 20160210
EP2731496 B1	20160831	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 : 20160610
EP2731496 B1	20160831	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 : 20160210
EP2731496 B1	20161031	LSLE	-PG25	LAPSED IN A CONTRACTING	COUNTRY OF REF DOCUMENT : DK

				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 : 20160210
EP2731496 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 : 20160210
EP2731496 B1	20161111	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 602012014776 COUNTRY OF REF DOCUMENT : DE
EP2731496 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 : 20160210
EP2731496 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 : 20160210
EP2731496 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 : 20160210
EP2731496 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 : 20160210
EP2731496 B1	20161230	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 : 20160210
EP2731496 B1	20170118	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20161111
EP2731496 B1	20170201	LSDW	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R119 REF DOCUMENT NUMBER : 602012014776 COUNTRY OF REF DOCUMENT : DE
EP2731496 B1	20170228	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 : 20160210
EP2731496 B1	20170228	LSLE	-PG25	LAPSED IN A	COUNTRY OF REF DOCUMENT

				CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	: 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 : 20160510
EP2731496 B1	20170228	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP2731496 B1	20170322	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20160710
EP2731496 B1	20170331	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 : 20160210
EP2731496 B1	20170428	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 : 20170201
EP2731496 B1	20170428	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 : 20160731
EP2731496 B1	20170428	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 : 20160731
EP2731496 B1	20170428	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 : 20160801
EP2731496 B1	20170428	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20170331
EP2731496 B1	20170503	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP2731496 B1	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 NON-PAYMENT OF DUE FEES LAPSED DATE : 20160710
EP2731496 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 : 20160710
EP2731496 B1	20170831	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 : 20160710
EP2731496 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 : 20120710

EP2731496 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 : 20160210
EP2731496 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 : 20160731
EP2731496 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 : 20160210
EP2731496 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 : 20160210
EP2731496 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 : 20160210
EP2731496 B1	20320710	PEXP		Calculated Patent Term Expiry	
EP2731497 A2	20140521	LSPB	+	published / reissued	
EP2731497 A2	20140521	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20140110
EP2731497 A4	20150401	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	EFFECTIVE DATE : 20150226
EP2731497 A4	20151209	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20151113
EP2731497 B1	20160427	LSGT	+	granted / extensions (spc, cpc, pte)	
EP2731497 B1	20160427	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP2731497 B1	20160429	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP2731497 B1	20160515	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 793816 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20160515
EP2731497 B1	20160518	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP2731497 B1	20160616	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602012017875 COUNTRY OF REF DOCUMENT : DE

EP2731497 B1	20160825	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : LT REF LEGAL EVENT CODE : MG4D
EP2731497 B1	20160915	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MK05 REF DOCUMENT NUMBER : 793816 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20160427
EP2731497 B1	20160930	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 : 20160427
EP2731497 B1	20161031	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 : 20160427
EP2731497 B1	20161031	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 : 20160427
EP2731497 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 : 20160727
EP2731497 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
EP2731497 B1	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 FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160427
EP2731497 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 : 20160829
EP2731497 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 : 20160427
EP2731497 B1	20161130	LSLE	-PG25	LAPSED IN A CONTRACTING	COUNTRY OF REF DOCUMENT : SE

				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 : 20160427
EP2731497 B1	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 FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160427
EP2731497 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
EP2731497 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
EP2731497 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 : 20160728
EP2731497 B1	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 FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160427
EP2731497 B1	20161230	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 : 20160427
EP2731497 B1	20170130	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 602012017875 COUNTRY OF REF DOCUMENT : DE
EP2731497 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 : 20160427
EP2731497 B1	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 FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160427
EP2731497 B1	20170131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED	COUNTRY OF REF DOCUMENT : EE NOTIFICATIONOFLAPSE :

				VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160427
EP2731497 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
EP2731497 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
EP2731497 B1	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20161220 YEAR OF FEE PAYMENT : 5
EP2731497 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
EP2731497 B1	20170228	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP2731497 B1	20170331	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 : 20160427
EP2731497 B1	20170405	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20170130
EP2731497 B1	20170428	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 : 20160731
EP2731497 B1	20170428	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 : 20160731
EP2731497 B1	20170428	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 : 20160801
EP2731497 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20161220 YEAR OF FEE PAYMENT : 5
EP2731497 B1	20170428	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20170331
EP2731497 B1	20170503	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP2731497 B1	20170531	LSLE	-PG25	LAPSED IN A CONTRACTING	COUNTRY OF REF DOCUMENT : SI

				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 : 20160427
EP2731497 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 : 20160710
EP2731497 B1	20170831	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 : 20160710
EP2731497 B1	20180201	LSDW	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R119 REF DOCUMENT NUMBER : 602012017875 COUNTRY OF REF DOCUMENT : DE
EP2731497 B1	20180328	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20170710
EP2731497 B1	20180430	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 : 20170710
EP2731497 B1	20180430	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 : 20180201
EP2731497 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 : 20120710
EP2731497 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
EP2731497 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 : 20160731
EP2731497 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
EP2731497 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

EP2731497 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
EP2731497 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
EP2731497 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 : 20160427
EP2731497 B1	20320710	PEXP		Calculated Patent Term Expiry	
ES2528403 T3	20150209	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2528403 T3	20260428	PEXP		Calculated Patent Term Expiry	
HK1113652 A1	20081010	LSPB	+	published / reissued	
HK1113652 A1	20280815	PEXP		Calculated Patent Term Expiry	
HK1113652 A3	20081010	LSPB	+	published / reissued	
HK1113652 B	20150911	LSGT	+	granted / extensions (spc, cpc, pte)	
HK1113652 B	20280815	PEXP		Calculated Patent Term Expiry	
HK1158920 A1	20120727	LSPB	+	published / reissued	
HK1158920 A1	20280815	PEXP		Calculated Patent Term Expiry	
HK1158920 A3	20120727	LSPB	+	published / reissued	
HK1158920 B	20151106	LSGT	+	granted / extensions (spc, cpc, pte)	
HK1158920 B	20280815	PEXP		Calculated Patent Term Expiry	
HK1166680 A1	20121109	LSPB	+	published / reissued	
HK1166680 A1	20320726	PEXP		Calculated Patent Term Expiry	
HK1166680 B	20150918	LSGT	+	granted / extensions (spc, cpc, pte)	
HK1166680 B	20320726	PEXP		Calculated Patent Term Expiry	
HK1196239 A1	20141212	LSPB	+	published / reissued	
HK1196239 A1	20341006	PEXP		Calculated Patent Term Expiry	
HK1196239 B	20170217	LSGT	+	granted / extensions (spc, cpc, pte)	
HK1196239 B	20341006	PEXP		Calculated Patent Term Expiry	
HK1196240 A1	20141212	LSPB	+	published / reissued	
HK1196240 A1	20341006	PEXP		Calculated Patent Term Expiry	
HK1196240 B	20170106	LSGT	+	granted / extensions (spc,	

				cpc, pte)
HK1196240 B	20341006	PEXP		Calculated Patent Term Expiry
HK1196931 A1	20141224	LSPB	+	published / reissued
HK1198283 A1	20150327	LSPB	+	published / reissued
HK1198283 A1	20341121	PEXP		Calculated Patent Term Expiry
IL186898 A1	20120131	LSPB	+	published / reissued
IL186898 A1	20120531	LSGT	+FF	PATENT GRANTED
IL186898 A1	20120830	LSFE	+KB	PATENT RENEWED
IL186898 A1	20200531	LSFE	+KB	PATENT RENEWED
IL214183 A0	20150730	LSGT	+FF	PATENT GRANTED
IL214183 A0	20150924	LSFE	+KB	PATENT RENEWED
IL214183 A1	20150331	LSPB	+	published / reissued
IL214183 A1	20150730	LSGT	+FF	PATENT GRANTED
IL214183 A1	20150924	LSFE	+KB	PATENT RENEWED
IL214183 A1	20200531	LSFE	+KB	PATENT RENEWED
IL216535 A1	20170629	LSPB	+	published / reissued
IL216535 A1	20171031	LSGT	+FF	PATENT GRANTED
IL216535 A1	20171231	LSFE	+KB	PATENT RENEWED
IL216535 A1	20200531	LSFE	+KB	PATENT RENEWED
IL230388 A1	20190331	LSPB	+	published / reissued
IL230388 A1	20190731	LSGT	+FF	PATENT GRANTED
IL230388 A1	20190926	LSFE	+KB	PATENT RENEWED
IL252946 A1	20181231	LSPB	+	published / reissued
IL252946 A1	20190430	LSGT	+FF	PATENT GRANTED
IL252946 A1	20190731	LSFE	+KB	PATENT RENEWED
IL252946 A1	20200531	LSFE	+KB	PATENT RENEWED
IL262761 A1	20190630	LSPB	+	published / reissued
IL262761 A1	20191031	LSGT	+FF	PATENT GRANTED
IL262761 A1	20191231	LSFE	+KB	PATENT RENEWED
IL262761 A1	20200531	LSFE	+KB	PATENT RENEWED
IL264121 A1	20191128	LSPB	+	published / reissued
IL264121 A1	20200331	LSGT	+FF	PATENT GRANTED
IL264121 A1	20200630	LSFE	+KB	PATENT RENEWED
IN00506CN2014 A	20150403	LSPB	+	published / reissued
IN00507CN2014 A	20160701	LSPB	+	published / reissued
IN00508CN2014 A	20150403	LSPB	+	published / reissued
IN00509CN2014 A	20150403	LSPB	+	published / reissued
IN05442DN2011 A	20121012	LSPB	+	published / reissued
IN08678DN2007 A	20071214	LSPB	+	published / reissued
IN201918006566 A	20190503	LSPB	+	published / reissued
IN201918006580 A	20190503	LSPB	+	published / reissued
IN310530 B	20190405	LSGT	+	granted / extensions (spc, cpc, pte)
IN310530 B	20271112	PEXP		Calculated Patent Term Expiry

IN321235 B	20190927	LSGT	+	granted / extensions (spc, cpc, pte)	
IN321235 B	20310714	PEXP		Calculated Patent Term Expiry	
JP2008539047 T2	20081113	LSPB	+	published / reissued	
JP2008539047 T2	20090204	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20090203
JP2008539047 T2	20090204	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20090203
JP2008539047 T2	20110621	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20110620
JP2008539047 T2	20111021	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20111020
JP2008539047 T2	20120116	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20120113
JP2008539047 T2	20120515	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20120514
JP2008539047 T2	20120629	LSAL	A911	TRANSFER OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A911 EFFECTIVE DATE : 20120628
JP2008539047 T2	20120723	LSAL	-A912	REMOVAL OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A912 EFFECTIVE DATE : 20120720
JP2008539047 T2	20130417	LSWD	-A761	WRITTEN WITHDRAWAL OF APPLICATION	TEXT : JAPANESE INTERMEDIATE CODE: A761 EFFECTIVE DATE : 20130416
JP2009506838 T2	20090219	LSPB	+	published / reissued	
JP2009506838 T2	20090716	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20090715
JP2009506838 T2	20100703	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20100702
JP2009506838 T2	20111130	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20111129
JP2009506838 T2	20120529	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20120528
JP2009506838 T2	20130315	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20130314
JP2009506838 T2	20130914	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20130913
JP2009506838 T2	20140320	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20140319
JP2009506838 T2	20140620	LSRE	A524	WRITTEN SUBMISSION OF COPY OF AMENDMENT UNDER SECTION 19 (PCT)	TEXT : JAPANESE INTERMEDIATE CODE: A524 EFFECTIVE DATE : 20140619
JP2009506838 T2	20140725	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20140724
JP2009506838 T2	20150123	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20150123

JP2009506838 T2	20150210	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2009506838 T2	20150217	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20150216
JP2009506838 T2	20150319	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20150311
JP2009506838 T2	20150320	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 5714210 COUNTRY OF REF DOCUMENT : JP
JP2011212466 A2	20111027	LSPB	+	published / reissued	
JP2011212466 A2	20111111	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20111110
JP2011212466 A2	20120511	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20120510
JP2011212466 A2	20120808	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2011212466 A2	20120814	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20120813
JP2011212466 A2	20120816	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01
JP2011212466 A2	20120817	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20120816
JP2011212466 A2	20120904	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A821 EFFECTIVE DATE : 20120816
JP2011212466 A2	20120913	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20120910
JP2011212466 A2	20120921	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP2011212466 A2	20120921	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP2011212466 A2	20120921	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 5088978 COUNTRY OF REF DOCUMENT : JP
JP2012020178 A2	20120202	LSPB	+	published / reissued	
JP2012020178 A2	20120630	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20120629
JP2012020178 A2	20130226	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20130225
JP2012020178 A2	20130525	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20130524

JP2012020178 A2	20130927	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2012020178 A2	20131003	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20131002
JP2012020178 A2	20131031	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20131024
JP2012020178 A2	20131101	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP2012020178 A2	20131101	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 5400121 COUNTRY OF REF DOCUMENT : JP
JP2012183385 A2	20120927	LSPB	+	published / reissued	
JP2012183385 A2	20130417	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20130416
JP2012183385 A2	20130521	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20130520
JP2012183385 A2	20130920	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20130919
JP2012183385 A2	20140115	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20140114
JP2012183385 A2	20140404	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20140403
JP2012183385 A2	20140919	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20140918
JP2012183385 A2	20150107	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20150107
JP2012183385 A2	20150116	LSAL	A911	TRANSFER OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A911 EFFECTIVE DATE : 20150115
JP2012183385 A2	20150309	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2012183385 A2	20150313	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20150312
JP2012183385 A2	20150416	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20150408
JP2012183385 A2	20150417	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 5730822 COUNTRY OF REF DOCUMENT : JP
JP2013163068 A2	20130822	LSPB	+	published / reissued	
JP2013163068 A2	20140403	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20140402

JP2013163068 A2	20140703	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20140702
JP2013163068 A2	20141215	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2013163068 A2	20141219	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20141218
JP2013163068 A2	20150122	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20150113
JP2013163068 A2	20150123	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 5683641 COUNTRY OF REF DOCUMENT : JP
JP2013176625 A2	20130909	LSPB	+	published / reissued	
JP2013176625 A2	20140304	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20140303
JP2013176625 A2	20140903	LSWD	-A761	WRITTEN WITHDRAWAL OF APPLICATION	TEXT : JAPANESE INTERMEDIATE CODE: A761 EFFECTIVE DATE : 20140902
JP2014176753 A2	20140925	LSPB	+	published / reissued	
JP2014176753 A2	20140623	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20140619
JP2014176753 A2	20150611	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20150610
JP2014176753 A2	20151002	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20151002
JP2014176753 A2	20160201	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20160129
JP2014176753 A2	20160727	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20160727
JP2014522694 T2	20140908	LSPB	+	published / reissued	
JP2014522694 T2	20140604	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20140516
JP2014522695 T2	20140908	LSPB	+	published / reissued	
JP2014522695 T2	20140604	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20140516
JP2014522695 T2	20150710	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20150710
JP2014525780 T2	20141002	LSPB	+	published / reissued	
JP2014525780 T2	20150616	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20150616
JP2014525780 T2	20150616	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20150616
JP2014525780 T2	20150804	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	

JP2014525780 T2	20150812	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20150811
JP2014525780 T2	20150910	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20150901
JP2014525780 T2	20150911	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 5805315 COUNTRY OF REF DOCUMENT : JP
JP2014526918 A2	20141009	LSPB	+	published / reissued	
JP2014526918 T2	20141009	LSPB	+	published / reissued	
JP2014529378 T2	20141106	LSPB	+	published / reissued	
JP2014529378 T2	20150617	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20150617
JP2014529378 T2	20150617	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20150617
JP2014529378 T2	20160531	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20160531
JP2014529378 T2	20170104	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20170104
JP2014529378 T2	20170502	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20170502
JP2014529378 T2	20170515	LSAL	A911	TRANSFER OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A911 EFFECTIVE DATE : 20170512
JP2014529378 T2	20170718	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20170718
JP2014529378 T2	20170807	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20170807
JP2014529378 T2	20171101	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2014529378 T2	20171114	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20171114
JP2014529378 T2	20171214	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20171208
JP2014529378 T2	20171215	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 6259395 COUNTRY OF REF DOCUMENT : JP
JP2016144696 A2	20160812	LSPB	+	published / reissued	
JP2016144696 A2	20160812	LSPB	+	published / reissued	
JP2016144696 A2	20160509	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20160502
JP2016144696 A2	20160509	LSES	+A621	WRITTEN REQUEST	TEXT : JAPANESE

				FOR APPLICATION EXAMINATION	INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20160502
JP2016144696 A2	20170517	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20170517
JP2016144696 A2	20170517	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20170517
JP2016144696 A2	20171116	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20171116
JP2016144696 A2	20171116	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20171116
JP2016144696 A2	20180410	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20180410
JP2016144696 A2	20180410	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20180410
JP2016144696 A2	20180710	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20180710
JP2016144696 A2	20180710	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20180710
JP2016144696 A2	20181130	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20181130
JP2016144696 A2	20181130	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20181130
JP2016144696 A2	20190401	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20190401
JP2016144696 A2	20190401	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20190401
JP2016144696 A2	20190409	LSAL	A911	TRANSFER OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A911 EFFECTIVE DATE : 20190408
JP2016144696 A2	20190409	LSAL	A911	TRANSFER OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A911 EFFECTIVE DATE : 20190408
JP2016144696 A2	20190520	LSAL	-A912	REMOVAL OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A912 EFFECTIVE DATE : 20190517
JP2016144696 A2	20190520	LSAL	-A912	REMOVAL OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A912 EFFECTIVE DATE : 20190517
JP2016144696 A2	20200512	LSWD	-A761	WRITTEN WITHDRAWAL OF APPLICATION	TEXT : JAPANESE INTERMEDIATE CODE: A761 EFFECTIVE DATE : 20200512
JP2016144696 A2	20200512	LSWD	-A761	WRITTEN WITHDRAWAL OF APPLICATION	TEXT : JAPANESE INTERMEDIATE CODE: A761 EFFECTIVE DATE : 20200512
JP2017208332 A2	20171124	LSPB	+	published / reissued	
JP2017208332 A2	20180111	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20180111
JP2017208332 A2	20180417	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20180417

JP2017208332 A2	20180903	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20180903
JP2017208332 A2	20190226	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2017208332 A2	20190312	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20190312
JP2017208332 A2	20190411	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20190408
JP2017208332 A2	20190412	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 6511484 COUNTRY OF REF DOCUMENT : JP
JP2019111406 A2	20190711	LSPB	+	published / reissued	
JP2019111406 A2	20190711	LSPB	+	published / reissued	
JP2019111406 A2	20190401	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20190401
JP2019111406 A2	20190401	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20190401
JP2019111406 A2	20200303	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20200303
JP2019111406 A2	20200303	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20200303
JP5088978 B2	20121205	LSGT	+	granted / extensions (spc, cpc, pte)	
JP5088978 B2	20110727	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20110725
JP5088978 B2	20120911	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP5088978 B2	20150924	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5088978 B2	20150929	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5088978 B2	20160923	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5088978 B2	20160927	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5088978 B2	20170907	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5088978 B2	20170919	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5088978 B2	20180913	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5088978 B2	20180918	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5088978 B2	20191010	LSFE	R20	特許料納付書 (Patent fee payment form)	EFFECTIVE DATE : 20191009
JP5088978 B2	20191015	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5088978 B2	20310725	PEXP		Calculated Patent Term Expiry	
JP5400121 B2	20140129	LSGT	+	granted /	

				extensions (spc, cpc, pte)	
JP5400121 B2	20131010	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP5400121 B2	20131029	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP5400121 B2	20131101	LSGT	+R150	特許証 (Patent certificate)	
JP5400121 B2	20161027	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5400121 B2	20161101	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5400121 B2	20171109	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5400121 B2	20171114	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5400121 B2	20181101	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5400121 B2	20181106	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5400121 B2	20191031	LSFE	R20	特許料納付書 (Patent fee payment form)	EFFECTIVE DATE : 20191029
JP5400121 B2	20191105	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5400121 B2	20311020	PEXP		Calculated Patent Term Expiry	
JP5683641 B2	20150311	LSGT	+	granted / extensions (spc, cpc, pte)	
JP5683641 B2	20130528	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20130524
JP5683641 B2	20141225	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP5683641 B2	20150120	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP5683641 B2	20150123	LSGT	+R150	特許証 (Patent certificate)	
JP5683641 B2	20180125	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5683641 B2	20180130	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5683641 B2	20190110	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5683641 B2	20190115	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5683641 B2	20200331	LSFE	R20	特許料納付書 (Patent fee payment form)	EFFECTIVE DATE : 20200330
JP5683641 B2	20200401	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5683641 B2	20330524	PEXP		Calculated Patent Term Expiry	
JP5714210 B2	20150507	LSGT	+	granted / extensions (spc, cpc, pte)	
JP5714210 B2	20150219	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP5714210 B2	20150219	LSGT	+A01	特許査定書 (Decision of patent grant)	EFFECTIVE DATE : 20150216
JP5714210 B2	20150317	LSFE	R100	特許料納付書 (Patent fee payment form)	TEXT : 51500511120 EFFECTIVE DATE : 20150311
JP5714210 B2	20150317	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP5714210 B2	20150320	LSGT	+R150	特許証 (Patent certificate)	
JP5714210 B2	20150320	LSGT	+R150	特許証 (Patent certificate)	EFFECTIVE DATE : 20150331

JP5714210 B2	20180315	LSFE	R20	特許料納付書 (Patent fee payment form)	TEXT : 51800477210 EFFECTIVE DATE : 20180308
JP5714210 B2	20180315	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5714210 B2	20180320	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5714210 B2	20190307	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5714210 B2	20190307	LSFE	R20	特許料納付書 (Patent fee payment form)	TEXT : 51900462511 EFFECTIVE DATE : 20190304
JP5714210 B2	20190312	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5714210 B2	20200331	LSFE	R20	特許料納付書 (Patent fee payment form)	EFFECTIVE DATE : 20200330
JP5714210 B2	20200331	LSFE	R20	特許料納付書 (Patent fee payment form)	TEXT : 52000681409 EFFECTIVE DATE : 20200330
JP5714210 B2	20200401	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5714210 B2	20260901	PEXP		Calculated Patent Term Expiry	
JP5730822 B2	20150610	LSGT	+	granted / extensions (spc, cpc, pte)	
JP5730822 B2	20120703	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20120629
JP5730822 B2	20150319	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP5730822 B2	20150414	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP5730822 B2	20150417	LSGT	+R150	特許証 (Patent certificate)	
JP5730822 B2	20180426	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5730822 B2	20180508	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5730822 B2	20190418	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5730822 B2	20190423	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5730822 B2	20200410	LSFE	R20	特許料納付書 (Patent fee payment form)	EFFECTIVE DATE : 20200409
JP5730822 B2	20200413	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5730822 B2	20320629	PEXP		Calculated Patent Term Expiry	
JP5805315 B2	20151104	LSGT	+	granted / extensions (spc, cpc, pte)	
JP5805315 B2	20150813	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP5805315 B2	20150908	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP5805315 B2	20150911	LSGT	+R150	特許証 (Patent certificate)	
JP5805315 B2	20181011	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5805315 B2	20181016	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5805315 B2	20191010	LSFE	R20	特許料納付書 (Patent fee payment form)	EFFECTIVE DATE : 20191009
JP5805315 B2	20191015	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5805315 B2	20320710	PEXP		Calculated Patent Term Expiry	
JP6259395 B2	20180110	LSGT	+	granted /	

				extensions (spc, cpc, pte)
JP6259395 B2	20171116	LSGT	+A01	特許査定書 (Decision of patent grant)
JP6259395 B2	20171212	LSFE	R100	特許料納付書 (Patent fee payment form)
JP6259395 B2	20171215	LSGT	+R150	特許証 (Patent certificate)
JP6259395 B2	20320710	PEXP		Calculated Patent Term Expiry
JP6511484 B2	20190515	LSGT	+	granted / extensions (spc, cpc, pte)
JP6511484 B2	20190314	LSGT	+A01	特許査定書 (Decision of patent grant)
JP6511484 B2	20190409	LSFE	R100	特許料納付書 (Patent fee payment form)
JP6511484 B2	20190412	LSGT	+R150	特許証 (Patent certificate)
JP6511484 B2	20370502	PEXP		Calculated Patent Term Expiry
KR20140051298 A	20140430	LSPB	+	published / reissued
KR20140051298 A	20170811	LSDW	-WITN	WITHDRAWAL DUE TO NO REQUEST FOR EXAMINATION
KR20140051299 A	20140430	LSPB	+	published / reissued
KR20140051299 A	20170811	LSDW	-WITN	WITHDRAWAL DUE TO NO REQUEST FOR EXAMINATION
KR20140066996 A	20140603	LSPB	+	published / reissued
KR20140066996 A	20170811	LSDW	-WITN	WITHDRAWAL DUE TO NO REQUEST FOR EXAMINATION
KR20140126282 A	20141030	LSPB	+	published / reissued
KR20140126282 A	20170811	LSDW	-WITN	WITHDRAWAL DUE TO NO REQUEST FOR EXAMINATION
MX2014000481 A1	20140908	LSPB	+	published / reissued
MX2014000481 A1	20190731	LSWD	-FA	ABANDONMENT OR WITHDRAWAL
MX2014000482 A1	20140827	LSPB	+	published / reissued
MX2014000484 A1	20140827	LSPB	+	published / reissued
MX2014000485 A1	20140908	LSPB	+	published / reissued
MX336850 B	20160203	LSGT	+	granted / extensions (spc, cpc, pte)
MX336850 B	20160203	LSGT	+FG	GRANT OR REGISTRATION
MX336850 B	20320710	PEXP		Calculated Patent Term Expiry
MX337131 B	20160212	LSGT	+	granted / extensions (spc, cpc, pte)
MX337131 B	20160212	LSGT	+FG	GRANT OR REGISTRATION
MX337131 B	20320710	PEXP		Calculated Patent Term Expiry
MX337132 B	20160212	LSGT	+	granted / extensions (spc, cpc, pte)
MX337132 B	20160212	LSGT	+FG	GRANT OR REGISTRATION
MX337132 B	20320710	PEXP		Calculated Patent Term Expiry
PL1889198 T3	20150430	LSGT	+	granted / extensions (spc, cpc, pte)
PT1889198 T	20150306	LSGT	+	granted /

				extensions (spc, cpc, pte)	
PT1889198 T	20260428	PEXP		Calculated Patent Term Expiry	
RU2014104519 A	20150820	LSPB	+	published / reissued	
RU2014104519 A	20150910	LSWD	-FA93	ACKNOWLEDGEMENT OF APPLICATION WITHDRAWN (NO REQUEST FOR EXAMINATION)	EFFECTIVE DATE : 20150713
RU2014104691 A	20150820	LSPB	+	published / reissued	
RU2014104691 A	20150910	LSWD	-FA93	ACKNOWLEDGEMENT OF APPLICATION WITHDRAWN (NO REQUEST FOR EXAMINATION)	EFFECTIVE DATE : 20150713
RU2014104692 A	20150910	LSPB	+	published / reissued	
RU2014104692 A	20161010	LSWD	-FA92	ACKNOWLEDGEMENT OF APPLICATION WITHDRAWN (LACK OF SUPPLEMENTARY MATERIALS SUBMITTED)	EFFECTIVE DATE : 20160916
RU2014104692 A	20161210	LSRE	+FZ9A	APPLICATION NOT WITHDRAWN (CORRECTION OF THE NOTICE OF WITHDRAWAL)	EFFECTIVE DATE : 20161125
RU2014104692 A	20171120	LSWD	-FA92	ACKNOWLEDGEMENT OF APPLICATION WITHDRAWN (LACK OF SUPPLEMENTARY MATERIALS SUBMITTED)	EFFECTIVE DATE : 20171116
RU2014104693 A	20150910	LSPB	+	published / reissued	
RU2572017 C2	20151227	LSGT	+	granted / extensions (spc, cpc, pte)	
RU2572017 C2	20320710	PEXP		Calculated Patent Term Expiry	
SI1889198 T1	20150227	LSGT	+	granted / extensions (spc, cpc, pte)	
SI1889198 T1	20260428	PEXP		Calculated Patent Term Expiry	
TH142307 A	20150803	LSPB	+	published / reissued	
TH142308 A	20150803	LSPB	+	published / reissued	
TH142309 A	20150803	LSPB	+	published / reissued	
TH143410 A	20151012	LSPB	+	published / reissued	
TW201317931 A	20130501	LSPB	+	published / reissued	
TW201320962 A	20130601	LSPB	+	published / reissued	
TW201320963 A	20130601	LSPB	+	published / reissued	
TW201321039 A	20130601	LSPB	+	published / reissued	
TW201321536 A	20130601	LSPB	+	published / reissued	
TW201322678 A	20130601	LSPB	+	published / reissued	
TW201336476 A	20130916	LSPB	+	published / reissued	
UA112548 C2	20160926	LSGT	+	granted / extensions (spc, cpc, pte)	
UA112548 C2	20320710	PEXP		Calculated Patent Term Expiry	
UA116434 C2	20180326	LSGT	+	granted / extensions (spc, cpc, pte)	
UA116434 C2	20320710	PEXP		Calculated Patent	

				Term Expiry	
US10517507 BB	20191231	LSGT	+	granted / extensions (spc, cpc, pte)	
US10517507 BB	20140919	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS BIOMEDICAL, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:FRANK, JEREMY; BJELETICH, PETER; HAFEZI, HOOMAN; AND OTHERS; SIGNING DATES FROM 20111220 TO 20120104; REEL/FRAME:033776/0272
US10517507 BB	20140919	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS DIGITAL HEALTH, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:SNYDER, ERIC; REEL/FRAME:033776/0283 EFFECTIVE DATE : 20130708
US10517507 BB	20140919	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS DIGITAL HEALTH, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:PROTEUS BIOMEDICAL, INC.; REEL/FRAME:033779/0329 EFFECTIVE DATE : 20120705
US10517507 BB	20350522	PEXP		Calculated Patent Term Expiry (PTA 338 days)	
US10542909 BB	20200128	LSGT	+	granted / extensions (spc, cpc, pte)	
US10542909 BB	20370330	PEXP		Calculated Patent Term Expiry	
US10610128 BB	20200407	LSGT	+	granted / extensions (spc, cpc, pte)	
US10610128 BB	20171020	LSFE	FEPP	FEE PAYMENT PROCEDURE	TEXT : ENTITY STATUS SET TO UNDISCOUNTED (ORIGINAL EVENT CODE: BIG.); ENTITY STATUS OF PATENT OWNER: LARGE ENTITY
US10610128 BB	20180202	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS DIGITAL HEALTH, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:HAFEZI, HOOMAN; REEL/FRAME:044821/0422 EFFECTIVE DATE : 20140718
US10610128 BB	20180202	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS BIOMEDICAL, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ZDEBLICK, MARK; THOMPSON, ANDREW; PIKELNY, ALEKSANDR; AND OTHERS; SIGNING DATES FROM 20080225 TO 20090225; REEL/FRAME:044821/0314
US10610128 BB	20180202	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS DIGITAL HEALTH, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:PROTEUS BIOMEDICAL, INC.; REEL/FRAME:045243/0578 EFFECTIVE DATE : 20120705
US10610128 BB	20200318	LSGT	PAT1	Patented Case	
US10610128 BB	20371020	PEXP		Calculated Patent Term Expiry	
US2008284599 AA	20081120	LSPB	+	published / reissued	
US2008284599 AA	20121102	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS DIGITAL HEALTH, INC., CALIFORNIA

					OLDPARTY : CHANGE OF NAME; ASSIGNOR:PROTEUS BIOMEDICAL, INC.; REEL/FRAME:029228/0436 EFFECTIVE DATE : 20120705
US2008284599 AA	20140725	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS DIGITAL HEALTH, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:HAFEZI, HOOMAN; REEL/FRAME:033396/0828 EFFECTIVE DATE : 20140718
US2008284599 AA	20140910	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2008306359 AA	20081211	LSPB	+	published / reissued	
US2008306359 AA	20121102	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS DIGITAL HEALTH, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:PROTEUS BIOMEDICAL, INC.; REEL/FRAME:029228/0436 EFFECTIVE DATE : 20120705
US2008306359 AA	20130911	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2009227204 AA	20090910	LSPB	+	published / reissued	
US2009227204 AA	20121102	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS DIGITAL HEALTH, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:PROTEUS BIOMEDICAL, INC.; REEL/FRAME:029228/0436 EFFECTIVE DATE : 20120705
US2009227204 AA	20140226	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2010081894 AA	20100401	LSPB	+	published / reissued	
US2010081894 AA	20110622	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2011105864 AA	20110505	LSPB	+	published / reissued	
US2011105864 AA	20121102	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS DIGITAL HEALTH, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:PROTEUS BIOMEDICAL, INC.; REEL/FRAME:029228/0436 EFFECTIVE DATE : 20120705
US2011105864 AA	20150714	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS DIGITAL HEALTH, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:HAFEZI, HOOMAN; REEL/FRAME:036081/0336 EFFECTIVE DATE : 20150713
US2011105864 AA	20150812	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2012001752 AA	20120105	LSPB	+	published / reissued	
US2012001752 AA	20121102	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS DIGITAL HEALTH, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:PROTEUS BIOMEDICAL, INC.; REEL/FRAME:029228/0436 EFFECTIVE DATE : 20120705
US2012001752 AA	20140806	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2012004520 AA	20120105	LSPB	+	published / reissued	

US2012004520 AA	20110929	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS BIOMEDICAL, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:WHITWORTH, ADAM; ZDEBLICK, MARK; SIGNING DATES FROM 20110825 TO 20110829; REEL/FRAME:026992/0128
US2012004520 AA	20121102	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS DIGITAL HEALTH, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:PROTEUS BIOMEDICAL, INC.; REEL/FRAME:029228/0436 EFFECTIVE DATE : 20120705
US2012004520 AA	20150320	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2012004527 AA	20120105	LSPB	+	published / reissued	
US2012004527 AA	20121102	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS DIGITAL HEALTH, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:PROTEUS BIOMEDICAL, INC.; REEL/FRAME:029228/0436 EFFECTIVE DATE : 20120705
US2012004527 AA	20140430	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2012007734 AA	20120112	LSPB	+	published / reissued	
US2012007734 AA	20121102	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS DIGITAL HEALTH, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:PROTEUS BIOMEDICAL, INC.; REEL/FRAME:029228/0436 EFFECTIVE DATE : 20120705
US2012007734 AA	20141125	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2012024889 AA	20120202	LSPB	+	published / reissued	
US2012024889 AA	20111021	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS BIOMEDICAL, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ROBERTSON, TIMOTHY; MOON, GREGORY; COSTELLO, BENEDICT; AND OTHERS; SIGNING DATES FROM 20110826 TO 20110928; REEL/FRAME:027100/0520
US2012024889 AA	20121102	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS DIGITAL HEALTH, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:PROTEUS BIOMEDICAL, INC.; REEL/FRAME:029228/0436 EFFECTIVE DATE : 20120705
US2012024889 AA	20150929	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2012062379 AA	20120315	LSPB	+	published / reissued	
US2012062379 AA	20121102	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS DIGITAL HEALTH, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:PROTEUS BIOMEDICAL, INC.; REEL/FRAME:029228/0436 EFFECTIVE DATE : 20120705
US2012062379 AA	20140827	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE

US2012116188 AA	20120510	LSPB	+	published / reissued	
US2012116188 AA	20121102	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS DIGITAL HEALTH, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:PROTEUS BIOMEDICAL, INC.; REEL/FRAME:029228/0436 EFFECTIVE DATE : 20120705
US2012116188 AA	20130722	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS DIGITAL HEALTH, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:SNYDER, ERIC; REEL/FRAME:030850/0362 EFFECTIVE DATE : 20130708
US2012116188 AA	20140723	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2012299723 AA	20121129	LSPB	+	published / reissued	
US2012299723 AA	20151111	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2014051965 AA	20140220	LSPB	+	published / reissued	
US2014051965 AA	20130809	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS DIGITAL HEALTH, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:PROTEUS BIOMEDICAL, INC.; REEL/FRAME:031003/0250 EFFECTIVE DATE : 20120705
US2014051965 AA	20130809	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS BIOMEDICAL, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ZDEBLICK, MARK J.; ROBERTSON, TIMOTHY; REEL/FRAME:030982/0533 EFFECTIVE DATE : 20080225
US2014051965 AA	20170911	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2014179221 AA	20140626	LSPB	+	published / reissued	
US2014179221 AA	20140106	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS BIOMEDICAL, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:WHITWORTH, ADAM; ZDEBLICK, MARK; SIGNING DATES FROM 20110825 TO 20110829; REEL/FRAME:031900/0180
US2014179221 AA	20140106	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS DIGITAL HEALTH, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:PROTEUS BIOMEDICAL, INC.; REEL/FRAME:031924/0585 EFFECTIVE DATE : 20120705
US2014179221 AA	20150223	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2015080677 AA	20150319	LSPB	+	published / reissued	
US2015080677 AA	20170301	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2015080678 AA	20150319	LSPB	+	published / reissued	
US2015080678 AA	20170419	LSES	NFA1	Non Final Action Mailed	
US2015080678 AA	20181228	LSES	NFA1	Non Final Action Mailed	

US2015080678 AA	20190816	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2015080678 AA	20191121	LSFE	+PPV1	Publications -- Issue Fee Payment Verified	
US2015080678 AA	20191211	LSGT	PAT1	Patented Case	
US2015080678 AA	20191211	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2015080679 AA	20150319	LSPB	+	published / reissued	
US2015080679 AA	20170628	LSES	NFA1	Non Final Action Mailed	
US2015080679 AA	20180109	LSES	+ALW2	Allowed -- Notice of Allowance Not Yet Mailed	
US2015080679 AA	20180117	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2015080679 AA	20180309	LSFE	+AWA3	Awaiting TC Resp, Issue Fee Payment Verified	
US2015080679 AA	20180330	LSFE	+PPV1	Publications -- Issue Fee Payment Verified	
US2015080679 AA	20180418	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2015080680 AA	20150319	LSPB	+	published / reissued	
US2015080680 AA	20140904	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS BIOMEDICAL, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ZDEBLICK, MARK; ROBERTSON, TIMOTHY; PIKELNY, ALEKSANDR; AND OTHERS; SIGNING DATES FROM 20091208 TO 20091209; REEL/FRAME:033663/0902
US2015080680 AA	20140904	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS DIGITAL HEALTH, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:PROTEUS BIOMEDICAL, INC.; REEL/FRAME:033688/0422 EFFECTIVE DATE : 20120705
US2015080680 AA	20151002	LSWD	-EAB2	Expressly Abandoned -- During Publication Process	
US2015080681 AA	20150319	LSPB	+	published / reissued	
US2015080681 AA	20150709	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS BIOMEDICAL, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:HAFEZI, HOOMAN; O'REILLY, DAVID; JOHNSON, PATRICIA; AND OTHERS; SIGNING DATES FROM 20110826 TO 20110919; REEL/FRAME:036045/0436
US2015080681 AA	20150709	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS DIGITAL HEALTH, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:PROTEUS BIOMEDICAL, INC.; REEL/FRAME:036088/0622 EFFECTIVE DATE : 20120705
US2015080681 AA	20150930	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE

US2015150480 AA	20150604	LSPB	+	published / reissued	
US2015150480 AA	20150710	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS BIOMEDICAL, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ZDEBLICK, MARK; THOMPSON, ANDREW; PIKELNY, ALEKSANDR; AND OTHERS; SIGNING DATES FROM 20080225 TO 20080310; REEL/FRAME:036092/0588
US2015150480 AA	20150710	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS DIGITAL HEALTH, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:HAFEZI, HOOMAN; REEL/FRAME:036057/0102 EFFECTIVE DATE : 20140718
US2015150480 AA	20150710	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS DIGITAL HEALTH, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:PROTEUS BIOMEDICAL, INC.; REEL/FRAME:036092/0593 EFFECTIVE DATE : 20120705
US2015150480 AA	20170417	LSES	NFA1	Non Final Action Mailed	
US2015150480 AA	20171113	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2015173646 AA	20150625	LSPB	+	published / reissued	
US2015173646 AA	20160824	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2015223751 AA	20150813	LSPB	+	published / reissued	
US2015223751 AA	20170403	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2015223751 AA	20170511	LSFE	+PPV1	Publications -- Issue Fee Payment Verified	
US2015223751 AA	20170515	LSFE	+PPV1	Publications -- Issue Fee Payment Verified	
US2015223751 AA	20170531	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2015230729 AA	20150820	LSPB	+	published / reissued	
US2015230729 AA	20150710	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS BIOMEDICAL, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ZDEBLICK, MARK; THOMPSON, ANDREW; PIKELNY, ALEKSANDR; AND OTHERS; SIGNING DATES FROM 20080225 TO 20080310; REEL/FRAME:036057/0328
US2015230729 AA	20150710	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS DIGITAL HEALTH, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:HAFEZI, HOOMAN; REEL/FRAME:036057/0384 EFFECTIVE DATE : 20140718
US2015230729 AA	20150710	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS DIGITAL HEALTH, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:PROTEUS BIOMEDICAL, INC.;

					REEL/FRAME:036092/0630 EFFECTIVE DATE : 20120705
US2015230729 AA	20171113	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2016155316 AA	20160602	LSPB	+	published / reissued	
US2016155316 AA	20160202	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS BIOMEDICAL, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:HAFEZI, HOOMAN; O'REILLY, DAVID; JOHNSON, PATRICIA; AND OTHERS; SIGNING DATES FROM 20120110 TO 20120131; REEL/FRAME:037647/0563
US2016155316 AA	20160202	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS DIGITAL HEALTH, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:PROTEUS BIOMEDICAL, INC.; REEL/FRAME:037682/0614 EFFECTIVE DATE : 20120705
US2016155316 AA	20161017	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2016174900 AA	20160623	LSPB	+	published / reissued	
US2016174900 AA	20170426	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2017265813 AA	20170921	LSPB	+	published / reissued	
US2017265813 AA	20171127	LSES	-NFA2	Non Final Action Counted, Not Yet Mailed	
US2017265813 AA	20171128	LSES	NFA1	Non Final Action Mailed	
US2017265813 AA	20180202	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS BIOMEDICAL, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ZDEBLICK, MARK; ROBERTSON, TIMOTHY; PIKELNY, ALEKSANDR; AND OTHERS; SIGNING DATES FROM 20091208 TO 20091209; REEL/FRAME:044820/0391
US2017265813 AA	20180202	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS DIGITAL HEALTH, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:PROTEUS BIOMEDICAL, INC.; REEL/FRAME:045252/0127 EFFECTIVE DATE : 20120705
US2017265813 AA	20190115	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2017265813 AA	20190319	LSES	NFA1	Non Final Action Mailed	
US2017265813 AA	20190916	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2017265813 AA	20200108	LSGT	PAT1	Patented Case	
US2017265813 AA	20200108	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2018214048 AA	20180802	LSPB	+	published / reissued	
US2018214048 AA	20181207	LSES	NFA1	Non Final Action Mailed	

US2018214048 AA	20191118	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2018214048 AA	20200218	LSFE	+PPR1	Publications -- Issue Fee Payment Received	
US2018214048 AA	20200228	LSFE	+PPV1	Publications -- Issue Fee Payment Verified	
US2018214048 AA	20200318	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2020121220 AA	20200423	LSPB	+	published / reissued	
US2020121220 AA	20200218	LSES	NFA1	Non Final Action Mailed	
US7978064 BB	20110712	LSGT	+	granted / extensions (spc, cpc, pte)	
US7978064 BB	20100226	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS BIOMEDICAL, INC.,CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ZDEBLICK, MARK; ROBERTSON, TIMOTHY; PIKELNY, ALEKSANDR; AND OTHERS; SIGNING DATES FROM 20091208 TO 20091209; REEL/FRAME:024001/0148
US7978064 BB	20100226	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS BIOMEDICAL, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ZDEBLICK, MARK; ROBERTSON, TIMOTHY; PIKELNY, ALEKSANDR; AND OTHERS; SIGNING DATES FROM 20091208 TO 20091209; REEL/FRAME:024001/0148
US7978064 BB	20110622	LSGT	PAT1	Patented Case	
US7978064 BB	20121102	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS DIGITAL HEALTH, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:PROTEUS BIOMEDICAL, INC.; REEL/FRAME:029228/0436 EFFECTIVE DATE : 20120705
US7978064 BB	20150105	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US7978064 BB	20190107	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US7978064 BB	20300207	PEXP		Calculated Patent Term Expiry (PTA 139 days and a terminal disclaimer has been filed)	
US8547248 BB	20131001	LSGT	+	granted / extensions (spc, cpc, pte)	
US8547248 BB	20080226	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS BIOMEDICAL, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ZDEBLICK, MARK J.; ROBERTSON, TIMOTHY; REEL/FRAME:020564/0213 EFFECTIVE DATE : 20080225
US8547248 BB	20130911	LSGT	PAT1	Patented Case	
US8547248 BB	20170321	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8547248 BB	20301218	PEXP		Calculated Patent Term Expiry (PTA 1569 days)	
US8674825 BB	20140318	LSGT	+	granted / extensions (spc,	

				cpc, pte)	
US8674825 BB	20090622	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS BIOMEDICAL, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ZDEBLICK, MARK; THOMPSON, ANDREW; PIKELNY, ALEKSANDR; AND OTHERS; REEL/FRAME:022859/0477; SIGNING DATES FROM 20080225 TO 20090225
US8674825 BB	20090622	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS BIOMEDICAL, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ZDEBLICK, MARK; THOMPSON, ANDREW; PIKELNY, ALEKSANDR; AND OTHERS; SIGNING DATES FROM 20080225 TO 20090225; REEL/FRAME:022859/0477
US8674825 BB	20140226	LSGT	PAT1	Patented Case	
US8674825 BB	20150811	LSRE	CC	CERTIFICATE OF CORRECTION	
US8674825 BB	20170830	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8674825 BB	20320223	PEXP		Calculated Patent Term Expiry (PTA 1077 days)	
US8730031 BB	20140520	LSGT	+	granted / extensions (spc, cpc, pte)	
US8730031 BB	20111114	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS BIOMEDICAL, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:THOMPSON, TODD; ZDEBLICK, MARK; BEHZADI, YASHAR; AND OTHERS; SIGNING DATES FROM 20110920 TO 20110922; REEL/FRAME:027223/0303
US8730031 BB	20140430	LSGT	PAT1	Patented Case	
US8730031 BB	20171115	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8730031 BB	20320409	PEXP		Calculated Patent Term Expiry (PTA 273 days)	
US8802183 BB	20140812	LSGT	+	granted / extensions (spc, cpc, pte)	
US8802183 BB	20120307	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS BIOMEDICAL, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:FRANK, JEREMY; BJELETICH, PETER; HAFEZI, HOOMAN; AND OTHERS; SIGNING DATES FROM 20111220 TO 20120104; REEL/FRAME:027823/0413
US8802183 BB	20140723	LSGT	PAT1	Patented Case	
US8802183 BB	20180209	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8802183 BB	20320525	PEXP		Calculated Patent Term Expiry (PTA 319 days)	
US8816847 BB	20140826	LSGT	+	granted / extensions (spc, cpc, pte)	
US8816847 BB	20110630	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS BIOMEDICAL, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST;

					ASSIGNORS:ZDEBLICK, MARK; ROBERTSON, TIMOTHY; PIKELNY, ALEKSANDR; AND OTHERS; SIGNING DATES FROM 20091208 TO 20091209; REEL/FRAME:026532/0200
US8816847 BB	20140806	LSGT	PAT1	Patented Case	
US8816847 BB	20180209	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8816847 BB	20311029	PEXP		Calculated Patent Term Expiry (PTA 148 days and a terminal disclaimer has been filed)	
US8836513 BB	20140916	LSGT	+	granted / extensions (spc, cpc, pte)	
US8836513 BB	20111208	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS BIOMEDICAL, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:HAFEZI, HOOMAN; O'REILLY, DAVID; JOHNSON, PATRICIA; AND OTHERS; SIGNING DATES FROM 20110826 TO 20110919; REEL/FRAME:027346/0526
US8836513 BB	20140827	LSGT	PAT1	Patented Case	
US8836513 BB	20150616	LSRE	CC	CERTIFICATE OF CORRECTION	
US8836513 BB	20180419	LSFE	FEPP	FEE PAYMENT PROCEDURE	TEXT : SURCHARGE FOR LATE PAYMENT, LARGE ENTITY (ORIGINAL EVENT CODE: M1554)
US8836513 BB	20180419	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8836513 BB	20191001	LSRE	CC	CERTIFICATE OF CORRECTION	
US8836513 BB	20311027	PEXP		Calculated Patent Term Expiry (PTA 108 days)	
US8847766 BB	20140930	LSGT	+	granted / extensions (spc, cpc, pte)	
US8847766 BB	20080311	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS BIOMEDICAL, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ZDEBLICK, MARK; THOMPSON, ANDREW; PIKELNY, ALEKSANDR; AND OTHERS; REEL/FRAME:020633/0458; SIGNING DATES FROM 20080225 TO 20080310
US8847766 BB	20080311	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS BIOMEDICAL, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ZDEBLICK, MARK; THOMPSON, ANDREW; PIKELNY, ALEKSANDR; AND OTHERS; SIGNING DATES FROM 20080225 TO 20080310; REEL/FRAME:020633/0458
US8847766 BB	20140910	LSGT	PAT1	Patented Case	
US8847766 BB	20180321	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8847766 BB	20300329	PEXP		Calculated Patent Term Expiry (PTA 1431 days)	
US8912908 BB	20141216	LSGT	+	granted / extensions (spc, cpc, pte)	
US8912908 BB	20111003	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS

					BIOMEDICAL, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BERKMAN, JEFFREY; ZDEBLICK, MARK; JOHNSON, PATRICIA; AND OTHERS; SIGNING DATES FROM 20110829 TO 20110916; REEL/FRAME:027008/0210
US8912908 BB	20141125	LSGT	PAT1	Patented Case	
US8912908 BB	20180607	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8912908 BB	20320628	PEXP		Calculated Patent Term Expiry (PTA 353 days)	
US9119554 BB	20150901	LSGT	+	granted / extensions (spc, cpc, pte)	
US9119554 BB	20110128	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS BIOMEDICAL, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ZDEBLICK, MARK; THOMPSON, ANDREW; PIKELNY, ALEKSANDR; AND OTHERS; SIGNING DATES FROM 20080225 TO 20090225; REEL/FRAME:025717/0108
US9119554 BB	20150812	LSGT	PAT1	Patented Case	
US9119554 BB	20190225	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US9119554 BB	20330708	PEXP		Calculated Patent Term Expiry (PTA 963 days)	
US9161707 BB	20151020	LSGT	+	granted / extensions (spc, cpc, pte)	
US9161707 BB	20150930	LSGT	PAT1	Patented Case	
US9161707 BB	20190418	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US9161707 BB	20340912	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
US9198608 BB	20151201	LSGT	+	granted / extensions (spc, cpc, pte)	
US9198608 BB	20120203	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS BIOMEDICAL, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:HAFEZI, HOOMAN; O'REILLY, DAVID; JOHNSON, PATRICIA; AND OTHERS; SIGNING DATES FROM 20120116 TO 20120131; REEL/FRAME:027651/0670
US9198608 BB	20120516	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS BIOMEDICAL, INC., CALIFORNIA OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE HAFEZI EXECUTION FROM JANUARY 31, 2012 TO JANUARY 13, 2012 AND HATAMKHANY EXECUTION FROM JANUARY 26, 2012 TO JANUARY 16, 2012 PREVIOUSLY RECORDED ON REEL 027651 FRAME 0670. ASSIGNOR(S) HEREBY CONFIRMS THE THE ASSIGNMENT OF ASSIGNOR'S INTEREST; ASSIGNORS:HAFEZI, HOOMAN; O'REILLY, DAVID; JOHNSON, PATRICIA; AND OTHERS; SIGNING DATES FROM 20120113 TO 20120131; REEL/FRAME:028222/0415

US9198608 BB	20121102	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS DIGITAL HEALTH, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:PROTEUS BIOMEDICAL, INC.; REEL/FRAME:029228/0436 EFFECTIVE DATE : 20120705
US9198608 BB	20151002	LSFE	+AWA3	Awaiting TC Resp, Issue Fee Payment Verified	
US9198608 BB	20151111	LSGT	PAT1	Patented Case	
US9198608 BB	20330414	PEXP		Calculated Patent Term Expiry (PTA 508 days)	
US9439582 BB	20160913	LSGT	+	granted / extensions (spc, cpc, pte)	
US9439582 BB	20150421	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS BIOMEDICAL, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BERKMAN, JEFFREY; ZDEBLICK, MARK; JOHNSON, PATRICIA; AND OTHERS; SIGNING DATES FROM 20110826 TO 20110916; REEL/FRAME:035458/0282
US9439582 BB	20150421	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS DIGITAL HEALTH, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:PROTEUS BIOMEDICAL, INC.; REEL/FRAME:035475/0085 EFFECTIVE DATE : 20120705
US9439582 BB	20160617	LSFE	+PPV1	Publications -- Issue Fee Payment Verified	
US9439582 BB	20160824	LSGT	PAT1	Patented Case	
US9439582 BB	20200320	LSFE	FEPP	FEE PAYMENT PROCEDURE	TEXT : SURCHARGE FOR LATE PAYMENT, LARGE ENTITY (ORIGINAL EVENT CODE: M1554); ENTITY STATUS OF PATENT OWNER: LARGE ENTITY
US9439582 BB	20200320	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US9439582 BB	20341124	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
US9597010 BB	20170321	LSGT	+	granted / extensions (spc, cpc, pte)	
US9597010 BB	20140721	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS BIOMEDICAL, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:THOMPSON, TODD; ZDEBLICK, MARK; BEHZADI, YASHAR; AND OTHERS; SIGNING DATES FROM 20110920 TO 20110922; REEL/FRAME:033352/0261
US9597010 BB	20140721	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS DIGITAL HEALTH, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:PROTEUS BIOMEDICAL, INC.; REEL/FRAME:033371/0471 EFFECTIVE DATE : 20120705
US9597010 BB	20170301	LSGT	PAT1	Patented Case	
US9597010 BB	20341225	PEXP		Calculated Patent Term Expiry (PTA 246 days)	
US9649066 BB	20170516	LSGT	+	granted /	

				extensions (spc, cpc, pte)	
US9649066 BB	20160215	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS BIOMEDICAL, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ZDEBLICK, MARK; ROBERTSON, TIMOTHY; PIKELNY, ALEKSANDR; AND OTHERS; SIGNING DATES FROM 20091208 TO 20091209; REEL/FRAME:037733/0405
US9649066 BB	20160215	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS DIGITAL HEALTH, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:PROTEUS BIOMEDICAL, INC.; REEL/FRAME:037820/0685 EFFECTIVE DATE : 20120705
US9649066 BB	20170426	LSGT	PAT1	Patented Case	
US9649066 BB	20350925	PEXP		Calculated Patent Term Expiry	
US9681842 BB	20170620	LSGT	+	granted / extensions (spc, cpc, pte)	
US9681842 BB	20150710	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS BIOMEDICAL, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ZDEBLICK, MARK; THOMPSON, ANDREW; PIKELNY, ALEKSANDR; AND OTHERS; SIGNING DATES FROM 20080225 TO 20080310; REEL/FRAME:036092/0613
US9681842 BB	20150710	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS DIGITAL HEALTH, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:HAFEZI, HOOMAN; REEL/FRAME:036057/0234 EFFECTIVE DATE : 20140718
US9681842 BB	20150710	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS DIGITAL HEALTH, INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:PROTEUS BIOMEDICAL, INC.; REEL/FRAME:036092/0616 EFFECTIVE DATE : 20120705
US9681842 BB	20170531	LSGT	PAT1	Patented Case	
US9681842 BB	20350310	PEXP		Calculated Patent Term Expiry (PTA 56 days)	
US9962107 BB	20180508	LSGT	+	granted / extensions (spc, cpc, pte)	
US9962107 BB	20140919	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS BIOMEDICAL, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:FRANK, JEREMY; BJELETICH, PETER; HAFEZI, HOOMAN; AND OTHERS; SIGNING DATES FROM 20111220 TO 20120104; REEL/FRAME:033776/0184
US9962107 BB	20140919	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS DIGITAL HEALTH, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:SNYDER, ERIC; REEL/FRAME:033776/0198 EFFECTIVE DATE : 20130708
US9962107 BB	20140919	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROTEUS DIGITAL HEALTH, INC., CALIFORNIA

					OLDPARTY : CHANGE OF NAME; ASSIGNOR:PROTEUS BIOMEDICAL, INC.; REEL/FRAME:033779/0325 EFFECTIVE DATE : 20120705
US9962107 BB	20180418	LSGT	PAT1	Patented Case	
US9962107 BB	20341011	PEXP		Calculated Patent Term Expiry (PTA 115 days)	
VN20417 A1	20190225	LSGT	+	granted / extensions (spc, cpc, pte)	
WO06116718 A2	20061102	LSPB	+	published / reissued	
WO06116718 A2	20060428	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 200680023838.6 COUNTRY OF REF DOCUMENT : CN
WO06116718 A2	20071024	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 186898 COUNTRY OF REF DOCUMENT : IL
WO06116718 A2	20071025	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2608144 COUNTRY OF REF DOCUMENT : CA
WO06116718 A2	20071026	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2008509195 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO06116718 A2	20071030	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE	REF COUNTRY CODE : DE
WO06116718 A2	20071101	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2006239221 COUNTRY OF REF DOCUMENT : AU
WO06116718 A2	20071112	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 8678/DELNP/2007 COUNTRY OF REF DOCUMENT : IN
WO06116718 A2	20071127	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2006751858 COUNTRY OF REF DOCUMENT : EP
WO06116718 A2	20071128	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE	REF COUNTRY CODE : RU
WO06116718 A2	20071129	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2006239221 COUNTRY OF REF DOCUMENT : AU DATE OF REF DOCUMENT : 20060428 KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO06116718 A3	20080623	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 11912475 COUNTRY OF REF DOCUMENT : US
WO07028035 A2	20070308	LSPB	+	published / reissued	
WO07028035 A3	20080229	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2008529315 COUNTRY OF REF DOCUMENT : JP
WO07028035 A3	20080229	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2006802827 COUNTRY OF REF DOCUMENT : EP
WO07028035 A3	20080304	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE	REF COUNTRY CODE : DE

WO07028035 A3	20080605	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 12063095 COUNTRY OF REF DOCUMENT : US
WO13009777 A2	20130117	LSPB	+	published / reissued	
WO13009777 A3	20140109	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2841833 COUNTRY OF REF DOCUMENT : CA
WO13009777 A3	20140110	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2014520261 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO13009777 A3	20140110	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2014/1986 COUNTRY OF REF DOCUMENT : KE
WO13009777 A3	20140110	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : MX/A/2014/000481 COUNTRY OF REF DOCUMENT : MX
WO13009777 A3	20140110	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2012810909 COUNTRY OF REF DOCUMENT : EP
WO13009777 A3	20140113	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE	REF COUNTRY CODE : DE
WO13009777 A3	20140130	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2012282772 COUNTRY OF REF DOCUMENT : AU DATE OF REF DOCUMENT : 20120710 KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO13009777 A3	20140207	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 20147003324 COUNTRY OF REF DOCUMENT : KR KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO13009777 A3	20140211	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2014104691 COUNTRY OF REF DOCUMENT : RU KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO13009777 A3	20170214	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 112014000620 COUNTRY OF REF DOCUMENT : BR KIND CODE OF REF DOCUMENT : A2 DESIGNATED STATE(S) : EFFECTIVE DATE : 20140110
WO13009779 A2	20130117	LSPB	+	published / reissued	
WO13009779 A3	20140110	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2014520262 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO13009779 A3	20140110	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2012810728 COUNTRY OF REF DOCUMENT : EP
WO13009779 A3	20140113	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE	REF COUNTRY CODE : DE
WO13009781 A2	20130117	LSPB	+	published /	

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WO13009781 A3	20140110	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2841904 COUNTRY OF REF DOCUMENT : CA
WO13009781 A3	20140110	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2014520263 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO13009781 A3	20140110	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2014/1985 COUNTRY OF REF DOCUMENT : KE
WO13009781 A3	20140110	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2012811425 COUNTRY OF REF DOCUMENT : EP
WO13009781 A3	20140110	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : MX/A/2014/000482 COUNTRY OF REF DOCUMENT : MX
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WO13009781 A3	20140210	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 20147003474 COUNTRY OF REF DOCUMENT : KR KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
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WO13009782 A3	20140110	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2014520264 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
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WO13009788 A3	20140110	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2841909 COUNTRY OF REF DOCUMENT : CA
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WO13009788 A3	20140110	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2014/1988 COUNTRY OF REF DOCUMENT : KE
WO13009788 A3	20140110	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : MX/A/2014/000485 COUNTRY OF REF DOCUMENT : MX
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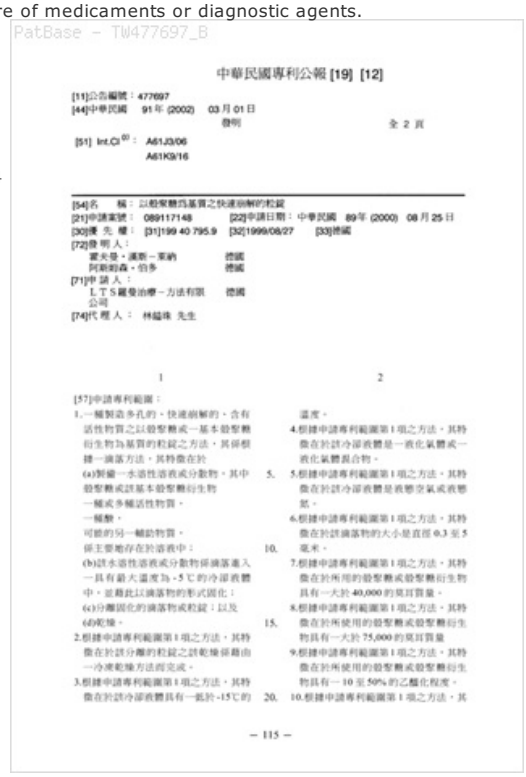
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WO13009788 A3	20140210	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 20147003476 COUNTRY OF REF DOCUMENT : KR KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
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ZA201400334 A	20160428	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA201400334 A	20340115	PEXP		Calculated Patent Term Expiry	
ZA201400337 A	20151125	LSGT	+	granted / extensions (spc, cpc, pte)	
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ZA201400338 A	20160727	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA201400338 A	20340115	PEXP		Calculated Patent Term Expiry	

3) Family number: 29000002 (US6770300B)

Title: RAPIDLY DECOMPOSING CHITOSAN-BASED PELLETS

Abstract: The invention relates to porous, rapidly disintegrating, active substance-containing pellets based on chitosan or a basic chitosan derivative, manufactured according to a dripping method wherein an aqueous solution or dispersion of chitosan or a basic chitosan derivative, one or more active substances, possibly further active substances and an acid is dripped into a cooling liquid having a temperature of maximally -5 degrees centigrade, thereby causing solidification of the solution or dispersion in the form of droplets, and wherein the solidified droplets or pellets are isolated and dried. The invention further relates to the use of these pellets in the manufacture of medicaments or diagnostic agents.

Classifications:
International (IPC 8-9): A61J3/00 A61J3/06 A61K31/722 A61K47/36 A61K9/16 A61K9/20 A61K9/48 B01J2/02 B01J2/06 C08B37/08 C08J3/12 C08J9/28 C08L5/08 (Advanced/Invention);
A61K9/20 C08B37/08 (Advanced/Non-invention);
A61J3/00 A61K31/716 A61K47/36 A61K9/16 A61K9/20 A61K9/48 B01J2/02 C08B37/00 C08J3/12 C08J9/00 C08L5/00 (Core/Invention)
International (IPC 1-7): A61J3/06 A61K31/722 A61K47/36 A61K9/14 A61K9/16 A61K9/20 A61K9/48 B01J2/02 C08B37/08 C08J9/28 C08L5/08
CPC: A61J3/00 A61K9/1652 A61K9/4866 B01J2/06
European: A61J3/00 A61K9/16H6F A61K9/48H6 B01J2/06
US: 424/451 424/452 424/456 424/489


PatBase – TW477697_B

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[11]公告編號：477697
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[51] Int.Cl.[6]： A61J3/06
A61K9/16

[54]名 稱：以粉末體爲基質之快速崩解的粒錠
[21]申請案號： 089117148 [22]申請日期： 中華民國 89年 (2000) 08 月 25 日
[30]優 先 權： [31]199 40 795.9 [32]1999/08/27 [33]德國
[72]發 明 人：
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阿斯姆森・伯多 德國
[71]申 請 人：
ＬＴＳ羅曼治療－方法有限公司 德國
[74]代 理 人： 林鎮珠 先生

1 2

[57]申請專利範圍：
1.一種製造多孔的，快速崩解的，含有活性物質之以粉型糖或一基本發型糖衍生物為基質的粒錠之方法，其係根據一噴落方法，其特徵在於
(a)製備一水溶性活性或分散物，其中發型糖或該基本發型糖衍生物一種或多種活性物質，
一種酸，
可能的另一種助物質，
係主要地存在於該液中；
(b)該水溶性活性或分散物係噴落進入一具有最大溫度為 -5℃的冷卻液體中，並藉此以噴落物的形式固化；
(c)分離固化的噴落物或粒錠；以及
(d)乾燥。
2.根據申請專利範圍第1項之方法，其特徵在於該分離的粒錠之該乾燥係藉由一冷凍乾燥方法而完成。
3.根據申請專利範圍第1項之方法，其特徵在於該冷卻液體具有一低於 -15℃的溫度。
4.根據申請專利範圍第1項之方法，其特徵在於該冷卻液體是一液化氣體或一液化氣體混合物。
5.根據申請專利範圍第1項之方法，其特徵在於該冷卻液體是液態氮氣或液態氬。
6.根據申請專利範圍第1項之方法，其特徵在於該噴落物的大小是直徑 0.3 至 5 毫米。
7.根據申請專利範圍第1項之方法，其特徵在於所用的發型糖或發型糖衍生物具有一大於 40,000 的莫耳質量。
8.根據申請專利範圍第1項之方法，其特徵在於所使用的發型糖或發型糖衍生物具有一大於 75,000 的莫耳質量
9.根據申請專利範圍第1項之方法，其特徵在於所使用的發型糖或發型糖衍生物具有一 10 至 50% 的乙醯化程度。
10.根據申請專利範圍第1項之方法，其

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Family:

Publication number	Publication date	Application number	Application date
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Priority:

DE19991040795 19990827 DE19991094079 19990827 WO2000EP07897 20000814

Probable Assignee: LTS LOHMANN THERAPIE SYSTEME AG

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Inventor(s): KHOFMAN KHANS-RAJNER

Agent(s): IP SOLVED ANZ PTY LTD; HODGKINSON MCINNES PATENTS; BLAKE CASSELS AND GRAYDON LLP; LUZZATTO AND LUZZATTO; GE EHRLICH 1995 LTD

Designated states: AT AU BE BR CA CH CN CY CZ DE DK ES FI FR GB GR HU IE IL IN IT JP KR LI LU MC MX NL NZ PL PT RU SE TR US ZA

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
AR025393 AA	20021127	LSPB	+	published / reissued	
AR025393 AA	20130927	LSWD	-FB	SUSPENSION OF GRANTING PROCEDURE	
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AT331755 E	20060715	LSGT	+	granted / extensions (spc, cpc, pte)	
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AU768328 B2	20040408	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
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EP1208140 A1	20020529	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20020130
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EP1208140 B1	20111130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20110819 YEAR OF FEE PAYMENT : 12
EP1208140 B1	20111130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20110810 YEAR OF FEE PAYMENT : 12
EP1208140 B1	20111130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20110824 YEAR OF FEE PAYMENT : 12
EP1208140 B1	20111130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20110822 YEAR OF FEE PAYMENT : 12
EP1208140 B1	20111230	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20110825 YEAR OF FEE PAYMENT : 12
EP1208140 B1	20111230	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20110825 YEAR OF FEE PAYMENT : 12
EP1208140 B1	20111230	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20110811 YEAR OF FEE PAYMENT : 12
EP1208140 B1	20130222	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 : 20130214
EP1208140 B1	20130228	LSLE	-BERE	BE: LAPSED	PARTYTYPE : OWNER REF COUNTRY CODE : EP OWNER : LOHMANN THERAPIE-SYSTEME A.G. *LTS EFFECTIVE DATE : 20120831

EP1208140 B1	20130308	LSWD	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HK REF LEGAL EVENT CODE : WD REF DOCUMENT NUMBER : 1047122 COUNTRY OF REF DOCUMENT : HK
EP1208140 B1	20130313	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : V1 EFFECTIVE DATE : 20130301
EP1208140 B1	20130328	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP1208140 B1	20130402	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DK REF LEGAL EVENT CODE : EBP
EP1208140 B1	20130402	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SE REF LEGAL EVENT CODE : EUG
EP1208140 B1	20130415	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MM01 REF DOCUMENT NUMBER : 331755 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20120814
EP1208140 B1	20130424	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20120814
EP1208140 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 NON-PAYMENT OF DUE FEES LAPSED DATE : 20120814
EP1208140 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 : 20120815
EP1208140 B1	20130430	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 : 20120831
EP1208140 B1	20130430	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 : 20130301
EP1208140 B1	20130430	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 : 20120831
EP1208140 B1	20130501	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : ML REF DOCUMENT NUMBER : 20060403126 COUNTRY OF REF DOCUMENT : GR EFFECTIVE DATE : 20130304
EP1208140 B1	20130517	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20130430
EP1208140 B1	20130522	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP1208140 B1	20130531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES

				NATIONAL OFFICE TO EPO]	LAPSED DATE : 20120831
EP1208140 B1	20130531	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 : 20120814
EP1208140 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 NON-PAYMENT OF DUE FEES LAPSED DATE : 20130304
EP1208140 B1	20130531	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 : 20130214
EP1208140 B1	20130628	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 : 20120814
EP1208140 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 NON-PAYMENT OF DUE FEES LAPSED DATE : 20120831
EP1208140 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 : 20130301
EP1208140 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 : 20120814
EP1208140 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 : 20120814
EP1208140 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 : 20120831
EP1208140 B1	20130926	LSDW	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R119 REF DOCUMENT NUMBER : 50013092 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20130301
EP1208140 B1	20131018	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20131018
EP1208140 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 NON-PAYMENT OF DUE FEES LAPSED DATE : 20120815
EP1208140 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 : 20120814
EP1208140 B1	20200814	PEXP		Calculated Patent Term Expiry	

ES2267562 T3	20070316	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2267562 T3	20200814	PEXP		Calculated Patent Term Expiry	
HU0203079 AB	20030128	LSPB	+	published / reissued	
HU0203079 AC	20121228	LSRE	-FA9A	LAPSE OF PROVISIONAL PATENT PROTECTION DUE TO RELINQUISHMENT OR PROTECTION CONSIDERED RELINQUISHED	
IL148221 A1	20051218	LSPB	+	published / reissued	
IL148221 A1	20060705	LSGT	+FF	PATENT GRANTED	
IL148221 A1	20060801	LSFE	+KB	PATENT RENEWED	
IL148221 A1	20061004	LSFE	+KB	PATENT RENEWED	
IL148221 A1	20101130	LSFE	+KB	PATENT RENEWED	
IL148221 A1	20150331	LSLE	-MM9K	PATENT NOT IN FORCE DUE TO NON-PAYMENT OF RENEWAL FEES	
IN231967 B	20090327	LSGT	+	granted / extensions (spc, cpc, pte)	
IN231967 B	20220215	PEXP		Calculated Patent Term Expiry	
JP2003508565 T2	20030304	LSPB	+	published / reissued	
JP2003508565 T2	20061208	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20061207
JP2003508565 T2	20091222	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20091222
JP2003508565 T2	20100422	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20100421
JP2003508565 T2	20110329	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20110329
JP2003508565 T2	20110622	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20110621
JP2003508565 T2	20110712	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20110623
JP2003508565 T2	20120130	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2003508565 T2	20120207	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20120207
JP2003508565 T2	20120209	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01
JP2003508565 T2	20120308	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20120302
JP2003508565 T2	20120309	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP2003508565 T2	20120312	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP4944327 B2	20120530	LSGT	+	granted / extensions (spc, cpc, pte)	
JP4944327 B2	20120209	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP4944327 B2	20120306	LSFE	R100	特許料納付書 (Patent fee payment form)	

JP4944327 B2	20120309	LSGT	+R150	特許証 (Patent certificate)	
JP4944327 B2	20150309	LSLE	-LAPS	CANCELLATION BECAUSE OF NO PAYMENT OF ANNUAL FEES	
JP4944327 B2	20200814	PEXP		Calculated Patent Term Expiry	
KR100610176 B1	20060809	LSGT	+	granted / extensions (spc, cpc, pte)	
KR100610176 B1	20040920	LSES	A201	REQUEST FOR EXAMINATION	
KR100610176 B1	20060227	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR100610176 B1	20060609	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
KR100610176 B1	20060801	LSGT	+GRNT	WRITTEN DECISION TO GRANT	
KR100610176 B1	20110726	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20110727 YEAR OF FEE PAYMENT : 6
KR100610176 B1	20120802	LSLE	-LAPS	LAPSE DUE TO UNPAID ANNUAL FEE	
KR100610176 B1	20220226	PEXP		Calculated Patent Term Expiry	
KR20020033774 A	20020507	LSPB	+	published / reissued	
MXPA02002047 A1	20020820	LSPB	+	published / reissued	
NZ517542 A	20030630	LSPB	+	published / reissued	
NZ517542 A	20031031	LSGT	+PSEA	PATENT SEALED	
NZ517542 A	20040827	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	
NZ517542 A	20070831	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	
NZ517542 A	20100827	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	
NZ517542 A	20140228	LSLE	-LAPS	PATENT LAPSED	
PL203820 B1	20091130	LSGT	+	granted / extensions (spc, cpc, pte)	
PL203820 B1	20110429	LSRE	RECP	RECTIFICATIONS OF PATENT SPECIFICATION	
PL203820 B1	20130930	LSLE	-LAPS	DECISIONS ON THE LAPSE OF THE PROTECTION RIGHTS	EFFECTIVE DATE : 20120814
PL353890 A1	20031215	LSPB	+	published / reissued	
PT1208140 T	20061130	LSGT	+	granted / extensions (spc, cpc, pte)	
PT1208140 T	20200814	PEXP		Calculated Patent Term Expiry	
RU2002103514 A	20031010	LSPB	+	published / reissued	
RU2248790 C2	20050327	LSGT	+	granted / extensions (spc, cpc, pte)	
RU2248790 C2	20130610	LSLE	-MM4A	THE PATENT IS INVALID DUE TO NON-PAYMENT OF FEES	EFFECTIVE DATE : 20120815
RU2248790 C2	20200814	PEXP		Calculated Patent Term Expiry	
TR200200519 T2	20020621	LSPB	+	published / reissued	
TR200200519 T2	20020621	LSPB	+	published / reissued	
TW477697 B	20020301	LSGT	+	granted / extensions (spc, cpc, pte)	
TW477697 B	20020708	LSGT	+GD4A	ISSUE OF PATENT CERTIFICATE FOR GRANTED INVENTION PATENT	
TW477697 B	20131201	LSLE	-MM4A	ANNULMENT OR LAPSE OF PATENT DUE TO NON-PAYMENT OF FEES	
TW477697 B	20200825	PEXP		Calculated Patent Term Expiry	

US6770300 BA	20040803	LSGT	+	granted / extensions (spc, cpc, pte)	
US6770300 BA	20020327	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : LTS LOHMANN THERAPIE-SYSTEME AG, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:HOFFMANN, HANS-RAINER; ASMUSSEN, BODO; REEL/FRAME:012730/0240 EFFECTIVE DATE : 20020219
US6770300 BA	20040715	LSGT	PAT1	Patented Case	
US6770300 BA	20080131	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6770300 BA	20120201	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US6770300 BA	20160803	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US6770300 BA	20160829	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US6770300 BA	20160829	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US6770300 BA	20160920	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20160803
US6770300 BA	20220619	PEXP		Calculated Patent Term Expiry (PTA 84 days)	
WO0116218 A1	20010308	LSPB	+	published / reissued	
WO0116218 A1	20020130	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2000960450 COUNTRY OF REF DOCUMENT : EP
WO0116218 A1	20020211	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 200201136 COUNTRY OF REF DOCUMENT : ZA
WO0116218 A1	20020211	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2002/01136 COUNTRY OF REF DOCUMENT : ZA
WO0116218 A1	20020215	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : IN/PCT/2002/00188/DE COUNTRY OF REF DOCUMENT : IN
WO0116218 A1	20020218	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 148221 COUNTRY OF REF DOCUMENT : IL
WO0116218 A1	20020221	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : PV2002-654 COUNTRY OF REF DOCUMENT : CZ
WO0116218 A1	20020222	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 008119023 COUNTRY OF REF DOCUMENT : CN
WO0116218 A1	20020225	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2382902 COUNTRY OF REF DOCUMENT : CA
WO0116218 A1	20020226	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1020027002508 COUNTRY OF REF DOCUMENT : KR
WO0116218 A1	20020226	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : PA/A/2002/002047 COUNTRY OF REF DOCUMENT : MX
WO0116218 A1	20020227	LSNP	+WWE	WIPO INFORMATION:	REF DOCUMENT NUMBER :

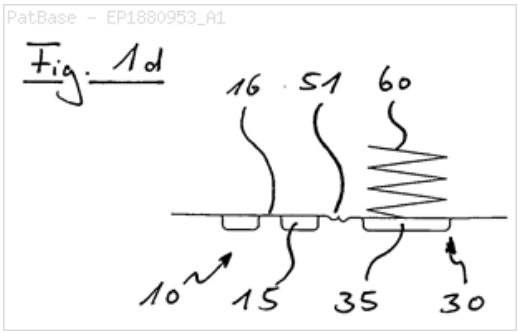
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WO0116218 A1	20020227	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2002/00519 COUNTRY OF REF DOCUMENT : TR
WO0116218 A1	20020304	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 517542 COUNTRY OF REF DOCUMENT : NZ
WO0116218 A1	20020327	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2002 2002103514 COUNTRY OF REF DOCUMENT : RU KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO0116218 A1	20020327	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 10069399 COUNTRY OF REF DOCUMENT : US
WO0116218 A1	20020507	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1020027002508 COUNTRY OF REF DOCUMENT : KR
WO0116218 A1	20020529	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2000960450 COUNTRY OF REF DOCUMENT : EP
WO0116218 A1	20020717	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : PV2002-654 COUNTRY OF REF DOCUMENT : CZ
WO0116218 A1	20030627	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 517542 COUNTRY OF REF DOCUMENT : NZ
WO0116218 A1	20031006	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 517542 COUNTRY OF REF DOCUMENT : NZ
WO0116218 A1	20040325	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 72755/00 COUNTRY OF REF DOCUMENT : AU
WO0116218 A1	20060609	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1020027002508 COUNTRY OF REF DOCUMENT : KR
WO0116218 A1	20060628	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2000960450 COUNTRY OF REF DOCUMENT : EP
ZA200201136 A	20020828	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA200201136 A	20220210	PEXP		Calculated Patent Term Expiry	

4) Family number: 41117003 (EP1880953A1)

Title: TABLET BLISTER PACK

Abstract: The blister packing (1) has a base part (10) connected over an articulation with a cover part (30). The cover part has a trough-shaped recess. The cover part covers an opening of a cavity (15) in a closed condition. The trough-shaped recess together with the base part forms a receiving space for product information. Sealing mediums (20,26) are provided at the base part and cover part for detachable holding of the blister packing in a closed condition. An independent claim is also included for a method for manufacturing of a blister packing.

Classifications:
International (IPC 8-9): A61J1/03 B65D75/34 (Advanced/Invention); A61J1/00 B65D75/28 (Core/Invention)
CPC: B65D43/162 B65D75/54 B65D2203/00 B65D2203/10
European: B65D43/16B B65D75/54 L65D203/00 L65D203/10



Family:

Publication number	Publication date	Application number	Application date
CH700029 B1	20100615	CH20060001152	20060718
EP1880953 A1	20080123	EP20070405207	20070713

Priority:

CH20060001152 20060718

Probable Assignee: IVERS LEE AG

Assignee(s): (std): IVERS LEE AG

Inventor(s): (std): SCHNEIDER MARTIN

Agent(s): KOEPF ALFRED

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 MK MT NL PL PT RO SE SI SK TR YU

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
CH700029 B1	20100615	LSGT	+	granted / extensions (spc, cpc, pte)	
CH700029 B1	20110630	LSAS	PFA	NAME/FIRM CHANGED	PARTYTYPE : OWNER OWNER : IVERS-LEE AG OLDPARTY : IVERS-LEE AG#KIRCHBERGSTRASSE 160#3400 BURGDORF (CH) -TRANSFER TO- IVERS-LEE AG#KIRCHBERGSTRASSE 160#3400 BURGDORF (CH)
CH700029 B1	20140228	LSLE	-PL	PATENT CEASED	
CH700029 B1	20260718	PEXP		Calculated Patent Term Expiry	
EP1880953 A1	20080123	LSPB	+	published / reissued	
EP1880953 A1	20080820	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20080708
EP1880953 A1	20081001	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 : IS COUNTRY OF REF DOCUMENT : IT COUNTRY OF REF DOCUMENT : LI

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EP1880953 A1	20081001	LSFE	+AXX	EXTENSION FEES PAID	COUNTRY OF REF DOCUMENT : AL PAYMENT DATE : 20080708
EP1880953 A1	20081001	LSFE	+AXX	EXTENSION FEES PAID	COUNTRY OF REF DOCUMENT : BA PAYMENT DATE : 20080708
EP1880953 A1	20081001	LSFE	+AXX	EXTENSION FEES PAID	COUNTRY OF REF DOCUMENT : HR PAYMENT DATE : 20080708
EP1880953 A1	20081001	LSFE	+AXX	EXTENSION FEES PAID	COUNTRY OF REF DOCUMENT : MK PAYMENT DATE : 20080708
EP1880953 A1	20081001	LSFE	+AXX	EXTENSION FEES PAID	COUNTRY OF REF DOCUMENT : RS PAYMENT DATE : 20080708
EP1880953 A1	20090107	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20081210
EP1880953 A1	20110803	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20110131

5) Family number: 31304003 (US2007148229A)

Title: TABLET WITH COLOURED CORE

Abstract: Press-coated tablets comprising a care and a coating. The core contains an active substance and a colouring agent such that when the tablet is exposed to penetrating radiation the core is contrasted with the coating and is visible through the coating. The invention also relates to the use' of a colouring agent or excipient in such tablets to determine whether the core is centrally located within the core, to check the integrity of the core, and to ensure that there is no contaminating core material on or near the surface the coating.

Classifications:
International (IPC 8-9): A61J3/06 A61K31/573 A61K47/02 A61K9/20 A61K9/28 (Advanced/Invention); A61J3/06 A61K31/57 A61K47/02 A61K9/20 A61K9/28 (Core/Invention)
International (IPC 1-7): A61K9/20 A61K9/28
CPC: A61K9/2009 A61K9/2893
European: A61K9/20H2 A61K9/28P
US: 424/464 424/464P 514/171 514/171S

Family:

Publication number	Publication date	Application number	Application date
AT445393 E	20091015	AT20040729172T	20040423
CY1109726 T1	20140910	CY20101100024T	20100108
DE602004023597 D1	20091126	DE200460023597T	20040423
DK1615626 T3	20100208	DK20040729172T	20040423
EP1615626 A1	20060118	EP20040729172	20040423
EP1615626 B1	20091014	EP20040729172	20040423
ES2335008 T3	20100318	ES20040729172T	20040423
JP2006524230 T2	20061026	JP20060506624T	20040423
JP4908200 B2	20120404	JP20060506624T	20040423
US2007148229 AA	20070628	US20040554258	20040423
WO04093850 A1	20041104	WO2004IB01702	20040423

Priority:
GB20030009343 20030424 EP20040729172 20040423 WO2004IB01702 20040423

Probable Assignee: JAGOTEC AG

Assignee(s): (std): DRAGAN CHRISTOPHE ; GRENIER PASCAL ; JAGOTEC AG ; VERGNAULT GUY

Inventor(s): (std): VERGNAULT GUY ; GRENIER PASCAL ; DRAGAN CHRISTOPHE

Agent(s): BASSIL NICHOLAS CHARLES; SHIMIZU HATSUSHI; MINTZ LEVIN COHN FERRIS GLOVSKY AND POPEO 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 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
AT445393 E	20091015	LSGT	+	granted / extensions (spc, cpc, pte)	
AT445393 E	20100415	LSLE	-RER	CEASED AS TO PARAGRAPH 5 LIT. 3 LAW INTRODUCING PATENT TREATIES	
AT445393 E	20240423	PEXP		Calculated Patent Term Expiry	
CY1109726 T1	20140910	LSGT	+	granted / extensions (spc, cpc, pte)	
DE602004023597 D1	20101104	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE602004023597 D1	20181101	LSDW	-R119	APPLICATION DEEMED WITHDRAWN, OR IP RIGHT LAPSED, DUE TO NON-PAYMENT OF RENEWAL FEE	
DK1615626 T3	20100208	LSGT	+	granted / extensions (spc, cpc, pte)	
DK1615626 T3	20240423	PEXP		Calculated Patent Term Expiry	
EP1615626 A1	20060118	LSPB	+	published / reissued	
EP1615626 A1	20060118	LSES	+17P	REQUEST FOR	EFFECTIVE DATE : 20051114

				EXAMINATION FILED	
EP1615626 A1	20080423	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20080328
EP1615626 A1	20160630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20160419 YEAR OF FEE PAYMENT : 13
EP1615626 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20160421 YEAR OF FEE PAYMENT : 13
EP1615626 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20160415 YEAR OF FEE PAYMENT : 13
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EP1615626 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20160412 YEAR OF FEE PAYMENT : 13
EP1615626 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20160425 YEAR OF FEE PAYMENT : 13
EP1615626 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20160425 YEAR OF FEE PAYMENT : 13
EP1615626 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY PAYMENT DATE : 20160323 YEAR OF FEE PAYMENT : 13
EP1615626 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20160426 YEAR OF FEE PAYMENT : 13
EP1615626 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20160425 YEAR OF FEE PAYMENT : 13
EP1615626 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20160427 YEAR OF FEE PAYMENT : 13
EP1615626 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20160418 YEAR OF FEE PAYMENT : 13
EP1615626 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20160421 YEAR OF FEE PAYMENT : 13
EP1615626 A1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20170421 YEAR OF FEE PAYMENT : 14
EP1615626 B1	20091014	LSGT	+	granted / extensions (spc, cpc, pte)	

EP1615626 B1	20091014	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP1615626 B1	20091015	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1615626 B1	20091111	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP1615626 B1	20100224	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : EP REF DOCUMENT NUMBER : 20100400029 COUNTRY OF REF DOCUMENT : GR
EP1615626 B1	20100318	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2335008 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP1615626 B1	20100430	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 : 20091014
EP1615626 B1	20100430	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 : 20100215
EP1615626 B1	20100531	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 : 20091014
EP1615626 B1	20100531	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 : 20091014
EP1615626 B1	20100630	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 : 20091014
EP1615626 B1	20100730	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 : 20100114
EP1615626 B1	20100730	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 : 20091014

EP1615626 B1	20100730	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 : 20091014
EP1615626 B1	20100831	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 : 20091014
EP1615626 B1	20100831	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 : 20091014
EP1615626 B1	20100922	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20100715
EP1615626 B1	20101130	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 : 20100430
EP1615626 B1	20101130	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : CH OWNER : JAGOTEC AG REF LEGAL EVENT CODE : PFA OLDPARTY : JAGOTEC AG#EPTINGERSTRASSE 51#4132 MUTTENZ (CH) -TRANSFER TO- JAGOTEC AG#EPTINGERSTRASSE 61#4132 MUTTENZ (CH)
EP1615626 B1	20120928	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 : 20100415
EP1615626 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 : 20100423
EP1615626 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 : 20091014
EP1615626 B1	20160426	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 13
EP1615626 B1	20170412	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 14
EP1615626 B1	20170630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20170418 YEAR OF FEE PAYMENT : 14
EP1615626 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20170424 YEAR OF FEE PAYMENT : 14

				FROM NATIONAL OFFICE TO EPO]	
EP1615626 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20170420 YEAR OF FEE PAYMENT : 14
EP1615626 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 : 14
EP1615626 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY PAYMENT DATE : 20170324 YEAR OF FEE PAYMENT : 14
EP1615626 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20170419 YEAR OF FEE PAYMENT : 14
EP1615626 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170412 YEAR OF FEE PAYMENT : 14
EP1615626 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20170424 YEAR OF FEE PAYMENT : 14
EP1615626 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20170419 YEAR OF FEE PAYMENT : 14
EP1615626 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20170502 YEAR OF FEE PAYMENT : 14
EP1615626 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20170418 YEAR OF FEE PAYMENT : 14
EP1615626 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20170419 YEAR OF FEE PAYMENT : 14
EP1615626 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20180206 YEAR OF FEE PAYMENT : 15
EP1615626 B1	20181101	LSDW	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R119 REF DOCUMENT NUMBER : 602004023597 COUNTRY OF REF DOCUMENT : DE
EP1615626 B1	20181126	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DK REF LEGAL EVENT CODE : EBP EFFECTIVE DATE : 20180430
EP1615626 B1	20181130	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP1615626 B1	20181226	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20180423
EP1615626 B1	20190123	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP1615626 B1	20190131	LSLE	-PG25	LAPSED IN A	COUNTRY OF REF DOCUMENT :

				CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	NL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180501
EP1615626 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
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EP1615626 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 : 20180430
EP1615626 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 : 20180430
EP1615626 B1	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 : 20180423
EP1615626 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 : 20180430
EP1615626 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 : 20180423
EP1615626 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 : 20180423
EP1615626 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
EP1615626 B1	20190531	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 : 20180430
EP1615626 B1	20190731	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 : 20180423
EP1615626 B1	20190912	LSLE	REG	REFERENCE TO A	REF COUNTRY CODE : ES

				NATIONAL CODE	REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20190912
EP1615626 B1	20191031	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 : 20180424
EP1615626 B1	20191203	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SE REF LEGAL EVENT CODE : EUG
EP1615626 B1	20200131	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 : 20190424
EP1615626 B1	20240423	PEXP		Calculated Patent Term Expiry	
ES2335008 T3	20100318	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2335008 T3	20240423	PEXP		Calculated Patent Term Expiry	
JP2006524230 T2	20061026	LSPB	+	published / reissued	
JP2006524230 T2	20070418	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20070417
JP2006524230 T2	20100528	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20100527
JP2006524230 T2	20101126	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20101125
JP2006524230 T2	20101221	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20101220
JP2006524230 T2	20110601	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20110531
JP2006524230 T2	20110712	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20110711
JP2006524230 T2	20110914	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20110913
JP2006524230 T2	20111118	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2006524230 T2	20111125	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20111124
JP2006524230 T2	20111201	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01
JP2006524230 T2	20120119	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20120112
JP2006524230 T2	20120120	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP2006524230 T2	20120120	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION	TEXT : JAPANESE INTERMEDIATE CODE: R150

				OF UTILITY MODEL	
JP2006524230 T2	20120120	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 4908200 COUNTRY OF REF DOCUMENT : JP
JP4908200 B2	20120404	LSGT	+	granted / extensions (spc, cpc, pte)	
JP4908200 B2	20111201	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP4908200 B2	20120117	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP4908200 B2	20120120	LSGT	+R150	特許証 (Patent certificate)	
JP4908200 B2	20150108	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4908200 B2	20150113	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
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JP4908200 B2	20170112	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4908200 B2	20170117	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4908200 B2	20180118	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4908200 B2	20180130	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
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JP4908200 B2	20240423	PEXP		Calculated Patent Term Expiry	
US2007148229 AA	20070628	LSPB	+	published / reissued	
US2007148229 AA	20070125	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : JAGOTEC AG, SWITZERLAND OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:VERGNAULT, GUY; GRENIER, PASCAL; DRAGAN, CHRISTOPHE; REEL/FRAME:018802/0203; SIGNING DATES FROM 20061003 TO 20070116
US2007148229 AA	20150914	LSES	NFA1	Non Final Action Mailed	
US2007148229 AA	20160818	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
WO04093850 A1	20041104	LSPB	+	published / reissued	
WO04093850 A1	20051024	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2006506624 COUNTRY OF REF DOCUMENT : JP
WO04093850 A1	20051111	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2004729172 COUNTRY OF REF DOCUMENT : EP
WO04093850 A1	20060118	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN	REF DOCUMENT NUMBER : 2004729172 COUNTRY OF REF DOCUMENT :

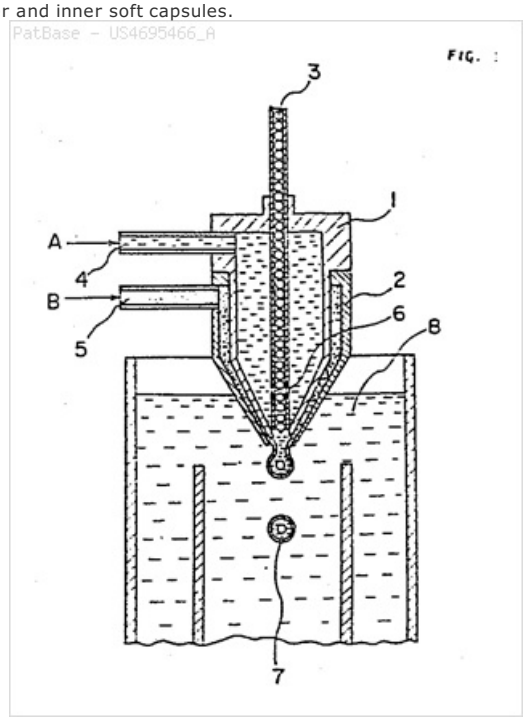
				NATIONAL OFFICE	EP
WO04093850 A1	20070118	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 10554258 COUNTRY OF REF DOCUMENT : US
WO04093850 A1	20070118	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2007148229 COUNTRY OF REF DOCUMENT : US
WO04093850 A1	20070628	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 10554258 COUNTRY OF REF DOCUMENT : US

6) Family number: 29342004 (US4695466A)

Title: MULTIPLE SOFT CAPSULES AND PRODUCTION THEREOF

Abstract: The present invention relates to a multiple soft capsule in which a soft capsule is contained in another soft capsule and the production thereof. The multiple soft capsule is useful for various industrial fields such as medicine, foods, table luxuries and the like. Especially, the multiple capsule is useful in medical field, for instance, in combining two or more components which cannot be enclosed together in a single capsule or in the dissolution control in vivo of the medicines by properly selecting the kind of the film-forming substance for the outer and inner soft capsules.

Classifications:
International (IPC 8-9): A23L1/00 A23L1/48 A23L35/00 A23P1/00 A23P1/04 A61J3/07 A61K9/48 A61K9/50 B01J13/02 B01J13/04 (Advanced/Invention);
A23L1/00 A23L1/48 A23P1/00 A23P1/04 A61J3/07 A61K9/48 A61K9/50 B01J13/02 B01J13/04 (Core/Invention)
International (IPC 1-7): A23L1/34 A23P1/00 A61J3/07 A61J3/7 A61K9/48 A61K9/54 B01J13/02 B65D81/32
CPC: A23P10/30 A61J3/07 A61K9/4808 A61K9/5073 B01J13/04
European: A23L1/00P4 A23P1/04 A61J3/07 A61K9/48A A61K9/50K B01J13/04
US: 424/451 424/456 424/458 424/460 424/461 426/138 426/140 426/89



Family:

Publication number	Publication date	Application number	Application date
AT43963 E	19890615	AT19840100398T	19840116
CA1241874 A1	19880913	CA19840445354	19840116
DE3478662 D1	19890720	DE19843478662	19840116
DE3478662 D1	19890720	DE19843478662T	19840116
EP0116311 A1	19840822	EP19840100398	19840116
EP0116311 B1	19890614	EP19840100398	19840116
ES528899 A0	19850101	ES19840528899	19840116
ES528899 A2	19850129	ES19840528899	19840116
ES8502395 A1	19850101	ES19840528899	19840116
JP1672487 C3	19920612	JP19830006287	19830117
JP3033338 B4	19910516	JP19830006287	19830117
JP59131355 A2	19840728	JP19830006287	19830117
KR19840007353 A	19841207	KR19840000154	19840116
KR840007353 A	19841207	KR19840000154	19840116
US4695466 A	19870922	US19860931940	19861118

Priority:
JP19830006287 19830117 US19840570289 19840113 EP19840100398 19840116

Probable Assignee: MORISHITA JINTAN CO LTD

Assignee(s): (std): FUJISAWA PHARMACEUTICAL CO ; MORISHITA JINTAN CO

Assignee(s): MORISHITA JINTAN CO LTD ; MORISHITA JINTAN KK ; FUJISAWA PHARMACEUTICAL CO LTD ; FUJISAWA YAKUHIN KOGYO KK

Inventor(s): (std): HATA TAKEHISA ; MORI MITIO ; MORI MITSUO ; MORISHITA TAKASHI ; TAGAMI SHIYOUHACHI ; TAGAMI SHOHACHI ; TANOUE SHOHACHI

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
AT43963 E	19890615	LSGT	+	granted / extensions (spc, cpc, pte)	
AT43963 E	19891215	LSLE	-RER	CEASED AS TO PARAGRAPH 5 LIT. 3 LAW INTRODUCING PATENT TREATIES	
AT43963 E	20040116	PEXP		Calculated Patent Term Expiry	

DE3478662 D1	19900719	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE3478662 D1	19900719	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE3478662 D1	19900719	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE3478662 D1	19900719	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
EP0116311 A1	19840822	LSPB	+	published / reissued	
EP0116311 A1	19850327	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19850102
EP0116311 A1	19860423	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 19860310
EP0116311 A1	19890531	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : MORISHITA JINTAN CO., LTD.
EP0116311 A1	19890531	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : FUJISAWA PHARMACEUTICAL CO., LTD.
EP0116311 B1	19890614	LSGT	+	granted / extensions (spc, cpc, pte)	
EP0116311 B1	19890614	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT LAPSED DATE : 19890614
EP0116311 B1	19890614	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE LAPSED DATE : 19890614
EP0116311 B1	19890614	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH LAPSED DATE : 19890614
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EP0116311 B1	19890614	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL LAPSED DATE : 19890614
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EP0116311 B1	19890929	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP0116311 B1	19891116	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
EP0116311 B1	19900131	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 : 19900131
EP0116311 B1	19900606	LSGT	+26N	NO OPPOSITION FILED	
EP0116311 B1	19910131	LSFE	ITTA	IT: LAST PAID ANNUAL FEE	REF COUNTRY CODE : EP
EP0116311 B1	20021218	LSFE	+PGFP	ANNUAL FEE PAID TO	COUNTRY OF REF

				NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	DOCUMENT : FR PAYMENT DATE : 20021218 YEAR OF FEE PAYMENT : 20
EP0116311 B1	20030106	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20030106 YEAR OF FEE PAYMENT : 20
EP0116311 B1	20030226	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20030226 YEAR OF FEE PAYMENT : 20
EP0116311 B1	20040115	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 : 20040115
EP0116311 B1	20040204	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : PE20
EP0116311 B1	20040116	PEXP		Calculated Patent Term Expiry	
ES8502395 A1	19850101	LSGT	+	granted / extensions (spc, cpc, pte)	
ES8502395 A1	20050101	PEXP		Calculated Patent Term Expiry	
JP1672487 C3	19920612	LSGT	+	granted / extensions (spc, cpc, pte)	
JP1672487 C3	20030117	PEXP		Calculated Patent Term Expiry	
JP3033338 B4	19910516	LSPB	+	published / reissued	
JP59131355 A2	19840728	LSPB	+	published / reissued	
KR19840007353 A	19841207	LSPB	+	published / reissued	
KR840007353 A	19841207	LSPB	+	published / reissued	
KR840007353 A	19890116	LSES	A201	REQUEST FOR EXAMINATION	
KR840007353 A	19910228	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR840007353 A	19910509	LSRV	-E601	DECISION TO REFUSE APPLICATION	
US4695466 A	19870922	LSGT	+	granted / extensions (spc, cpc, pte)	
US4695466 A	19870722	LSGT	PAT1	Patented Case	
US4695466 A	19870722	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US4695466 A	19881117	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MORISHITA JINTAN CO., LTD., 1-30, TAMATSUKURI 1-CH OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNOR:FUJISAWA PHARMACEUTICAL CO., LTD.; REEL/FRAME:004999/0055 EFFECTIVE DATE : 19880825
US4695466 A	19881117	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MORISHITA JINTAN CO., LTD., JAPAN OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:FUJISAWA PHARMACEUTICAL CO., LTD.; REEL/FRAME:004999/0055 EFFECTIVE DATE : 19880825
US4695466 A	19910205	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US4695466 A	19950202	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US4695466 A	19990203	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US4695466 A	20061118	PEXP		Calculated Patent Term	

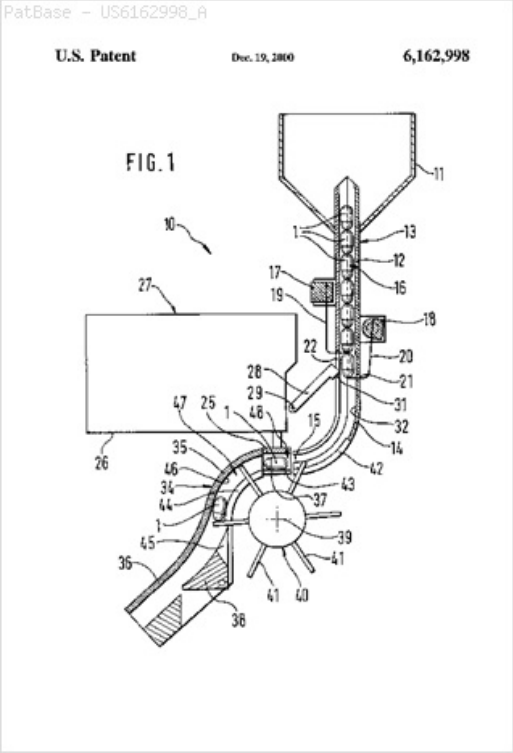
Expiry

7) Family number: 30337004 (US6162998A)

Title: Apparatus for weighing hard **gelatine** capsules or the like

Abstract: An apparatus for weighing hard **gelatine** capsules or the like has a feed conduit and a discharge conduit, as well as a weighing receptacle that is disposed between them with virtually no cap. By means of a pawl, whichever of the lowermost hard **gelatine** capsule or the like is released in the feed conduit and pushed over onto the weighing receptacle by a lever can be pivoted into the feed conduit. A vane wheel is also present, whose vanes engages the feed conduit, the weighing receptacle and the discharge conduit and thereby form virtually closed-off transport chambers, each for one hard **gelatine** capsule or the like.

Classifications:
International (IPC 8-9): A61J3/07 G01G17/00 (Advanced/Invention); A61J3/07 G01G17/00 (Core/Invention)
International (IPC 1-7): A61J3/07 B07C5/00 B07C5/16 G01G13/00 G01G17/00 G01G19/00
CPC: G01G17/00
European: G01G17/00
US: 177/145 209/592 209/596 221/222 221/277



Family:

Publication number	Publication date	Application number	Application date
DE19819395 C1	19991028	DE19981019395	19980430
IT1312191 B1	20020409	IT1999MI00820	19990420
ITMI990820 A1	20001020	IT1999MI00820	19990420
JP2000028422 A2	20000128	JP19990124816	19990430
JP4210390 B2	20090114	JP19990124816	19990430
US6162998 A	20001219	US19990283748	19990402

Priority:
DE19981019395 19980430

Probable Assignee: ROBERT BOSCH GMBH
Assignee(s): (std): BOSCH GMBH ROBERT ; ROBERT BOSCH GMBH
Inventor(s): (std): RUNFT WERNER ; WURST REINER

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
DE19819395 C1	19991028	LSGT	+	granted / extensions (spc, cpc, pte)	
DE19819395 C1	19991028	LSPB	+8100	PUBLICATION OF THE EXAMINED APPLICATION WITHOUT PUBLICATION OF UNEXAMINED APPLICATION	
DE19819395 C1	19991028	LSGT	+D1	GRANT (NO UNEXAMINED APPLICATION PUBLISHED) PATENT LAW 81	
DE19819395 C1	20000427	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE19819395 C1	20180430	LSLE	-R071	EXPIRY OF RIGHT	
DE19819395 C1	20180430	PEXP		Calculated Patent Term	

				Expiry	
IT1312191 B1	20020409	LSGT	+	granted / extensions (spc, cpc, pte)	
IT1312191 B1	20190420	PEXP		Calculated Patent Term Expiry	
ITMI990820 A1	20001020	LSPB	+	published / reissued	
JP2000028422 A2	20000128	LSPB	+	published / reissued	
JP2000028422 A2	20060429	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20060428
JP2000028422 A2	20080606	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20080605
JP2000028422 A2	20080902	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20080901
JP2000028422 A2	20080922	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2000028422 A2	20080929	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20080926
JP2000028422 A2	20081002	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01
JP2000028422 A2	20081030	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20081027
JP2000028422 A2	20081031	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP2000028422 A2	20081106	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP4210390 B2	20090114	LSGT	+	granted / extensions (spc, cpc, pte)	
JP4210390 B2	20081028	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP4210390 B2	20111027	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4210390 B2	20111101	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 4
JP4210390 B2	20121101	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4210390 B2	20121106	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 5
JP4210390 B2	20131024	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4210390 B2	20131029	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4210390 B2	20141030	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4210390 B2	20141104	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4210390 B2	20151029	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4210390 B2	20151104	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4210390 B2	20161027	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4210390 B2	20161101	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4210390 B2	20171026	LSFE	R20	特許料納付書 (Patent fee	

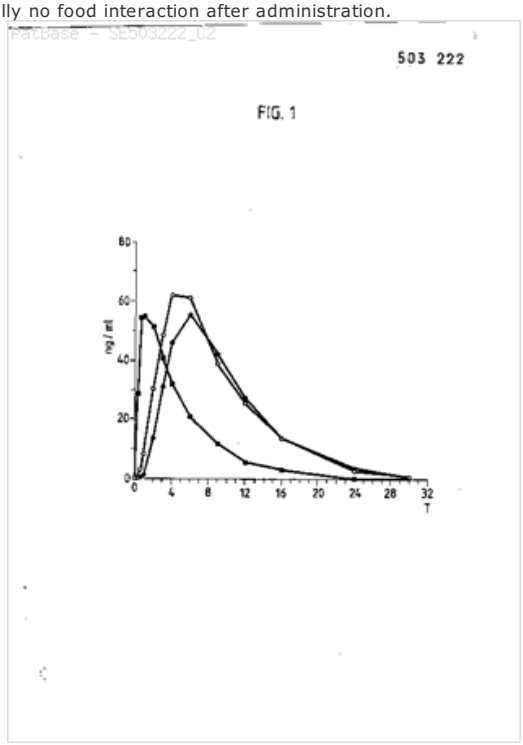
				payment form)	
JP4210390 B2	20171031	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4210390 B2	20181101	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4210390 B2	20181106	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4210390 B2	20190430	LSLE	-EXPY	CANCELLATION BECAUSE OF COMPLETION OF TERM	
JP4210390 B2	20190430	PEXP		Calculated Patent Term Expiry	
US6162998 A	20001219	LSGT	+	granted / extensions (spc, cpc, pte)	
US6162998 A	19990402	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ROBERT BOSCH GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:WURST, REINER; RUNFT, WERNER; REEL/FRAME:009919/0544 EFFECTIVE DATE : 19990325
US6162998 A	20001130	LSGT	PAT1	Patented Case	
US6162998 A	20001130	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US6162998 A	20040518	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6162998 A	20080605	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US6162998 A	20120613	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US6162998 A	20190402	PEXP		Calculated Patent Term Expiry	

8) Family number: 30142005 (GB2181053A)

Title: CONTROLLED RELEASE FORMULATION

Abstract: A controlled release formulation for oral administration comprising -an active substance chosen from the group of Pindolol and a 4-(2,1,3-benzoxadiazol-4-yl)- 1,4-dihydro- 2,6-dimethyl-3,5-pyridine dicarboxylate ester, -a pharmaceutically acceptable hydrophilic swellable substance and containing optionally a pharmaceutically acceptable inert fatty material in addition. The formulation has an excellent bioavailability and practically no food interaction after administration.

Classifications:
International (IPC 8-9): A61K31/40 A61K31/405 A61K31/44 A61K31/455 A61K47/00 A61K47/38 A61K47/42 A61K47/44 A61K9/20 A61K9/22 A61K9/26 A61K9/48 A61K9/52 (Advanced/Invention);
A61K47/38 A61K47/42 A61K47/44 (Advanced/Non-invention);
A61K31/40 A61K31/403 A61K31/44 A61K31/455 A61K47/00 A61K47/38 A61K47/42 A61K47/44 A61K9/20 A61K9/22 A61K9/26 A61K9/48 A61K9/52 (Core/Invention);
A61K (Subclass/Invention)
International (IPC 1-7): A61J A61K31/00 A61K31/40 A61K31/405 A61K31/41 A61K31/415 A61K31/44 A61K31/4422 A61K31/455 A61K31/535 A61K47/00 A61K47/38 A61K47/44 A61K9/00 A61K9/22 A61K9/26 A61K9/52 A61K9/56 C07D209/32 C07D413/04
CPC: A61K9/2013 A61K9/2054 A61K9/485 A61K9/4858 A61K9/4866 A61K31/40 A61K31/44
European: A61K31/40 A61K31/44 A61K9/20H4 A61K9/20H6F2 A61K9/48H2 A61K9/48H4 A61K9/48H6



Family:

Publication number	Publication date	Application number	Application date
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AT402257 B	19970325	AT19860002604	19860930
AU198663226 A1	19870402	AU19860063226	19860929
AU199053020 A1	19900809	AU19900053020	19900409
AU598751 B2	19900705	AU19860063226	19860929
AU626404 B2	19920730	AU19900053020	19900409
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CH669524 A	19890331	CH19860003780	19860922
CY1622 A	19920710	CY19920001622	19920710
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DK464686 A0	19860929	DK19860004646	19860929
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FR2589732 A1	19870515	FR19860013668	19861001
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GB2181053 A1	19870415	GB19860023389	19860929
GB2181053 B2	19900523	GB19860023389	19860929
GB8524135 A0	19851106	GB19850024135	19851001
GB8524653 A0	19851113	GB19850024653	19851007
GB8531419 A0	19860205	GB19850031419	19851220
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GR862457 B	19870129	GR19860102457	19860929
HK392 A	19920110	HK19920000003	19920102
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IL80182 A0	19861231	IL19860080182	19860929
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NL194822 C	20030403	NL19860002370	19860919
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PT83456 B	19890512	PT19860083456	19860929
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Priority:

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GB19850024135 19851001
GB19850003097 19860207
AU19860063226 19860929
GB19850024653 19851007
GB19860003097 19860207
CA19860519302 19860929

Probable Assignee: SANDOZ LTD

Assignee(s): (std): NOVARTIS AG ; PHARMACEUTICAL FORMULATIONS WI ; PHARMACEUTICAL FORMULATIONS WITH CONTROLLED RELEAS ; SANDOZ A G ; SANDOZ A G TE BAZEL ZWITSERLAND ; SANDOZ AG ; SANDOZ AG CH ; SANDOZ ERFINDUNGEN VERWALTUNGSGESELLSCHAFT M B H ; SANDOZ LIMITED ; SANDOZ LTD ; SANDOZ PHARMACEUTICALS CORP ; SANDOZ S A ; SANDOZ SA ; SANDOR AG ; ZUEGER OTHMAR

Assignee(s): ZUGER OTHMAR ; SANDOX LTD ; SANDOZ TE BAZEL ZWITSERLAND AG ; SANDOZ PATENT GMBH ; SANDOZ PATENT GMBH 79539 LOERRACH DE ; SANDOZ PHARM CORP ; SANDOZ ERFINDUNGEN VERWALTUNGSGESELLSCHAFT MBH ; PHARMACEUTICAL FORMULATIONS WITH CONTROLLED RELEASE OF ACTIVE SUBSTANCE ; PHARMACEUTICAL FORMULATIONS WITH CONTROLLED RELEASE OF THE ACTIVE SUBSTANCE

Inventor(s): (std): O ZUGER ; OSUMAARU TSUYUUGERU ; OTHMAR ZUEGER ; OTHMAR ZUGER ; ZUEGER OTHMAR ; ZUEGER OTHMAR CH ; ZUGAR OTHMAR ; ZUGER O ; ZUGER OTHMAR

Inventor(s): ZUEGER OTHMAR ALLSCHWIL CH

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; FETHERSTONHAUGH AND CO; LUZZATTO AND LUZZATTO

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
AT260486 A	19960815	LSPB	+	published / reissued	
AT402257 B	19970325	LSGT	+	granted / extensions (spc, cpc, pte)	
AT402257 B	20070615	LSLE	-ELA	EXPIRED DUE TO LAPSE OF TIME	
AT402257 B	20060930	PEXP		Calculated Patent Term Expiry	
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AU626404 B2	19920730	LSGT	+	granted / extensions (spc, cpc, pte)	
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BE905516 A	19870330	LSPB	+	published / reissued	
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CA1298784 A1	19920414	LSGT	+	granted / extensions (spc, cpc, pte)	
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CA1298784 A1	20090414	PEXP		Calculated Patent Term Expiry	
CH669524 A	19890331	LSGT	+	granted / extensions (spc, cpc, pte)	
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CH669524 A	20060922	PEXP		Calculated Patent Term Expiry	

CY1622 A	19920710	LSGT	+	granted / extensions (spc, cpc, pte)	
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DE3632201 A1	19870402	LSPB	+	published / reissued	
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DE3632201 C2	19970507	LSGT	+	granted / extensions (spc, cpc, pte)	
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DK170016 B1	20060929	PEXP		Calculated Patent Term Expiry	
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ES2002508 AF	20060930	PEXP		Calculated Patent Term Expiry	
FR2589732 A1	19870515	LSPB	+	published / reissued	
FR2589732 B1	19890713	LSGT	+	granted / extensions (spc, cpc, pte)	
FR2589732 B1	19920821	LSGT	CC	SUPPLEMENTARY PROTECTION CERTIFICATE (SPC) LAID OPEN TO THE PUBLIC (LAW OF 25 JUNE 1990)	TEXT : 92C0174, 920507
FR2589732 B1	19921030	LSGT	CB	SUPPLEMENTARY PROTECTION CERTIFICATE (SPC) GRANTED (LAW OF 25 JUNE 1990)	TEXT : 92C0167, 861001
FR2589732 B1	19930423	LSLI	CL	CONCESSION TO GRANT LICENCES	
FR2589732 B1	19971114	LSAS	TP	TRANSMISSION OF PROPERTY	
FR2589732 B1	20061001	PEXP		Calculated Patent Term Expiry	
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GB2181053 B2	19900523	LSGT	+	granted / extensions (spc, cpc, pte)	
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GR862457 B	19870129	LSGT	+	granted / extensions (spc, cpc, pte)	
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HK392 A	20061027	LSLE	-PE	PATENT EXPIRED	EFFECTIVE DATE : 20060928
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IL80182 A1	19961114	LSFE	+KB	PATENT RENEWED	
IL80182 A1	19971120	LSAS	HC	CHANGE OF NAME OF PROPRIETOR(S)	
IL80182 A1	20010111	LSFE	+KB	PATENT RENEWED	
IL80182 A1	20061227	LSLE	-EXP	PATENT EXPIRED	
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IT1214719 A	19920423	LSGT	ITCP	COMPLEMENTARY PROTECTION CERTIFICATE	TEXT : CCP 137
IT1214719 A	19921113	LSGT	+MEDD	SUPPLEMENTARY PROTECTION CERTIFICATE FOR PHARMACEUTICAL PRODUCTS: GRANTED	TEXT : CCP 137, 19920423; SANDOZ A.G.
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IT1214719 A	20060930	PEXP		Calculated Patent Term Expiry	
JP62149618 A2	19870703	LSPB	+	published / reissued	
KR19870003777 A	19870504	LSPB	+	published / reissued	
KR920008817 B1	19921009	LSGT	+	granted / extensions (spc, cpc, pte)	
KR920008817 B1	19870926	LSES	A201	REQUEST FOR EXAMINATION	
KR920008817 B1	19890907	LSRV	-E601	DECISION TO REFUSE APPLICATION	
KR920008817 B1	19890907	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR920008817 B1	19900824	LSAL	J2X1	APPEAL (BEFORE THE PATENT COURT)	TEXT : APPEAL AGAINST DECISION TO DECLINE REFUSAL
KR920008817 B1	19911230	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR920008817 B1	19920909	LSPB	G160	DECISION TO PUBLISH PATENT APPLICATION	
KR920008817 B1	19930109	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
KR920008817 B1	19930308	LSGT	+GRNT	WRITTEN DECISION TO GRANT	
KR920008817 B1	20050816	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20050817 YEAR OF FEE PAYMENT : 14
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NL194822 B	20021202	LSPB	+	published / reissued	
NL194822 B	20060919	PEXP		Calculated Patent Term Expiry	
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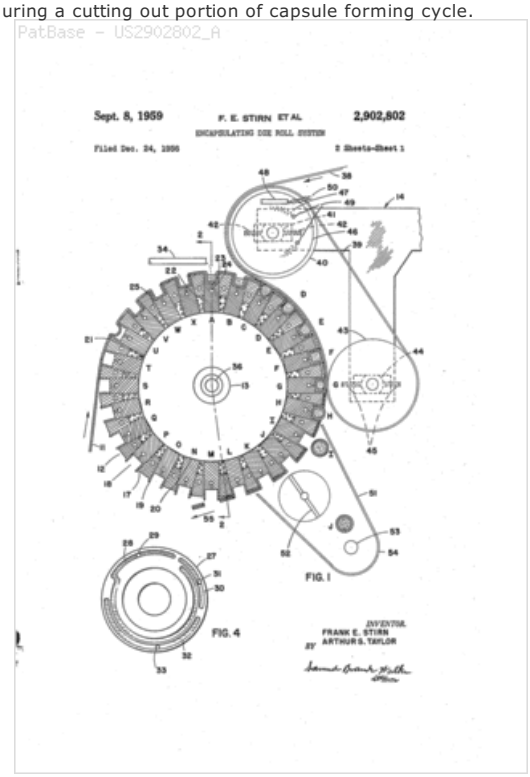
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NL8602370 A	19931001	LSES	BB	A SEARCH REPORT HAS BEEN DRAWN UP	
NL8602370 A	19940301	LSES	+BC	A REQUEST FOR EXAMINATION HAS BEEN FILED	
NL8602370 A	19971103	LSAS	CNR	TRANSFER OF RIGHTS (PATENT APPLICATION AFTER ITS LAYING OPEN FOR PUBLIC INSPECTION)	TEXT : NOVARTIS AG
NZ217732 A	19900726	LSPB	+	published / reissued	
NZ217732 A	20140430	LSRE	ERR	ERROR OR CORRECTION	TEXT : THE OWNER HAS BEEN CORRECTED TO 890887, NOVARTIS AG, LICHTSTRASSE 35, CH-4056 BASEL, CH EFFECTIVE DATE : 20140409
PT83456 A	19861001	LSPB	+	published / reissued	
PT83456 B	19890512	LSGT	+	granted / extensions (spc, cpc, pte)	
PT83456 B	19980130	LSAS	PC3A	TRANSFER OR ASSIGNMENT	TEXT : 971017 NOVARTIS AG CH
PT83456 B	20060929	PEXP		Calculated Patent Term Expiry	
SE503222 C2	19960422	LSGT	+	granted / extensions (spc, cpc, pte)	
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ZA8607507 A	19880525	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA8607507 A	20060930	PEXP		Calculated Patent Term Expiry	

9) Family number: 22084005 (US2902802A)

Title: ENCAPSULATING DIE ROLL SYSTEM

Abstract: (Claim 1) 1. A cavity die roll for formffig soft plastic capsules from plastic strip wh comprises: a hollow die roll having a series of apertures extending from the working face into the horow interior thereof, means for rotating said die roll, a cavity slide having a capsule forming cavity and _.a cutting out rim,at the outer end and a cam means at the inner end in each aperture, and a stationary cam, acting on the cam rneans of said cavity slide, of such c.onfiguration that the slides are positioned with the cuttmg out rim about even with the surface of the die roll during a loading por-tion of a capsule forming cycle, and with the cutting out rims raised against a sealing means during a cutting out portion of capsule forming cycle.

Classifications:
International (IPC 8-9): A61J3/07 B65B47/10 (Advanced/Invention); A61J3/07 B65B47/00 (Core/Invention)
International (IPC 1-7): B65B47/10
CPC: A61J3/07 B65B47/10
European: A61J3/07 B65B47/10
US: 53/454 53/560



Family:

Publication number	Publication date	Application number	Application date
US2902802 A	19590908	US19560630345	19561224

Priority:
US19560630345 19561224

Probable Assignee:	AMERICAN CYANAMID CO
Assignee(s): (std):	AMERICAN CYANAMID CO
Assignee(s):	AMERICAN CYANAMID COMPANY
Inventor(s): (std):	TAYLOR ARTHUR S ; STIRN FRANK E

Legal status (INPADOC)

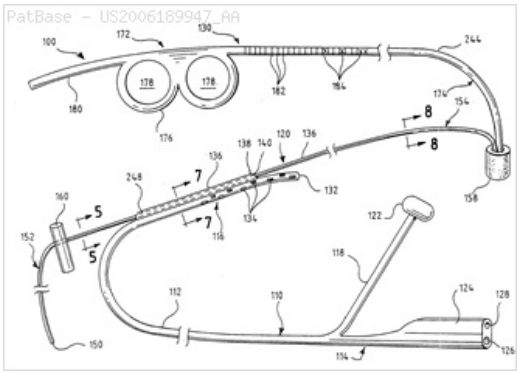
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Patent	Date recorded	Event group	Code	Event	Details
US2902802 A	19590908	LSGT	+	granted / extensions (spc, cpc, pte)	

10) Family number: 33256005 (US2006189947A)

Title: NASOGASTRIC TUBE INSERTION SYSTEM AND METHOD

Abstract: A nasogastric tube insertion system comprises a nasogastric tube, a guide element, and an inserter element. The inserter element has a slim, elongate main body, a handle attached to the body, and an anatomically curved insertion section. The guide element comprises a swallowable weight attached to a cord, string, monofilament line, or other similar line. The nasogastric tube comprises a tube having one or more interior bores or lumina and a guide element capture structure. In use, the swallowable weight is placed onto the end of the inserter element. The inserter element is inserted through the patient's nasal passages and optionally into the oropharynx. The weight is released and the patient swallows it into the stomach. The guide element is threaded through the guide element retaining structure, and the nasogastric tube is safely inserted along the guide element into the patient's stomach. The tube and guide element are removed together when no longer needed.



Classifications:
International (IPC 8-9): A61B17/34 A61B5/00 A61B5/06 A61B5/145 A61B5/1473 A61J15/00 A61M25/00 A61M25/02 A61M25/06 A61M25/09 A61M31/00 (Advanced/Invention);
A61B10/00 A61B19/00 A61B5/155 A61B5/157 A61M25/01 A61M25/09 (Advanced/Non-invention);
A61J15/00 A61M25/00 A61M25/02 A61M25/06 A61M31/00 (Core/Invention)
CPC: A61B5/1473 A61B5/1427 A61B5/157 A61B5/14539 A61B5/6852 A61B10/007 A61B2010/0061 A61B17/24 A61B17/3415 A61J15/0073 A61M25/007 A61M25/09041 A61M2025/0177 A61M2025/0183 A61B2090/0807 A61J15/0007 A61J15/0026 A61M25/09 A61M31/00 A61M2025/0166 A61M2025/09008 A61M2025/09175 A61M2025/09183 A61M2205/3324
European: A61B17/34E A61B5/145J A61B5/68D1H A61J15/00 A61M25/09C A61M31/00 K61B10/00L5 K61B10/00L8 K61B17/24 K61B19/48H K61J15/00 K61M205/33H K61M25/00T10C K61M25/01C11 K61M25/01K K61M25/01M K61M25/09 K61M25/09A K61M25/09T K61M25/09T1
US: 1/1 600/367 600/367P 604/103.04 604/164.13 604/165.01 604/270 604/270P 604/270S 604/503 604/503S 604/514 604/514P 604/516 604/516P 604/523 604/523S

Family:

Publication number	Publication date	Application number	Application date
AU2006337424 AA	20070809	AU20060337424	20060427
AU2006337424 BB	20121129	AU20060337424	20060427
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CA2815943 AA	20130425	CA20102815943	20101207
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EP2160173 A2	20100310	EP20080768139	20080605
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US2007112317 AA	20070517	US20060548086	20061010
US2008004598 AA	20080103	US20070769597	20070627
US2010241104 AA	20100923	US20100799123	20100419
US2011077495 AA	20110331	US20100925783	20101029
US2012316415 AA	20121213	US20120589686	20120820
US7695459 BB	20100413	US20060347481	20060203
US7699818 BB	20100420	US20070769597	20070627
US7740620 BB	20100622	US20060548086	20061010
US9173602 BB	20151103	US20120589686	20120820
WO07088428 A1	20070809	WO2006IB51319	20060427
WO08103155 A1	20080828	WO2007US21538	20071005
WO09005573 A2	20090108	WO2008US07059	20080605
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WO12057725 A1	20120503	WO2010US03100	20101207
WO13025993 A1	20130221	WO2012US51350	20120817

Priority:

US20050650806P 20050208
US20060548086 20061010
WO2008US07059 20080605
EP20100796514 20101207
US20120589686 20120820
US20060347481 20060203
US20070769597 20070627
US20100799123 20100419
WO2010US03100 20101207
WO2006IB51319 20060427
EP20080768139 20080605
US20100925783 20101029
US20110524878P 20110818

Probable Assignee: CRITICAL DEVICE CORP

Assignee(s): (std): GILBERT PAUL ; GILBERT PAUL J ; GILBERT ROBERT P ; PAUL GILBERT ; ROBERT GILBERT ; GILBERT ROBERT ; GIBERT PAUL

Assignee(s): GILBERT PAUL J1650 W. OGDEN AVE., #2CHICAGOIL60612-2324US ; GILBERT ROBERT P1809 REBECCA RD.LUTZFL33458-4531US ; RIGHTBIO I METRICS INC ; RIGHTBIO METRICS ; GILBERT PAUL J DR ; GILBERT PAUL J PAYSON ; CRITICAL DEVICE CORP

Inventor(s): (std): GILBERT ROBERT P ; GILBERT PAUL J

Inventor(s): GILBERT ROBERT ; ROBERT P GILBERT ; PAUL J GILBERT ; GILBERT ROBERT P1809 REBECCA

RD.LUTZFL33458-4531US ; GILBERT PAUL J1650 W. OGDEN AVE., #2CHICAGOIL60612-2324US ; GILBERT PAUL ; GILBERT PAUL J PAYSON

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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 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 YU ZA ZM ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AU2006337424 AA	20070809	LSPB	+	published / reissued	
AU2006337424 BB	20121129	LSGT	+	granted / extensions (spc, cpc, pte)	
AU2006337424 BB	20130328	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU2006337424 BB	20161124	LSLE	-MK14	PATENT CEASED SECTION 143(A) (ANNUAL FEES NOT PAID) OR EXPIRED	
AU2006337424 BB	20260427	PEXP		Calculated Patent Term Expiry	
AU2008271276 AA	20090108	LSPB	+	published / reissued	
AU2008271276 BB	20131212	LSGT	+	granted / extensions (spc, cpc, pte)	
AU2008271276 BB	20140410	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU2008271276 BB	20280605	PEXP		Calculated Patent Term Expiry	
AU2010363102 AA	20120503	LSPB	+	published / reissued	
AU2010363102 AA	20160630	LSLE	-MK4	APPLICATION LAPSED SECTION 142(2)(D) - NO CONTINUATION FEE PAID FOR THE APPLICATION	
CA2652459 AA	20081112	LSPB	+	published / reissued	
CA2652459 AA	20110303	LSES	+EEER	EXAMINATION REQUEST	
CA2652459 C	20141118	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2652459 C	20260427	PEXP		Calculated Patent Term Expiry	
CA2712361 AA	20090108	LSPB	+	published / reissued	
CA2712361 AA	20130605	LSES	+EEER	EXAMINATION REQUEST	EFFECTIVE DATE : 20130523
CA2712361 C	20170725	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2712361 C	20280605	PEXP		Calculated Patent Term Expiry	
CA2815943 AA	20130425	LSPB	+	published / reissued	
CA2815943 AA	20170118	LSLE	-FZDE	DEAD	EFFECTIVE DATE : 20161207
EP2010264 A1	20090107	LSPB	+	published / reissued	
EP2010264 A1	20090107	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20081030

EP2010264 A1	20111221	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20111118
EP2010264 A1	20150819	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20150317
EP2160173 A2	20100310	LSPB	+	published / reissued	
EP2160173 A2	20100310	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20091218
EP2160173 A2	20100421	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20100323
EP2160173 A2	20140730	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20140304
EP2468234 A2	20120627	LSPB	+	published / reissued	
EP2468234 A3	20130306	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20130125
EP2468234 A3	20130918	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20130819
EP2468234 A3	20150916	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20150408
EP2632331 A1	20130904	LSPB	+	published / reissued	
EP2632331 A1	20130904	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20130520
EP2632331 A1	20160217	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20160122
EP2632331 B1	20160629	LSGT	+	granted / extensions (spc, cpc, pte)	
EP2632331 B1	20160629	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP2632331 B1	20160630	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP2632331 B1	20160715	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 808430 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20160715
EP2632331 B1	20160727	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP2632331 B1	20160811	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602010034361 COUNTRY OF REF DOCUMENT : DE
EP2632331 B1	20161025	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : LT REF LEGAL EVENT CODE : MG4D
EP2632331 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 : 20160629
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				OFFICE TO EPO]	FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160629
EP2632331 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 : 20160929
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EP2632331 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 : 20160629
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EP2632331 B1	20161215	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MK05 REF DOCUMENT NUMBER : 808430 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20160629
EP2632331 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 : 7
EP2632331 B1	20170131	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

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EP2632331 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 : 20160629
EP2632331 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 : 20160629
EP2632331 B1	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20161207 YEAR OF FEE PAYMENT : 7
EP2632331 B1	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20161221 YEAR OF FEE PAYMENT : 7
EP2632331 B1	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20161213 YEAR OF FEE PAYMENT : 7
EP2632331 B1	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 FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160629
EP2632331 B1	20170228	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 : 20160629
EP2632331 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

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EP2632331 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 : 20160629
EP2632331 B1	20170228	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 : 20160629
EP2632331 B1	20170228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20161222 YEAR OF FEE PAYMENT : 7
EP2632331 B1	20170330	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 602010034361 COUNTRY OF REF DOCUMENT : DE
EP2632331 B1	20170531	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 : 20160629
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EP2632331 B1	20170831	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 : 20160629
EP2632331 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 : 20160929
EP2632331 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 : 20160629
EP2632331 B1	20171004	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP2632331 B1	20171031	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

				FROM NATIONAL OFFICE TO EPO]	LAPSED DATE : 20161207
EP2632331 B1	20171130	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 : 20161207
EP2632331 B1	20171221	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 8
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EP2632331 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 : 8
EP2632331 B1	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20171220 YEAR OF FEE PAYMENT : 8
EP2632331 B1	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20171122 YEAR OF FEE PAYMENT : 8
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EP2632331 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 : 20160629
EP2632331 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 : 20161207
EP2632331 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 : 20160629
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				OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	PAYMENT DATE : 20181231 YEAR OF FEE PAYMENT : 9
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EP2632331 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20190123 YEAR OF FEE PAYMENT : 9
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EP2632331 B1	20200228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20191220 YEAR OF FEE PAYMENT : 10
EP2632331 B1	20200331	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20191219 YEAR OF FEE PAYMENT : 10
EP2632331 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20191129 YEAR OF FEE PAYMENT : 10
EP2632331 B1	20200515	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : CH OWNER : CRITICAL DEVICE CORPORATION, US REF LEGAL EVENT CODE : PUE OLDPARTY : FORMER OWNER: GILBERT, PAUL J., US
EP2632331 B1	20301207	PEXP		Calculated Patent Term Expiry	
US2006189947 AA	20060824	LSPB	+	published / reissued	
US2006189947 AA	20060914	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GILBERT, PAUL J., DR., ILLINOIS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:GILBERT, ROBERT P., DR.; REEL/FRAME:018248/0735 EFFECTIVE DATE : 20060811
US2006189947 AA	20060914	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GILBERT, PAUL J., DR.,ILLINOIS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:GILBERT, ROBERT P., DR.; REEL/FRAME:018248/0735 EFFECTIVE DATE : 20060811
US2006189947 AA	20100324	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2007112317 AA	20070517	LSPB	+	published / reissued	
US2007112317 AA	20100602	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2008004598 AA	20080103	LSPB	+	published / reissued	
US2008004598 AA	20100331	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2010241104 AA	20100923	LSPB	+	published / reissued	

US2010241104 AA	20121211	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2011077495 AA	20110331	LSPB	+	published / reissued	
US2011077495 AA	20151014	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2012316415 AA	20121213	LSPB	+	published / reissued	
US2012316415 AA	20151014	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US7695459 BB	20100413	LSGT	+	granted / extensions (spc, cpc, pte)	
US7695459 BB	20100324	LSGT	PAT1	Patented Case	
US7695459 BB	20130710	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US7695459 BB	20171127	LSFE	FEPP	FEE PAYMENT PROCEDURE	TEXT : MAINTENANCE FEE REMINDER MAILED (ORIGINAL EVENT CODE: REM.)
US7695459 BB	20180411	LSFE	FEPP	FEE PAYMENT PROCEDURE	TEXT : 7.5 YR SURCHARGE - LATE PMT W/IN 6 MO, SMALL ENTITY (ORIGINAL EVENT CODE: M2555)
US7695459 BB	20180411	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US7695459 BB	20181210	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : RIGHTBIO METRICS, ARIZONA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:GILBERT, PAUL J; REEL/FRAME:047730/0746 EFFECTIVE DATE : 20181201
US7695459 BB	20191025	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CRITICAL DEVICE CORPORATION, OHIO OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:RIGHTBIO METRICS, INC.; REEL/FRAME:050825/0837 EFFECTIVE DATE : 20191007
US7695459 BB	20280118	PEXP		Calculated Patent Term Expiry (PTA 714 days and a terminal disclaimer has been filed)	
US7699818 BB	20100420	LSGT	+	granted / extensions (spc, cpc, pte)	
US7699818 BB	20100331	LSGT	PAT1	Patented Case	
US7699818 BB	20130710	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US7699818 BB	20171002	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US7699818 BB	20181210	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : RIGHTBIO METRICS, ARIZONA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:GILBERT, PAUL J; REEL/FRAME:047730/0746 EFFECTIVE DATE : 20181201
US7699818 BB	20191025	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CRITICAL DEVICE CORPORATION, OHIO OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:RIGHTBIO METRICS, INC.; REEL/FRAME:050825/0837 EFFECTIVE DATE : 20191007
US7699818 BB	20270715	PEXP		Calculated Patent Term Expiry (PTA 18 days and a terminal disclaimer has been filed)	
US7740620 BB	20100622	LSGT	+	granted / extensions (spc,	

				cpc, pte)	
US7740620 BB	20100602	LSGT	PAT1	Patented Case	
US7740620 BB	20131104	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US7740620 BB	20170920	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US7740620 BB	20181210	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : RIGHTBIO METRICS, ARIZONA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:GILBERT, PAUL J; REEL/FRAME:047730/0746 EFFECTIVE DATE : 20181201
US7740620 BB	20191025	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CRITICAL DEVICE CORPORATION, OHIO OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:RIGHTBIO METRICS, INC.; REEL/FRAME:050825/0837 EFFECTIVE DATE : 20191007
US7740620 BB	20270714	PEXP		Calculated Patent Term Expiry (PTA 277 days and a terminal disclaimer has been filed)	
US9173602 BB	20151103	LSGT	+	granted / extensions (spc, cpc, pte)	
US9173602 BB	20151014	LSGT	PAT1	Patented Case	
US9173602 BB	20181210	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : RIGHTBIO METRICS, ARIZONA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:GILBERT, PAUL J; REEL/FRAME:047730/0746 EFFECTIVE DATE : 20181201
US9173602 BB	20190613	LSFE	FEPP	FEE PAYMENT PROCEDURE	TEXT : SURCHARGE FOR LATE PAYMENT, SMALL ENTITY (ORIGINAL EVENT CODE: M2554); ENTITY STATUS OF PATENT OWNER: SMALL ENTITY
US9173602 BB	20190613	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US9173602 BB	20191025	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CRITICAL DEVICE CORPORATION, OHIO OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:RIGHTBIO METRICS, INC.; REEL/FRAME:050825/0837 EFFECTIVE DATE : 20191007
US9173602 BB	20330225	PEXP		Calculated Patent Term Expiry (PTA 189 days)	
WO07088428 A1	20070809	LSPB	+	published / reissued	
WO07088428 A1	20080805	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE	REF COUNTRY CODE : DE
WO07088428 A1	20081030	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2006728065 COUNTRY OF REF DOCUMENT : EP
WO07088428 A1	20081110	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2006337424 COUNTRY OF REF DOCUMENT : AU
WO07088428 A1	20081112	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2652459 COUNTRY OF REF DOCUMENT : CA
WO07088428 A1	20090115	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2006337424 COUNTRY OF REF DOCUMENT : AU DATE OF REF DOCUMENT : 20060427 KIND CODE OF REF DOCUMENT : A

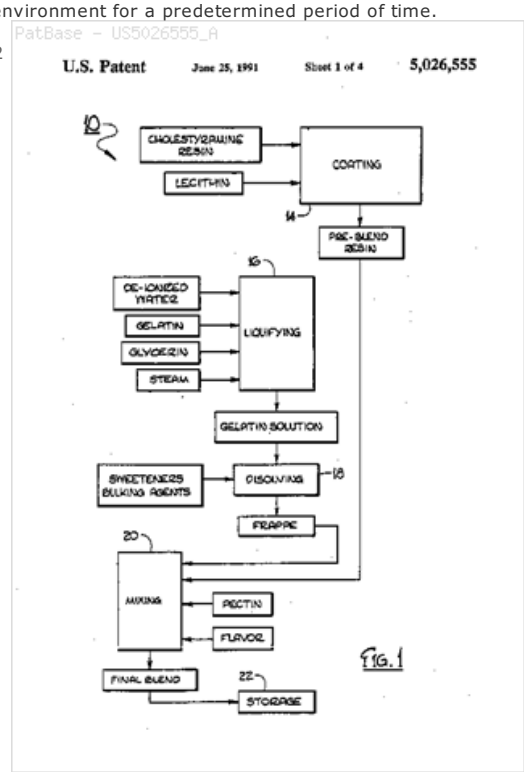
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WO08103155 A1	20080828	LSPB	+	published / reissued	
WO08103155 A1	20090415	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE	REF COUNTRY CODE : DE
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WO09005573 A2	20090108	LSPB	+	published / reissued	
WO09005573 A3	20091218	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2008768139 COUNTRY OF REF DOCUMENT : EP
WO09005573 A3	20091218	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2008271276 COUNTRY OF REF DOCUMENT : AU
WO09005573 A3	20091229	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE	REF COUNTRY CODE : DE
WO09005573 A3	20100121	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2008271276 COUNTRY OF REF DOCUMENT : AU DATE OF REF DOCUMENT : 20080605 KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
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WO12057725 A1	20130425	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2815943 COUNTRY OF REF DOCUMENT : CA
WO12057725 A1	20130429	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE	REF COUNTRY CODE : DE
WO12057725 A1	20130520	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2010796514 COUNTRY OF REF DOCUMENT : EP
WO12057725 A1	20130530	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2010363102 COUNTRY OF REF DOCUMENT : AU DATE OF REF DOCUMENT : 20101207 KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO13025993 A1	20130221	LSPB	+	published / reissued	
WO13025993 A1	20140218	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE	REF COUNTRY CODE : DE
WO13025993 A1	20140910	LSNE	-122	EP: PCT APPLICATION NON-ENTRY IN EUROPEAN PHASE	REF DOCUMENT NUMBER : 12766492 COUNTRY OF REF DOCUMENT : EP KIND CODE OF REF DOCUMENT : A1 DESIGNATED STATE(S) :

11) Family number: 3221005 (US5026555A)

Title: METHOD FOR PREPARING AN ANION EXCHANGE RESIN DELIVERY SYSTEM

Abstract: A method for preparing an edible anion exchange resin delivery system which comprises the steps of coating granules of resin with lecithin. A **gelatin** frappe is separately prepared and placed into a mixing chamber. The lecithin-coated resin granules are then added to the chamber and mixed together with the frappe. Flavorings can also be added to the mixture and the final blend is then allowed to set-up in a controlled environment for a predetermined period of time.

Classifications:
International (IPC 8-9): A23L1/30 A23P1/08 A61K31/785 A61K47/42 A61K9/16 A61K9/20 A61K9/50 A61P3/06 (Advanced/Invention); A23L1/30 A23P1/08 A61K47/42 A61K9/16 (Advanced/Non-invention); A23L1/30 A23P1/08 A61K31/74 A61K47/42 A61K9/16 A61K9/20 A61K9/50 A61P3/00 (Core/Invention)
International (IPC 1-7): A23G3/00 A23L1/015 A23L1/29 A23L1/30 A23L1/308 A23P1/08 A61J3/00 A61K31/205 A61K31/685 A61K31/74 A61K31/785 A61K47/00 A61K47/26 A61K47/42 A61K9/00 A61K9/16 A61K9/50 B01J C09F1/00 C09H5/00
CPC: A61K9/2063 A61K9/2095 A61K9/5015 A61K31/785 A61P3/06
European: A61K31/785 A61K9/20H6H A61K9/20P A61K9/50H4
US: 424/439 424/78.1 424/78.12 424/79



Family:

Publication number	Publication date	Application number	Application date
AU198943877 A1	19900503	AU19890043877	19891027
AU618419 B2	19911219	AU19890043877	19891027
CN1042076 A	19900516	CN19891007814	19891007
DK537189 A	19900429	DK19890005371	19891027
DK537189 A0	19891027	DK19890005371	19891027
EP0366255 A2	19900502	EP19890309388	19890915
EP0366255 A3	19910410	EP19890309388	19890915
FI895073 A0	19891025	FI19890005073	19891025
JP2180832 A2	19900713	JP19890278760	19891027
KR19900005896 A	19900507	KR19890015539	19891027
NO894269 A	19900430	NO19890004269	19891026
NO894269 A0	19891026	NO19890004269	19891026
NO894269 L	19900430	NO19890004269	19891026
NZ231172 A	19901026	NZ19890231172	19891026
PT92092 A	19900430	PT19890092092	19891025
US5026555 A	19910625	US19880263846	19881028
ZA8908196 A	19910424	ZA19890008196	19891027

Priority:
US19880263846 19881028

Probable Assignee: WARNER LAMBERT CO
Assignee(s): (std): WARNER LAMBERT CO
Assignee(s): WARNER LAMBERT COMPANY
Inventor(s): (std): KILLEEN MICHAEL J ; KILLEEN MICHAEL JAMES ; MAIKURU JIEIMUZU KIRIIN ; MICHAEL JAMES KILLEEN
Agent(s): SHELSTON IP; SHELSTON IP PTY LTD
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
AU198943877 A1	19900503	LSPB	+	published / reissued	
AU618419 B2	19911219	LSGT	+	granted / extensions (spc, cpc, pte)	
AU618419 B2	20091027	PEXP		Calculated Patent Term Expiry	

CN1042076 A	19900516	LSPB	+	published / reissued	
CN1042076 A	19900516	LSPB	+C06	PUBLICATION	
CN1042076 A	19941221	LSDW	-C01	DEEMED WITHDRAWAL OF PATENT APPLICATION (PATENT LAW 1993)	
DK537189 A	19900429	LSPB	+	published / reissued	
DK537189 A	19930628	LSWD	-AHB	APPLICATION SHELVED DUE TO NON-PAYMENT	
EP0366255 A2	19900502	LSPB	+	published / reissued	
EP0366255 A3	19910626	LSRE	RHK1	MAIN CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : A61K 9/50
EP0366255 A3	19911127	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19911001
EP0366255 A3	19920415	LSWD	-18W	APPLICATION WITHDRAWN	DATE APPLICATION WITHDRAWN : 19920224
EP0366255 A3	19920506	LSWD	R18W	APPLICATION WITHDRAWN (CORRECTED)	EFFECTIVE DATE : 19920224
FI895073 A0	19930430	LSLE	-FD	APPLICATION LAPSED	
FI895073 A0	20040831	LSLE	-MM	PATENT LAPSED	PARTYTYPE : OWNER OWNER : WARNER-LAMBERT COMPANY
JP2180832 A2	19900713	LSPB	+	published / reissued	
KR19900005896 A	19900507	LSPB	+	published / reissued	
KR19900005896 A	19941027	LSDW	-WITN	WITHDRAWAL DUE TO NO REQUEST FOR EXAMINATION	
NO894269 A	19900430	LSPB	+	published / reissued	
NZ231172 A	19901026	LSPB	+	published / reissued	
PT92092 A	19900430	LSPB	+	published / reissued	
US5026555 A	19910625	LSGT	+	granted / extensions (spc, cpc, pte)	
US5026555 A	19881202	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WARNER-LAMBERT COMPANY, A CORP. OF DE, NEW JERSEY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNOR:KILLEEN, MICHAEL J.; REEL/FRAME:005003/0807 EFFECTIVE DATE : 19881103
US5026555 A	19910425	LSGT	PAT1	Patented Case	
US5026555 A	19950625	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5026555 A	19950905	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 19950628
US5026555 A	20180129	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US5026555 A	20180129	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US5026555 A	20081028	PEXP		Calculated Patent Term Expiry	
ZA8908196 A	19910424	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA8908196 A	20091026	PEXP		Calculated Patent Term Expiry	

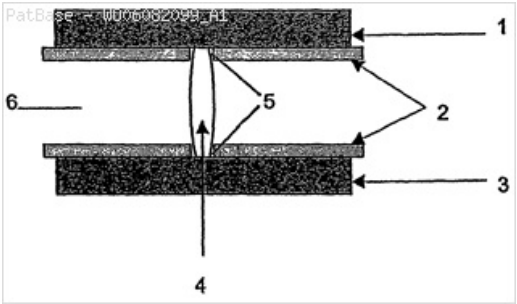
12) Family number: 31522006 (US2005031546A)

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	COLLEGIUM PHARM INC	Aug 25, 2011
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
206627	HYDROCODONE BITARTRATE	HYSINGLA ER	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 B29C48/00 B29C48/14 B29C48/21 B30B11/16 B30B11/34 C12Q1/68 (Advanced/Invention);
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A61J3/06 A61J3/10 (Core/Non-invention);
A61K (Subclass/Invention)
International (IPC 1-7): A61K31/135 A61K31/137 A61K31/138 A61K31/485 A61K31/515 A61K31/5513 A61K34/485 A61K47/30 A61K47/44 A61K49/00 A61K9/14 A61K9/16 A61K9/20 A61K9/22 A61K9/48 A61P25/00 A61P25/04 A61P25/20 A61P25/22 A61P25/26 A61P25/36 B06B1/02
CPC: A61J3/07 A61K9/0092 A61K9/2004 B29K2071/02 B29K2105/0088 B29K2105/25 B29K2995/007 B29K2995/0089 B29C48/03 B29C48/18 B29C48/40 B30B11/16 B30B11/34 A61K9/1635 B29L2031/00 B29C43/003 B29C43/006 A61K31/277 A61K31/4418 A61K31/4422 A61K31/55 A61K31/554 B29B7/002 B29B9/12 B29C35/0261 B29C45/0001 B29C48/0011 B29C48/0022 B29C48/022 B29C48/146 B29C48/21 B29C2793/009 B29K2105/0035 A61J3/005 A61K9/2009 A61K9/2086 A61K9/2893 A61K9/4808 B29B9/02 B29C43/02 B29K2105/0044 B29K2105/251 B29K2995/0056 B29L2031/753 B29L2031/772 B29C43/24 B30B11/00 A61K9/2022 A61K9/0053 A61K9/20 A61K9/2068 A61K9/2077 B29C48/44 A61P1/00 A61P13/00 A61P17/00 A61P19/00 A61P25/00 A61P25/04 A61P25/22 A61P25/30 A61P25/36 A61P29/00 A61P25/20 A61P25/26 A61P27/00 A61P25/02 A61P5/00 A61P7/00 A61P9/00 A61P37/00 A61J3/06 A61J3/10 A61J2200/20 A61K47/34 A61K9/2013 A61K9/2027 A61K9/2031 A61K9/205 A61K9/2054 A61K9/2072 A61K9/2095 A61K31/135 A61K31/4725 A61K31/485 A61K31/515 A61K31/5513 A61K36/67 A61K36/81 A61K45/06 A61K47/10
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US: 1/1 264/109 264/115 264/118 264/141 264/143 264/145 264/148 264/176.1 264/176.100S 264/210.1 264/210.100S 264/211.12 264/211.120S 264/211.23 264/211.230S 264/211.24 264/239 264/239S 264/319 264/331.11 264/442 264/443 264/443P 264/444 264/85 264/85S 424/10.1 424/10.100P 424/10.100S 424/10.2 424/10.200P 424/10.3 424/10.300P 424/10.4 424/10.400S 424/400 424/451 424/452 424/457 424/464 424/465 424/465P 424/465S 424/468 424/469 424/474 424/484 424/485 424/485P 424/486 424/486S 424/489 424/501 424/501S 424/725 424/734 424/754 424/756 424/760 424/773 424/773S 427/2.14 427/2.21 435/6.1 514/211.07 514/217 514/282 514/282S 514/284 514/284S 514/356 514/523 514/646 514/646S 514/647 514/654 514/654S 514/772.3 514/772.4 514/772.7 514/781 514/785

Family:

Publication number	Publication date	Application number	Application date
AR045352 AA	20051026	AR2004P102829	20040806
AR045353 AA	20051026	AR2004P102830	20040806
AR046994 AA	20060104	AR2004P104887	20041222
AR049083 AA	20060628	AR2005P101591	20050421
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AT356618 E	20070415	AT20040763834T	20040805
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AT447942 E	20091115	AT20040804271T	20041223
AT517610 E	20110815	AT20050741758T	20050420
AU2004264666 AA	20050224	AU20040264666	20040805
AU2004264666 BB	20091015	AU20040264666	20040805
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AU2004308653 AA	20050714	AU20040308653	20041223
AU2004308653 BB	20090903	AU20040308653	20041223
AU2006210145 AA	20060810	AU20060210145	20060206
AU2006210145 BB	20110609	AU20060210145	20060206
AU2006210145 BI	20110630	AU20060210145	20060206
BR122018068298 B1	20191029	BR20181268298	20040805
BRPI0413318 A	20061010	BR2004PI13318	20040805
BRPI0413318 B1	20190514	BR2004PI13318	20040805
BRPI0413361 A	20061010	BR2004PI13361	20040805
BRPI0413361 B1	20181211	BR2004PI13361	20040805
BRPI0606145 A2	20090602	BR2006PI06145	20060206
BRPI0606145 B1	20190917	BR2006PI06145	20060206
BRPI0606145 B8	20191105	BR2006PI06145	20060206
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CA2534932 AA	20060206	CA20042534932	20040805
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Probable Assignee: GRUENENTHAL GMBH

Assignee(s): (std): GRA¼NENTHAL GMBH ; GRNENTHAL GMBH ; GRUENENTHAL CHEMIE ; ASHWORTH JUDY ; ARKENAU ELISABETH ; KUGELMANN HEINRICH ; BARTHOLOMAUS JOHANNES ; ARKENAU MARIC ELISABETH ; GRUENENTHAL GMBH ; GRJUNENTAL GMBKH ; BARTHOLOMAEUS JOHANNES ; GR NENTHAL GMBH

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

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

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

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 FOR STANDARD PATENT REQUESTED (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)	
BR122018068298 B1	20181218	LSES	B07A	TECHNICAL EXAMINATION (OPINION): PUBLICATION OF TECHNICAL EXAMINATION (OPINION)	
BR122018068298 B1	20190604	LSES	B07A	TECHNICAL EXAMINATION (OPINION): PUBLICATION OF TECHNICAL EXAMINATION (OPINION)	
BR122018068298 B1	20191001	LSGT	B09A	DECISION: INTENTION TO GRANT	
BR122018068298 B1	20191029	LSGT	+B16A	PATENT OR CERTIFICATE OF ADDITION OF INVENTION GRANTED	TEXT : PRAZO DE VALIDADE: 10 (DEZ) ANOS CONTADOS A PARTIR DE 29/10/2019, OBSERVADAS AS CONDICOES LEGAIS. (CO) 10 (DEZ) ANOS CONTADOS A PARTIR DE 29/10/2019, OBSERVADAS AS CONDICOES LEGAIS
BR122018068298 B1	20291029	PEXP		Calculated Patent Term Expiry	
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	
BRPI0606145 B1	20190917	LSGT	+B16A	PATENT OR CERTIFICATE OF ADDITION OF INVENTION GRANTED	TEXT : PRAZO DE VALIDADE: 10 (DEZ) ANOS CONTADOS A PARTIR DE 17/09/2019, OBSERVADAS AS CONDICOES LEGAIS. (CO) 10 (DEZ) ANOS CONTADOS A PARTIR DE 17/09/2019, OBSERVADAS AS CONDICOES LEGAIS
BRPI0606145 B1	20290917	PEXP		Calculated Patent Term Expiry	
BRPI0606145 B8	20260206	PEXP		Calculated Patent Term Expiry	

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	
CN1863513 B	20240805	PEXP		Calculated Patent Term Expiry	
CN1863514 A	20061115	LSPB	+	published / reissued	
CN1863514 A	20061115	LSPB	+C06	PUBLICATION	
CN1917862 A	20070221	LSPB	+	published / reissued	
CN1917862 A	20070221	LSPB	+C06	PUBLICATION	
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 A	20070613	LSPB	PB01	公开 (The publication of application)	TEXT : 公开 (DISCLOSURE)
CN1980643 B	20120530	LSGT	+	granted / extensions (spc, cpc, pte)	
CN1980643 B	20120530	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN1980643 B	20120530	LSGT	+GR01	授权 (The grant of patent right)	TEXT : 授权 (AUTHORIZATION)
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	20190405	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 : 20180420
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)	
CY1110609 T1	20300211	PEXP		Calculated Patent Term Expiry	
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	20110726	LSAS	R081	CHANGE OF APPLICANT/PATENTEE	PARTYTYPE : OWNER OWNER : GRÜNENTHAL GMBH, 52078 AACHEN, DE 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)	
DK1658054 T3	20240805	PEXP		Calculated Patent Term Expiry	
DK1658055 T3	20070702	LSGT	+	granted / extensions (spc, cpc, pte)	
DK1658055 T3	20240805	PEXP		Calculated Patent Term Expiry	
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)	
DK1842533 T3	20130527	LSGT	+	granted / extensions (spc, cpc, pte)	
DK1842533 T3	20240805	PEXP		Calculated Patent Term Expiry	
DK1842533 T3	20240805	PEXP		Calculated Patent Term Expiry	
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
EP1658054 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
EP1658054 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
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
EP1658054 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
EP1658054 A1	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
EP1658054 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
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
EP1658054 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
EP1658054 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
EP1658054 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
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
EP1658054 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
EP1658054 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
EP1658054 A1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20160714

				NATIONAL OFFICE TO EPO]	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 NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20160624 YEAR OF FEE PAYMENT : 13
EP1658054 B1	20070627	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1658054 B1	20070627	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D TEXT : NOT ENGLISH
EP1658054 B1	20070731	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
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
EP1658054 B1	20071017	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : EP REF DOCUMENT NUMBER : 20070402714 COUNTRY OF REF DOCUMENT : GR
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
EP1658054 B1	20080201	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2289542 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP1658054 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
EP1658054 B1	20080507	LSOP	-26	OPPOSITION FILED	PARTYTYPE : OPPONENT OPPONENT : PURDUE PHARMA LP EFFECTIVE DATE : 20080327
EP1658054 B1	20080701	LSOP	-NLR1	NL: OPPOSITION HAS BEEN FILED WITH THE EPO	PARTYTYPE : OPPONENT REF COUNTRY CODE : EP OPPONENT : PURDUE PHARMA LP
EP1658054 B1	20100324	LSRE	+27O	OPPOSITION REJECTED	EFFECTIVE DATE : 20091021
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	COUNTRY OF REF DOCUMENT :

				NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	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 EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20160810 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 : 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
EP1658054 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
EP1658054 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
EP1658054 B1	20170714	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 14
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
EP1658054 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
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
EP1658054 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
EP1658054 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
EP1658054 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
EP1658054 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
EP1658054 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
EP1658054 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
EP1658054 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20170814

				NATIONAL OFFICE TO EPO]	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 : FI PAYMENT DATE : 20170809 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 : CY PAYMENT DATE : 20170710 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 : 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
EP1658054 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
EP1658054 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
EP1658054 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
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
EP1658054 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
EP1658054 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
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
EP1658054 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
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
EP1658054 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
EP1658054 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
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	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
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	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 EPO]	COUNTRY OF REF DOCUMENT : GB 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 : 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	20190731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20190613 YEAR OF FEE PAYMENT : 16
EP1658054 B1	20190830	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20190724 YEAR OF FEE PAYMENT : 16
EP1658054 B1	20190830	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE PAYMENT DATE : 20190628 YEAR OF FEE PAYMENT : 16
EP1658054 B1	20190830	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG PAYMENT DATE : 20190614 YEAR OF FEE PAYMENT : 16
EP1658054 B1	20190830	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20190617 YEAR OF FEE PAYMENT : 16
EP1658054 B1	20190930	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20190814 YEAR OF FEE PAYMENT : 16
EP1658054 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20190831 YEAR OF FEE PAYMENT : 16
EP1658054 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY PAYMENT DATE : 20190708 YEAR OF FEE PAYMENT : 16
EP1658054 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20190716 YEAR OF FEE PAYMENT : 16
EP1658054 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20190813 YEAR OF FEE PAYMENT : 16
EP1658054 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20190813 YEAR OF FEE PAYMENT : 16
EP1658054 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20190701 YEAR OF FEE PAYMENT : 16
EP1658054 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO	COUNTRY OF REF DOCUMENT :

				NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	CZ PAYMENT DATE : 20190718 YEAR OF FEE PAYMENT : 16
EP1658054 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20190805 YEAR OF FEE PAYMENT : 16
EP1658054 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20190821 YEAR OF FEE PAYMENT : 16
EP1658054 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK PAYMENT DATE : 20190701 YEAR OF FEE PAYMENT : 16
EP1658054 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20190725 YEAR OF FEE PAYMENT : 16
EP1658054 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20190813 YEAR OF FEE PAYMENT : 16
EP1658054 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20190812 YEAR OF FEE PAYMENT : 16
EP1658054 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20190711 YEAR OF FEE PAYMENT : 16
EP1658054 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20190902 YEAR OF FEE PAYMENT : 16
EP1658054 B1	20191129	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20190628 YEAR OF FEE PAYMENT : 16
EP1658054 B1	20191129	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20190710 YEAR OF FEE PAYMENT : 16
EP1658054 B1	20191231	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20190725 YEAR OF FEE PAYMENT : 16
EP1658054 B1	20191231	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20190731 YEAR OF FEE PAYMENT : 16
EP1658054 B1	20200131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20190819 YEAR OF FEE PAYMENT : 16
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 [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE PAYMENT DATE : 20160727 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	COUNTRY OF REF DOCUMENT : SI

				[ANNOUNCED FROM NATIONAL OFFICE TO EPO]	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	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20170901 YEAR OF FEE PAYMENT : 14

				EPO]	
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 NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : 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 [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20180614 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 [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20180810 YEAR OF FEE PAYMENT : 15
EP1658055 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO	COUNTRY OF REF DOCUMENT :

				NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	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	20190731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20190613 YEAR OF FEE PAYMENT : 16
EP1658055 B1	20190830	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE PAYMENT DATE : 20190628 YEAR OF FEE PAYMENT : 16
EP1658055 B1	20190830	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20190724 YEAR OF FEE PAYMENT : 16
EP1658055 B1	20190830	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG PAYMENT DATE : 20190614 YEAR OF FEE PAYMENT : 16
EP1658055 B1	20190830	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20190617 YEAR OF FEE PAYMENT : 16
EP1658055 B1	20190930	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20190814 YEAR OF FEE PAYMENT : 16
EP1658055 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20190725 YEAR OF FEE PAYMENT : 16
EP1658055 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK PAYMENT DATE : 20190701 YEAR OF FEE PAYMENT : 16
EP1658055 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20190701 YEAR OF FEE PAYMENT : 16
EP1658055 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20190716 YEAR OF FEE PAYMENT : 16
EP1658055 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20190718 YEAR OF FEE PAYMENT : 16
EP1658055 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20190813 YEAR OF FEE PAYMENT : 16
EP1658055 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20190831 YEAR OF FEE PAYMENT : 16
EP1658055 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20190813 YEAR OF FEE PAYMENT : 16
EP1658055 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : CY

				[ANNOUNCED FROM NATIONAL OFFICE TO EPO]	PAYMENT DATE : 20190708 YEAR OF FEE PAYMENT : 16
EP1658055 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20190711 YEAR OF FEE PAYMENT : 16
EP1658055 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20190813 YEAR OF FEE PAYMENT : 16
EP1658055 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20190812 YEAR OF FEE PAYMENT : 16
EP1658055 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20190821 YEAR OF FEE PAYMENT : 16
EP1658055 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20190902 YEAR OF FEE PAYMENT : 16
EP1658055 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20190805 YEAR OF FEE PAYMENT : 16
EP1658055 B1	20191129	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20190710 YEAR OF FEE PAYMENT : 16
EP1658055 B1	20191129	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20190628 YEAR OF FEE PAYMENT : 16
EP1658055 B1	20191231	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20190725 YEAR OF FEE PAYMENT : 16
EP1658055 B1	20191231	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20190731 YEAR OF FEE PAYMENT : 16
EP1658055 B1	20200131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20190819 YEAR OF FEE PAYMENT : 16
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	COUNTRY OF REF DOCUMENT :

				NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	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 [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI 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 : 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	COUNTRY OF REF DOCUMENT : LT

				[ANNOUNCED FROM NATIONAL OFFICE TO EPO]	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 [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20161024 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	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20171231 YEAR OF FEE PAYMENT : 14

				EPO]	
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

				EPO]	
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	20200228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20191115 YEAR OF FEE PAYMENT : 16
EP1699440 B1	20200228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20191209 YEAR OF FEE PAYMENT : 16
EP1699440 B1	20200331	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20191213 YEAR OF FEE PAYMENT : 16
EP1699440 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20191219 YEAR OF FEE PAYMENT : 16
EP1699440 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20200102 YEAR OF FEE PAYMENT : 16
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 NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : 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	COUNTRY OF REF DOCUMENT : FR

				[ANNOUNCED FROM NATIONAL OFFICE TO EPO]	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	REF COUNTRY CODE : CH

				NATIONAL CODE	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	COUNTRY OF REF DOCUMENT : SI NOTIFICATIONOFLAPSE :

				POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	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
EP1740156 B8	20190912	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20190912
EP1740156 B8	20191031	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 : 20180421
EP1740156 B8	20191129	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 : 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	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20160511

				NATIONAL OFFICE TO EPO]	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 NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20160516 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 : 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	COUNTRY OF REF DOCUMENT : EE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION

				NATIONAL OFFICE TO EPO]	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 [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 : 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 NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT 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	REF COUNTRY CODE : CH

				NATIONAL CODE	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 : 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	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	COUNTRY OF REF DOCUMENT : HU NOTIFICATIONOFLAPSE :

				POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	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	20190531	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 : 20180630
EP1765298 B1	20190531	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 : 20180630
EP1765298 B1	20190531	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 : 20180629
EP1765298 B1	20190916	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20190916
EP1765298 B1	20191031	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 : 20180630
EP1765298 B1	20191129	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 : 20180629
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	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20160822 YEAR OF FEE PAYMENT : 13

				EPO]	
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	EXTENSION FEES PAID	COUNTRY OF REF DOCUMENT : HR PAYMENT DATE : 20080514
EP1842533 A3	20080723	LSFE	+AXX	EXTENSION FEES PAID	COUNTRY OF REF DOCUMENT : LT PAYMENT DATE : 20080514
EP1842533 A3	20080723	LSFE	+AXX	EXTENSION FEES PAID	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 [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20160725 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	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20170630 YEAR OF FEE PAYMENT : 14

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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 [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK PAYMENT DATE : 20170703 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 NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK 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 : 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	COUNTRY OF REF DOCUMENT :

				NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	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 NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20180725 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 : 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	20190731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20190613 YEAR OF FEE PAYMENT : 16
EP1842533 B1	20190830	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : BG

				[ANNOUNCED FROM NATIONAL OFFICE TO EPO]	PAYMENT DATE : 20190614 YEAR OF FEE PAYMENT : 16
EP1842533 B1	20190830	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20190724 YEAR OF FEE PAYMENT : 16
EP1842533 B1	20190830	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20190617 YEAR OF FEE PAYMENT : 16
EP1842533 B1	20190830	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE PAYMENT DATE : 20190628 YEAR OF FEE PAYMENT : 16
EP1842533 B1	20190930	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20190814 YEAR OF FEE PAYMENT : 16
EP1842533 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20190725 YEAR OF FEE PAYMENT : 16
EP1842533 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK PAYMENT DATE : 20190701 YEAR OF FEE PAYMENT : 16
EP1842533 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20190805 YEAR OF FEE PAYMENT : 16
EP1842533 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20190821 YEAR OF FEE PAYMENT : 16
EP1842533 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20190813 YEAR OF FEE PAYMENT : 16
EP1842533 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20190718 YEAR OF FEE PAYMENT : 16
EP1842533 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20190831 YEAR OF FEE PAYMENT : 16
EP1842533 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20190712 YEAR OF FEE PAYMENT : 16
EP1842533 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY PAYMENT DATE : 20190708 YEAR OF FEE PAYMENT : 16
EP1842533 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20190813 YEAR OF FEE PAYMENT : 16
EP1842533 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20190711 YEAR OF FEE PAYMENT : 16
EP1842533 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20190726 YEAR OF FEE PAYMENT : 16
EP1842533 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20190902 YEAR OF FEE PAYMENT : 16
EP1842533 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20190716

				NATIONAL OFFICE TO EPO]	YEAR OF FEE PAYMENT : 16
EP1842533 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20190813 YEAR OF FEE PAYMENT : 16
EP1842533 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20190812 YEAR OF FEE PAYMENT : 16
EP1842533 B1	20191129	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20190710 YEAR OF FEE PAYMENT : 16
EP1842533 B1	20191129	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20190628 YEAR OF FEE PAYMENT : 16
EP1842533 B1	20191231	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20190725 YEAR OF FEE PAYMENT : 16
EP1842533 B1	20191231	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20190731 YEAR OF FEE PAYMENT : 16
EP1842533 B1	20200131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20190819 YEAR OF FEE PAYMENT : 16
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	COUNTRY OF REF DOCUMENT : RO

				[ANNOUNCED FROM NATIONAL OFFICE TO EPO]	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	COUNTRY OF REF DOCUMENT : CY PAYMENT DATE : 20180109

				NATIONAL OFFICE TO EPO]	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 : 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	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	COUNTRY OF REF DOCUMENT : LT PAYMENT DATE : 20190128 YEAR OF FEE PAYMENT : 14

				EPO]	
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	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	20190731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20190205 YEAR OF FEE PAYMENT : 14
EP1845956 B1	20200131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK PAYMENT DATE : 20191230 YEAR OF FEE PAYMENT : 15
EP1845956 B1	20200131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG PAYMENT DATE : 20191217 YEAR OF FEE PAYMENT : 15
EP1845956 B1	20200131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20191230 YEAR OF FEE PAYMENT : 15
EP1845956 B1	20200228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20191212 YEAR OF FEE PAYMENT : 15
EP1845956 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LV PAYMENT DATE : 20200129 YEAR OF FEE PAYMENT : 15
EP1845956 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20200211 YEAR OF FEE PAYMENT : 15

EP1845956 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20200129 YEAR OF FEE PAYMENT : 15
EP1845956 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20200212 YEAR OF FEE PAYMENT : 15
EP1845956 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20200115 YEAR OF FEE PAYMENT : 15
EP1845956 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20200210 YEAR OF FEE PAYMENT : 15
EP1845956 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LT PAYMENT DATE : 20200131 YEAR OF FEE PAYMENT : 15
EP1845956 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20200302 YEAR OF FEE PAYMENT : 15
EP1845956 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20200206 YEAR OF FEE PAYMENT : 15
EP1845956 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20200121 YEAR OF FEE PAYMENT : 15
EP1845956 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20200110 YEAR OF FEE PAYMENT : 15
EP1845956 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20200210 YEAR OF FEE PAYMENT : 15
EP1845956 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20200129 YEAR OF FEE PAYMENT : 15
EP1845956 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20200210 YEAR OF FEE PAYMENT : 15
EP1845956 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20200127 YEAR OF FEE PAYMENT : 15
EP1845956 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE PAYMENT DATE : 20200102 YEAR OF FEE PAYMENT : 15
EP1845956 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20200128 YEAR OF FEE PAYMENT : 15
EP1845956 B1	20200529	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IS PAYMENT DATE : 20200114 YEAR OF FEE PAYMENT : 15
EP1845956 B1	20200529	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY PAYMENT DATE : 20200108 YEAR OF FEE PAYMENT : 15
EP1845956 B1	20200529	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20200213 YEAR OF FEE PAYMENT : 15

EP1845956 B1	20200529	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20200114 YEAR OF FEE PAYMENT : 15
EP1845956 B1	20200529	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20200114 YEAR OF FEE PAYMENT : 15
EP1845956 B1	20200529	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20200124 YEAR OF FEE PAYMENT : 15
EP1845956 B1	20200529	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20200123 YEAR OF FEE PAYMENT : 15
EP1845956 B1	20200630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20200113 YEAR OF FEE PAYMENT : 15
EP1845956 B1	20200630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20200206 YEAR OF FEE PAYMENT : 15
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	EXTENSION FEES PAID	COUNTRY OF REF DOCUMENT : HR PAYMENT DATE : 20080528
EP1859789 A1	20080806	LSFE	+AXX	EXTENSION FEES PAID	COUNTRY OF REF DOCUMENT : LT

					PAYMENT DATE : 20080528
EP1859789 A1	20080806	LSFE	+AXX	EXTENSION FEES PAID	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 [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE PAYMENT DATE : 20160727 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	COUNTRY OF REF DOCUMENT : CY PAYMENT DATE : 20160706

				NATIONAL OFFICE TO EPO]	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 NATIONAL CODE	REF COUNTRY CODE : AT 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	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20160809 YEAR OF FEE PAYMENT : 13

				EPO]	
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 EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20160804 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 : 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	COUNTRY OF REF DOCUMENT :

				NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	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 [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20170809 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 [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20180612 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	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20180725 YEAR OF FEE PAYMENT : 15

				EPO]	
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 [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR 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	20190731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20190613 YEAR OF FEE PAYMENT : 16
EP1859789 B1	20190830	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20190724 YEAR OF FEE PAYMENT : 16
EP1859789 B1	20190830	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE PAYMENT DATE : 20190628 YEAR OF FEE PAYMENT : 16
EP1859789 B1	20190830	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG PAYMENT DATE : 20190614 YEAR OF FEE PAYMENT : 16
EP1859789 B1	20190830	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20190617 YEAR OF FEE PAYMENT : 16
EP1859789 B1	20190930	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20190814 YEAR OF FEE PAYMENT : 16
EP1859789 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20190821 YEAR OF FEE PAYMENT : 16
EP1859789 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20190813 YEAR OF FEE PAYMENT : 16
EP1859789 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20190812 YEAR OF FEE PAYMENT : 16

EP1859789 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20190813 YEAR OF FEE PAYMENT : 16
EP1859789 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20190712 YEAR OF FEE PAYMENT : 16
EP1859789 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20190725 YEAR OF FEE PAYMENT : 16
EP1859789 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20190718 YEAR OF FEE PAYMENT : 16
EP1859789 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20190716 YEAR OF FEE PAYMENT : 16
EP1859789 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20190831 YEAR OF FEE PAYMENT : 16
EP1859789 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK PAYMENT DATE : 20190701 YEAR OF FEE PAYMENT : 16
EP1859789 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20190813 YEAR OF FEE PAYMENT : 16
EP1859789 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY PAYMENT DATE : 20190708 YEAR OF FEE PAYMENT : 16
EP1859789 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20190726 YEAR OF FEE PAYMENT : 16
EP1859789 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20190805 YEAR OF FEE PAYMENT : 16
EP1859789 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20190711 YEAR OF FEE PAYMENT : 16
EP1859789 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20190902 YEAR OF FEE PAYMENT : 16
EP1859789 B1	20191129	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20190710 YEAR OF FEE PAYMENT : 16
EP1859789 B1	20191129	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20190628 YEAR OF FEE PAYMENT : 16
EP1859789 B1	20191231	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20190725 YEAR OF FEE PAYMENT : 16
EP1859789 B1	20191231	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20190731 YEAR OF FEE PAYMENT : 16
EP1859789 B1	20200131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20190819 YEAR OF FEE PAYMENT : 16

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	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20180112

				NATIONAL OFFICE TO EPO]	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 NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20180212 YEAR OF FEE PAYMENT : 13
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	COUNTRY OF REF DOCUMENT :

				NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	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	COUNTRY OF REF DOCUMENT : HU

				[ANNOUNCED FROM NATIONAL OFFICE TO EPO]	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	20190731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20190205 YEAR OF FEE PAYMENT : 14
EP2478896 B1	20200131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG PAYMENT DATE : 20191217 YEAR OF FEE PAYMENT : 15
EP2478896 B1	20200131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK PAYMENT DATE : 20191230 YEAR OF FEE PAYMENT : 15
EP2478896 B1	20200131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20191230 YEAR OF FEE PAYMENT : 15
EP2478896 B1	20200228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20191212 YEAR OF FEE PAYMENT : 15
EP2478896 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20200210 YEAR OF FEE PAYMENT : 15
EP2478896 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20200302 YEAR OF FEE PAYMENT : 15
EP2478896 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20200121 YEAR OF FEE PAYMENT : 15
EP2478896 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20200210 YEAR OF FEE PAYMENT : 15
EP2478896 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20200110 YEAR OF FEE PAYMENT : 15
EP2478896 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20200128 YEAR OF FEE PAYMENT : 15
EP2478896 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20200212 YEAR OF FEE PAYMENT : 15
EP2478896 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LT PAYMENT DATE : 20200131 YEAR OF FEE PAYMENT : 15
EP2478896 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20200211

				NATIONAL OFFICE TO EPO]	YEAR OF FEE PAYMENT : 15
EP2478896 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20200129 YEAR OF FEE PAYMENT : 15
EP2478896 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20200210 YEAR OF FEE PAYMENT : 15
EP2478896 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20200129 YEAR OF FEE PAYMENT : 15
EP2478896 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20200115 YEAR OF FEE PAYMENT : 15
EP2478896 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LV PAYMENT DATE : 20200129 YEAR OF FEE PAYMENT : 15
EP2478896 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20200206 YEAR OF FEE PAYMENT : 15
EP2478896 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE PAYMENT DATE : 20200102 YEAR OF FEE PAYMENT : 15
EP2478896 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20200127 YEAR OF FEE PAYMENT : 15
EP2478896 B1	20200529	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20200124 YEAR OF FEE PAYMENT : 15
EP2478896 B1	20200529	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20200114 YEAR OF FEE PAYMENT : 15
EP2478896 B1	20200529	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20200114 YEAR OF FEE PAYMENT : 15
EP2478896 B1	20200529	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20200213 YEAR OF FEE PAYMENT : 15
EP2478896 B1	20200529	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IS PAYMENT DATE : 20200114 YEAR OF FEE PAYMENT : 15
EP2478896 B1	20200529	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20200123 YEAR OF FEE PAYMENT : 15
EP2478896 B1	20200529	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY PAYMENT DATE : 20200108 YEAR OF FEE PAYMENT : 15
EP2478896 B1	20200630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20200113 YEAR OF FEE PAYMENT : 15
EP2478896 B1	20200630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20200206 YEAR OF FEE PAYMENT : 15
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	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 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	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	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	
IL178787 A1	20191128	LSLE	-MM9K	PATENT NOT IN FORCE DUE TO NON-PAYMENT OF RENEWAL FEES	
IL180335 A1	20131031	LSPB	+	published / reissued	
IL180335 A1	20140227	LSGT	+FF	PATENT GRANTED	
IL180335 A1	20140227	LSFE	+KB	PATENT RENEWED	
IL180335 A1	20200130	LSLE	-MM9K	PATENT NOT IN FORCE DUE TO NON-PAYMENT OF RENEWAL FEES	
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
JP2007501201 T2	20120302	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 4939217 COUNTRY OF REF DOCUMENT : JP
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 OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 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
JP2007501202 T2	20120302	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 4939218 COUNTRY OF REF DOCUMENT : JP

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	20120106	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 4895821 COUNTRY OF REF DOCUMENT : JP
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	TEXT : JAPANESE INTERMEDIATE CODE: R150

				UTILITY MODEL	
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	20130222	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 5202963 COUNTRY OF REF DOCUMENT : JP
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	20191226	LSFE	R20	特許料納付書 (Patent fee payment form)	EFFECTIVE DATE : 20191224
JP4895821 B2	20200107	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	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	20191128	LSFE	R20	特許料納付書 (Patent fee payment form)	EFFECTIVE DATE : 20191121
JP4939217 B2	20191203	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
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	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	20191226	LSFE	R20	特許料納付書 (Patent fee payment form)	EFFECTIVE DATE : 20191224
JP4939218 B2	20200107	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	20200130	LSFE	R20	特許料納付書 (Patent fee payment form)	EFFECTIVE DATE : 20200129
JP5202963 B2	20200131	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
NZ560203 A	20200131	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	TEXT : PATENT RENEWED FOR 1 YEAR UNTIL 06 FEB 2021 BY CPA GLOBAL EFFECTIVE DATE : 20191227
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	
PE20050353 A1	20050710	LSPB	+	published / reissued	
PE20050728 A1	20051110	LSPB	+	published / reissued	
PE20050814 A1	20051110	LSPB	+	published / reissued	
PE20060195 A1	20060510	LSPB	+	published / reissued	
PE20060482 A1	20060804	LSPB	+	published / reissued	
PE20061087 A1	20061215	LSPB	+	published / reissued	
PL1658054 T3	20071130	LSGT	+	granted / extensions (spc, cpc, pte)	
PL1658055 T3	20070831	LSGT	+	granted / extensions (spc, cpc, pte)	
PL1699440 T3	20100430	LSGT	+	granted / extensions (spc, cpc, pte)	
PL1740156 T3	20111230	LSGT	+	granted / extensions (spc, cpc, pte)	
PL1765298 T3	20130131	LSGT	+	granted / extensions (spc, cpc, pte)	
PL1842533 T3	20130830	LSGT	+	granted / extensions (spc, cpc, pte)	
PL1845956 T3	20170831	LSGT	+	granted / extensions (spc, cpc, pte)	
PL1859789 T3	20160831	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)	
US10675278 BB	20200609	LSGT	+	granted / extensions (spc, cpc, pte)	
US10675278 BB	20200520	LSGT	PAT1	Patented Case	
US10675278 BB	20360304	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	
US2016184297 AA	20190806	LSES	NFA1	Non Final Action Mailed	
US2016184297 AA	20200204	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2016184297 AA	20200424	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2016184297 AA	20200508	LSFE	+PPV1	Publications -- Issue Fee Payment Verified	
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	
US2016367487 AA	20200111	LSAL	NAF1	Notice of Appeal Filed	
US2016367487 AA	20200111	LSAL	STCV	INFORMATION ON STATUS: APPEAL PROCEDURE	TEXT : NOTICE OF APPEAL FILED
US2016367487 AA	20200413	LSAL	ABE1	Appeal Brief (or Supplemental Brief) Entered and Forwarded to Examiner	
US2016367487 AA	20200413	LSAL	STCV	INFORMATION ON STATUS: APPEAL PROCEDURE	TEXT : APPEAL BRIEF (OR SUPPLEMENTAL BRIEF) ENTERED AND FORWARDED TO EXAMINER
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	
US2018243237 AA	20191220	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2018369235 AA	20181227	LSPB	+	published / reissued	
US2018369235 AA	20190730	LSES	NFA1	Non Final Action Mailed	
US2018369235 AA	20191126	LSES	NFA1	Non Final Action Mailed	
US2018369235 AA	20200616	LSES	NFA1	Non Final Action Mailed	
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	
US2019008849 AA	20190814	LSWD	-ABD2	Abandoned -- Failure to Pay Issue Fee	
US2019029976 AA	20190131	LSPB	+	published / reissued	
US2019029976 AA	20190821	LSES	NFA1	Non Final Action Mailed	
US2019029976 AA	20200319	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	

US2019321358 AA	20191024	LSPB	+	published / reissued	
US2019321358 AA	20190820	LSES	NFA1	Non Final Action Mailed	
US2019321358 AA	20200320	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2020188333 AA	20200618	LSPB	+	published / reissued	
US2020215053 AA	20200709	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	20190802	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 8
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	20190802	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US8114384 BB	20191029	LSRE	CC	CERTIFICATE OF CORRECTION	
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	20191121	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 8
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	20200430	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 8
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	20200727	LSFE	FEPP	FEE PAYMENT PROCEDURE	TEXT : MAINTENANCE FEE REMINDER MAILED (ORIGINAL EVENT CODE: REM.); ENTITY STATUS OF PATENT OWNER: LARGE ENTITY
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	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
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WO05016313 A1	20060207	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2006/01090 COUNTRY OF REF DOCUMENT : ZA
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WO05016313 A1	20060223	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2004264666 COUNTRY OF REF DOCUMENT : AU DATE OF REF DOCUMENT : 20040805 KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
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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

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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
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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
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WO05016314 A1	20060203	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1020067002402 COUNTRY OF REF DOCUMENT : KR
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WO05016314 A1	20060306	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2006106726 COUNTRY OF REF DOCUMENT : RU
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WO05063214 A1	20050714	LSPB	+	published / reissued	
WO05063214 A1	20060614	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2004804271 COUNTRY OF REF DOCUMENT : EP
WO05063214 A1	20060614	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 176296 COUNTRY OF REF DOCUMENT : IL
WO05063214 A1	20060616	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2004308653 COUNTRY OF REF DOCUMENT : AU
WO05063214 A1	20060620	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 11471438 COUNTRY OF REF DOCUMENT : US
WO05063214 A1	20060622	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2551231 COUNTRY OF REF DOCUMENT : CA
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WO05063214 A1	20060706	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2004308653 COUNTRY OF REF DOCUMENT : AU
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WO05063214 A1	20070104	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 11471438 COUNTRY OF REF DOCUMENT : US
WO05102286 A1	20051103	LSPB	+	published / reissued	
WO05102286 A1	20061014	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2005741758 COUNTRY OF REF DOCUMENT : EP
WO05102286 A1	20061022	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 178787 COUNTRY OF REF DOCUMENT : IL
WO05102286 A1	20061023	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2007508834 COUNTRY OF REF DOCUMENT : JP
WO05102286 A1	20061026	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 6286/DELNP/2006 COUNTRY OF REF DOCUMENT : IN
WO05102286 A1	20061221	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 200580020544.3 COUNTRY OF REF DOCUMENT : CN
WO05102286 A1	20070110	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2005741758 COUNTRY OF REF DOCUMENT : EP
WO06002883 A1	20060112	LSPB	+	published / reissued	
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WO06002883 A1	20061226	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 180335 COUNTRY OF REF DOCUMENT : IL
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WO06002883 A1	20070301	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 200580029337.4 COUNTRY OF REF DOCUMENT : CN
WO06002883 A1	20070328	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2005757777 COUNTRY OF REF DOCUMENT : EP
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WO06082099 A1	20070712	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2006706682 COUNTRY OF REF DOCUMENT : EP
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WO06082099 A1	20070725	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2006210145 COUNTRY OF REF DOCUMENT : AU
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WO06082099 A1	20071024	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2006706682 COUNTRY OF REF DOCUMENT : EP
WO06082099 A1	20090602	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : PI0606145 COUNTRY OF REF DOCUMENT : BR KIND CODE OF REF DOCUMENT : A2 DESIGNATED STATE(S) :

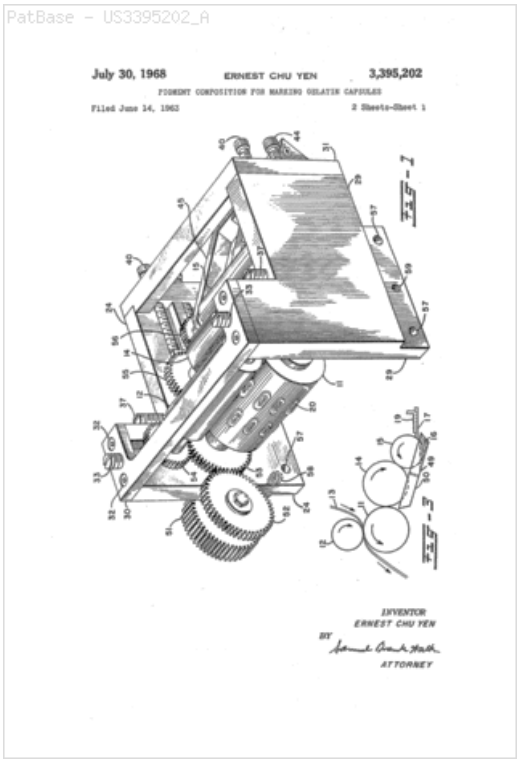
ZA200601087 A	20070425	LSGT	+	granted / extensions (spc, cpc, pte)
ZA200601087 A	20240804	PEXP		Calculated Patent Term Expiry
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ZA200601090 A	20240804	PEXP		Calculated Patent Term Expiry
ZA200705836 A	20080625	LSGT	+	granted / extensions (spc, cpc, pte)
ZA200705836 A	20270715	PEXP		Calculated Patent Term Expiry

13) Family number: 832006 (US3395202A)

Title: Pigment composition for marking gelating capsules

Abstract: (Claim 1) 1. A method of forming pigment marked edible soft **gelatin** capsules having pigmented indicia on the surface which comprises: suspending from 10 to 20 parts of a non-toxic water and alcohol insoluble pigment selected from the group consisting of titanium dioxide, calcium carbonate, barium sulfate, charcoal, iron oxides and the lakes of dyes approved for drug and cosmetic use, in to 60 parts of a polyhydric alcohol selected from the group consisting of propylene glycol, polyethylene glycol and glycerine and sufficient water to make a total of 100 parts with the aid of 0.005 to 1 part of a non-toxic surface active suspending agent in the presence of from about 0.5 to 3 parts of a water-soluble non-toxic cellulose derivative selected from the group consisting of methyl cellulose and sodium carboxymethyl cellulose, applying the thus formed pigment marking fluid to a wet soft **gelatin** strip, forming **gelatin** capsules from said strip, and thereafter drying the pigment marked capsules.

Classifications:
International (IPC 8-9): A61J3/00 A61K9/20 A61K9/48 B41F17/36 B41M1/26 B41M1/40 (Advanced/Invention);
A61J3/00 A61K9/20 A61K9/48 B41F17/00 B41M1/26 B41M1/40 (Core/Invention)
International (IPC 1-7): A61K9/48 B41M1/26 B41M1/40
CPC: A61J3/007 A61K9/2072 A61K9/4883 B41F17/36 B41M1/26 B41M1/40
European: A61J3/00M A61K9/20K A61K9/48P B41F17/36 B41M1/26 B41M1/40
US: 101/464 101/491 106/31.69 264/132 424/10.2



Family:

Publication number	Publication date	Application number	Application date
US3395202 A	19680730	US19630287841	19630614

Priority:
US19630287841 19630614

Probable Assignee:	AMERICAN CYANAMID CO
Assignee(s): (std):	AMERICAN CYANAMID CO
Assignee(s):	AMERICAN CYANAMID COMPANY
Inventor(s): (std):	YEN ERNEST CHU ; CHU YEN ERNEST

Legal status (INPADOC)

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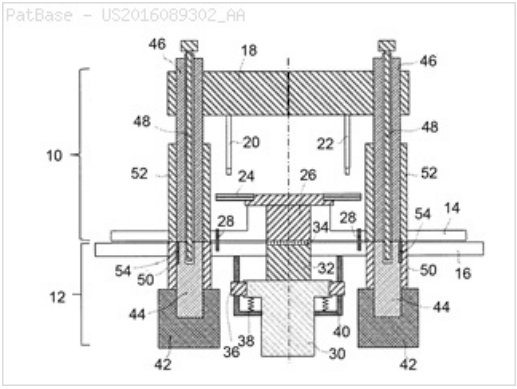
Patent	Date recorded	Event group	Code	Event	Details
US3395202 A	19680730	LSGT	+	granted / extensions (spc, cpc, pte)	

14) Family number: 61959008 (US2016089302A)

Title: DOSING STATION FOR A CAPSULE FILLING MACHINE

Abstract: A dosing station for a capsule filling machine comprises a dosing unit in which capsule lower parts are filled with a filling material via a filling apparatus and a drive unit with at least one drive that drives at least one component of the dosing unit. The drive unit is arranged beneath a supporting plate, and detachable fastening and coupling means detachably fastens the dosing unit on the supporting plate. Where the dosing unit is detachably fastened on the supporting plate, the at least one drive is coupled to the at least one component. In the detached state of the dosing unit from the supporting plate, the coupling of the at least one drive to the at least one component is canceled. In this way, the dosing unit can be removed as a module from the dosing station.

Classifications:
International (IPC 8-9): A61J3/07 B65B1/04 B65B1/24 B65B1/38 B65B3/00 B65B59/04 B65B63/02 (Advanced/Invention)
CPC: A61J3/074 B65B1/24 B65B1/385 B65B3/003 B65B59/04 B65B63/022 B65B1/04
US: 53/284.5



Family:

Publication number	Publication date	Application number	Application date
DE102014114091 B3	20160331	DE201410114091	20140929
DE502015000555 D1	20170309	DE201550000555T	20150925
EP3000737 A1	20160330	EP20150186813	20150925
EP3000737 B1	20170201	EP20150186813	20150925
US2016089302 AA	20160331	US20150868973	20150929
US10449119 BB	20191022	US20150868973	20150929

Priority:
DE201410114091 20140929 EP20150186813 20150925

Probable Assignee: FETTE ENGINEERING GMBH

Assignee(s): (std): FETTE ENG GMBH ; FETTE ENGINEERING GMBH

Inventor(s): (std): MALICK DANIEL ; NAKHAVOLI AFSANEH ; SCHEFFLER JAN FABIAN ; KRUSE JAN ERIC ; HEINRICH THOMAS ; PEHLKE CHRISTIAN

Agent(s): HAUCK PATENTANWALTSPARTNERSCHAFT MBB; YOUNG BASILE HANLON AND MACFARLANE PC

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
DE102014114091 B3	20160331	LSGT	+	granted / extensions (spc, cpc, pte)	
DE102014114091 B3	20140929	LSES	+R012	REQUEST FOR EXAMINATION VALIDLY FILED	
DE102014114091 B3	20150714	LSES	R016	RESPONSE TO EXAMINATION COMMUNICATION	
DE102014114091 B3	20151211	LSGT	+R018	GRANT DECISION BY EXAMINATION SECTION/EXAMINING DIVISION	
DE102014114091 B3	20170103	LSGT	+R020	PATENT GRANT NOW FINAL	
DE102014114091 B3	20340929	PEXP		Calculated Patent Term Expiry	
EP3000737 A1	20160330	LSPB	+	published / reissued	
EP3000737 A1	20160413	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20160307
EP3000737 A1	20160608	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20160513
EP3000737 A1	20161102	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20161005
EP3000737 B1	20170201	LSGT	+	granted / extensions (spc,	

				cpc, pte)	
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EP3000737 B1	20170215	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP3000737 B1	20170215	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 865328 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20170215
EP3000737 B1	20170222	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D TEXT : LANGUAGE OF EP DOCUMENT: GERMAN
EP3000737 B1	20170309	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 502015000555 COUNTRY OF REF DOCUMENT : DE
EP3000737 B1	20170612	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : LT REF LEGAL EVENT CODE : MG4D
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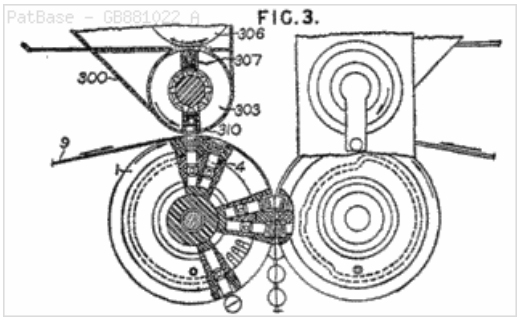
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EP3000737 B1	20350925	PEXP		Calculated Patent Term Expiry	
US10449119 BB	20191022	LSGT	+	granted / extensions (spc, cpc, pte)	
US10449119 BB	20380822	PEXP		Calculated Patent Term Expiry (PTA 1058 days)	
US2016089302 AA	20160331	LSPB	+	published / reissued	
US2016089302 AA	20151119	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : FETTE ENGINEERING GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:SCHEFFLER, JAN FABIAN; MALICK, DANIEL; NAKHAVOLI, AFSANEH; AND OTHERS; SIGNING DATES FROM 20151026 TO 20151106; REEL/FRAME:037087/0237
US2016089302 AA	20190215	LSES	NFA1	Non Final Action Mailed	
US2016089302 AA	20190611	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2016089302 AA	20190911	LSFE	+PPR1	Publications -- Issue Fee Payment Received	
US2016089302 AA	20191002	LSGT	PAT1	Patented Case	
US2016089302 AA	20191002	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE

15) Family number: 29753008 (GB881022A)

Title: Improvements relating to methods and machines for forming and filling capsules of **gelatine** or like material

Abstract: 881,022. Machines for forming capsules. MEHTA, M. K., and MEHTA, M. July 23, 1958 [July 24, 1957], No. 23393/57. Class 94(1). A machine for forming capsules containing granular materials simultaneously produces and fills cavities in two webs which are then sealed together and severed along the peripheries of the cavities to produce the capsules. The webs 9 pass over heater drums 1 having staggered rows of apertures, the bases of which are closed by pistons 4. Above each drum is a hopper 300 for powder, containing a helical agitator 306 and having in its base a rotary feed member 303 with pockets 301 for receiving charges of the material. As each row of filled pockets and drum apertures comes into alignment, the pistons 4 recede inwards to draw the webs into the apertures, and cam operated plungers 306 discharge the material into the cavities so formed. Just prior to the webs being nipped between the drums, the pistons 4 begin to move radially outwards so as to remove air from the cavities prior to sealing and severing continued outward movement of the pistons after sealing insures ejection of any capsules adhering to the drums. Capsules remaining on the web are ejected by a pair of rollers, Fig. 1 (not shown), between which the web passes and which rotate in the opposite direction to its movement. Each hopper may feed a different power so as to produce a capsule containing two materials. According to the Provisional Specification, a partition may be arranged to separate the materials.

Classifications:
International (IPC 8-9): A61J3/07 (Advanced/Invention); A61J3/07 (Core/Invention)
International (IPC 1-7): B65D88/54 B65G3/10 B65G65/48
CPC: A61J3/07
European: A61J3/07



Family:

Publication number	Publication date	Application number	Application date
GB881022 A	19611101	GB19570023393	19570724

Priority:
GB19570023393 19570724

Probable Assignee: MAHARAJ KRISHEN MEHTA
Assignee(s): (std): MAHARAJ KRISHEN MEHTA ; KANTA MEHTA

Legal status (INPADOC)

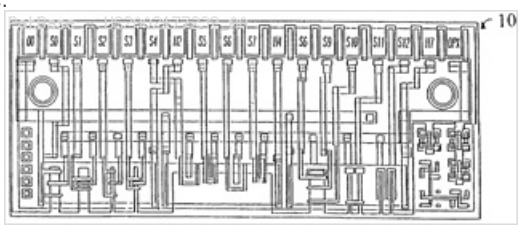
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Patent	Date recorded	Event group	Code	Event	Details
GB881022 A	19611101	LSGT	+	granted / extensions (spc, cpc, pte)	
GB881022 A	19770724	PEXP		Calculated Patent Term Expiry	

16) Family number: 31047008 (US2002177232A)

Title: METHOD AND APPARATUS FOR DETECTING ILLICIT SUBSTANCES

Abstract: The present invention includes a method and apparatus for detecting use of illicit substances by analyzing a sample of breath using electronic sensor technology, including surface acoustic-wave gas sensor technology. The method determines the presence and concentration of the substance (or a class of substances). Diagnostic software is used to identify substances where a stored library of signatures is compared to the signature obtained from the system. Signal processing and neural networks are preferably utilized in the analysis.



Classifications:
International (IPC 8-9): A61B19/00 A61B5/00 A61B5/08 A61B5/083 A61B5/11 A61J1/10 A61J7/00 A61K31/7088 A61K45/00 A61K47/04 A61K47/32 A61K47/34 A61K47/36 A61K47/38 A61K47/48 A61K48/00 A61K49/00 A61K9/14 A61K9/50 A61K9/51 A61M11/00 A61M15/00 A61M16/00 A61M16/01 A61M16/10 A61M31/00 A61M5/00 A61P1/00 A61P1/04 A61P17/00 A61P19/02 A61P25/00 A61P25/04 A61P25/08 A61P25/18 A61P25/22 A61P25/24 A61P29/00 A61P37/06 A61P9/00 A61P9/08 A61P9/10 B32B5/16 G01N1/22 G01N27/02 G01N27/12 G01N29/02 G01N29/036 G01N29/44 G01N33/00 G01N33/15 G01N33/497 G01N33/50 G01N33/53 G01N33/543 G01N33/58 G01N33/66 G01N33/68 G01N37/00 (Advanced/Invention);
A61J7/00 A61M16/10 A61M5/142 A61M5/172 G01N27/02 G01N27/12 G01N31/00 G01N33/15 G01N7/00 (Advanced/Non-invention);
A61B19/00 A61B5/00 A61B5/08 A61B5/11 A61J1/10 A61K31/7088 A61K45/00 A61K47/02 A61K47/32 A61K47/34 A61K47/36 A61K47/38 A61K47/48 A61K48/00 A61K49/00 A61K9/14 A61K9/50 A61K9/51 A61M11/00 A61M16/00 A61M16/01 A61M5/00 A61P1/00 A61P17/00 A61P19/00 A61P25/00 A61P29/00 A61P37/00 A61P9/00 B32B5/16 G01N29/02 G01N29/44 G01N33/00 G01N33/483 G01N33/50 G01N33/53 G01N33/543 G01N33/58 G01N33/66 G01N33/68 (Core/Invention);
A61M16/10 A61M5/142 A61M5/168 G01N33/15 (Core/Non-invention)
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European: A61B5/00 A61B5/08 A61B5/083D A61B5/08S A61B5/145 A61B5/145G A61B5/145P A61B5/41B A61B5/48D A61B5/48H A61K47/48T4B28 A61K47/48W8B A61K47/48W8E2K A61K9/00Z4 A61K9/51 A61M16/01 B82Y30/00 B82Y5/00 G01N29/02F G01N29/036 G01N29/06D4 G01N29/44N G01N33/00D2D2N G01N33/497 G01N33/50 G01N33/53 G01N33/531 G01N33/53F G01N33/542 G01N33/543B G01N33/543D2 G01N33/543D6 G01N33/543K2 G01N33/58 G01N33/58D K61B5/083D K61M16/00A14B2 K61M16/08 K61M16/08A7 K61M16/08C K61M16/10A10C K61M16/10A10E K61M16/10E K61M16/10F2A K61M16/18 K61M16/22 K61M202/02M1 K61M202/04N32 K61M205/18 K61M205/35R1 K61M205/35R2 K61M205/35T1 K61M205/50A K61M205/52 K61M205/80 K61M230/43 K61M230/43C K61M230/43D K61M230/43E K61M5/142 K61M5/172B S01N291/021 S01N291/025G S01N291/042E S01N291/042H S01N291/042J S01N800/52
US: 128/203.12 128/203.13 422/68.1 422/82.01 422/82.010S 422/82.02 422/83 422/83S 422/84 422/84P 422/85 422/86 422/98 423/445 423/445.00BS 423/445B 424/489 424/489P 424/501 424/502 424/9.1 424/9.100P 428/402.2 428/402.22 435/4 435/6 435/6.11 435/6.14 435/6.140P 435/6.16 435/6.160S 435/6.17 435/6P 435/7.1 435/7.100P 435/7.100S 435/7.9 435/7.92 435/79 435/79.2 435/792 436/13 436/151 436/151P 436/164 436/171 436/172 436/173 436/173S 436/501 436/518 436/524 436/528 436/535 436/56 436/56P 436/56S 436/805 436/811 436/815 436/900 600/529 600/529S 600/532 600/532P 604/19 604/19S 604/24 604/24P 604/512 73/23.2 73/23.3 73/23.34

Family:

Publication number	Publication date	Application number	Application date
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Priority:

US19990164250P 19991108	AU20010015893 20001108	EP20000978427 20001108
US20000708789 20001108	WO2000US30692 20001108	US20010292962P 20010523
US20010292962P 20010523	US20020054619 20020122	US20020154201 20020522
WO2002US16157 20020522	US20020178877 20020624	US20020274829 20021021
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US20060512856 20060829	WO2006US46660 20061206	US20110246436 20110927
US20140230043 20140331		

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Agent(s): SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD; SIM AND MCBURNEY; MBM INTELLECTUAL PROPERTY LAW LLP; PERRY ROBERT EDWARD; CLARKE LIONEL PAUL; HASHIMOTO KAZUNORI; SHIMIZU HATSUSHI; OSAKABE SUGURU; SALIWANCHIK LLOYD AND SALIWANCHIK A PROFESSIONAL ASSOCIATION; SALIWANCHIK LLOYD AND SALIWANCHIK, A PROFESSIONAL ASSOCIATION; SALIWANCHIK LLOYD AND SALIWANCHIK; BRINKS HOFER GILSON AND LIONE; BEUSSE WOLTER SANKS MORA AND MAIRE; TIMOTHY H; THOMAS KAYDEN HORSTEMEYER AND RISLEY LLP

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 YU ZA ZM ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT515229 E	20110715	LSGT	+	granted / extensions (spc, cpc, pte)	
AT515229 E	20120115	LSLE	-RER	CEASED AS TO PARAGRAPH 5 LIT. 3 LAW INTRODUCING PATENT TREATIES	
AT515229 E	20201108	PEXP		Calculated Patent Term Expiry	
AU200115893 A1	20010606	LSPB	+	published / reissued	
AU2002310031 AA	20021203	LSPB	+	published / reissued	
AU2002310031 AA	20040311	LSLE	-MK6	APPLICATION LAPSED SECTION 142(2)(F)/REG. 8.3(3) - PCT APPLIC. NOT ENTERING NATIONAL PHASE	
AU2003241504 AA	20040106	LSPB	+	published / reissued	
AU2003241504 AA	20050310	LSLE	-MK6	APPLICATION LAPSED SECTION 142(2)(F)/REG. 8.3(3) - PCT APPLIC. NOT ENTERING NATIONAL PHASE	
AU2003290524 AA	20040513	LSPB	+	published / reissued	
AU2003290524 AA	20050721	LSLE	-MK6	APPLICATION LAPSED SECTION 142(2)(F)/REG. 8.3(3) - PCT APPLIC. NOT ENTERING NATIONAL PHASE	
AU2003293460 AA	20040813	LSPB	+	published / reissued	
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AU2005200393 AA	20050224	LSPB	+	published / reissued	
AU2005200393 AA	20051006	LSLE	-MK1	APPLICATION LAPSED SECTION 142(2)(A) - NO REQUEST FOR EXAMINATION IN RELEVANT PERIOD	
AU777817 B2	20041104	LSGT	+	granted / extensions (spc, cpc, pte)	
AU777817 B2	20201108	PEXP		Calculated Patent Term Expiry	
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CA2390261 AA	20031209	LSES	+EER	EXAMINATION REQUEST	
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DE60046187 D1	20110704	LSAS	R081	CHANGE OF APPLICANT/PATENTEE	PARTYTYPE : OWNER OWNER : UNIVERSITY OF FLORIDA RESEARCH FOUNDATION, INC., GAINESVILLE, FLA., US OLDPARTY : UNIVERSITY OF FLORIDA RESEARCH FOUNDATION, INC., GAINESVILLE, FLA., US
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EP1227753 A1	20020807	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20020521
EP1227753 A1	20040331	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20040216
EP1227753 A1	20090619	LSWD	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HK REF LEGAL EVENT CODE : WD REF DOCUMENT NUMBER : 1047396

					COUNTRY OF REF DOCUMENT : HK
EP1227753 A1	20110126	LSRE	RTI1	TITLE (CORRECTION)	TEXT : MARKER DETECTION APPARATUS TO MONITOR DRUG COMPLIANCE
EP1227753 A1	20160129	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20151127 YEAR OF FEE PAYMENT : 16
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EP1227753 A1	20160229	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20151117 YEAR OF FEE PAYMENT : 16
EP1227753 A1	20160229	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20151127 YEAR OF FEE PAYMENT : 16
EP1227753 B1	20110706	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1227753 B1	20110706	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
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EP1227753 B1	20110803	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP1227753 B1	20110825	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 60046187 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20110825
EP1227753 B1	20111026	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : VDEP EFFECTIVE DATE : 20110706
EP1227753 B1	20120115	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MK05 REF DOCUMENT NUMBER : 515229 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20110706
EP1227753 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 FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20110706
EP1227753 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 FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20111107
EP1227753 B1	20120131	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 : 20110706
EP1227753 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 : 20110706
EP1227753 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 : 20111007
EP1227753 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 FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20110706
EP1227753 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 : 20110706
EP1227753 B1	20120531	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 : 20110706
EP1227753 B1	20120613	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20120411
EP1227753 B1	20120629	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 : 20111130
EP1227753 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 : 20110706
EP1227753 B1	20120802	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 60046187 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20120411
EP1227753 B1	20120829	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP1227753 B1	20121031	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 : 20111108
EP1227753 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 : 20111017
EP1227753 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 : 20111108
EP1227753 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 : 20110706
EP1227753 B1	20151117	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
EP1227753 B1	20161123	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
EP1227753 B1	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20161123 YEAR OF FEE PAYMENT : 17
EP1227753 B1	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20161128 YEAR OF FEE PAYMENT : 17
EP1227753 B1	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20161123 YEAR OF FEE PAYMENT : 17
EP1227753 B1	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20161128 YEAR OF FEE PAYMENT : 17
EP1227753 B1	20170228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20161125 YEAR OF FEE PAYMENT : 17
EP1227753 B1	20171127	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 18
EP1227753 B1	20180131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20171129 YEAR OF FEE PAYMENT : 18
EP1227753 B1	20180131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20171127 YEAR OF FEE PAYMENT : 18
EP1227753 B1	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20171129 YEAR OF FEE PAYMENT : 18
EP1227753 B1	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20171127 YEAR OF FEE PAYMENT : 18
EP1227753 B1	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20171127 YEAR OF FEE PAYMENT : 18
EP1227753 B1	20190131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20181128 YEAR OF FEE PAYMENT : 19
EP1227753 B1	20190131	LSFE	+PGFP	ANNUAL FEE PAID TO	COUNTRY OF REF DOCUMENT :

				NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	DE PAYMENT DATE : 20181128 YEAR OF FEE PAYMENT : 19
EP1227753 B1	20190228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20181204 YEAR OF FEE PAYMENT : 19
EP1227753 B1	20190228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20181127 YEAR OF FEE PAYMENT : 19
EP1227753 B1	20190228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20181127 YEAR OF FEE PAYMENT : 19
EP1227753 B1	20200131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20191127 YEAR OF FEE PAYMENT : 20
EP1227753 B1	20200131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20191127 YEAR OF FEE PAYMENT : 20
EP1227753 B1	20200228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20191125 YEAR OF FEE PAYMENT : 20
EP1227753 B1	20200331	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20191203 YEAR OF FEE PAYMENT : 20
EP1227753 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20191127 YEAR OF FEE PAYMENT : 20
EP1227753 B1	20201108	PEXP		Calculated Patent Term Expiry	
EP1405067 A2	20040407	LSPB	+	published / reissued	
EP1405067 A2	20040407	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20031211
EP1405067 A2	20070606	LSWD	-18W	APPLICATION WITHDRAWN	EFFECTIVE DATE : 20070420
EP1519767 A2	20050406	LSPB	+	published / reissued	
EP1519767 A2	20050406	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20050111
EP1519767 A2	20050608	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20050420
EP1519767 A2	20050810	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : UNIVERSITY OF FLORIDA RESEARCH FOUNDATION, INC.
EP1519767 A2	20061220	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20060623
EP1718971 A2	20061108	LSPB	+	published / reissued	
EP1718971 A2	20061108	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20060918
EP1718971 A2	20080514	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20080411
EP1718971 A2	20090218	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20080822
EP1960775 A2	20080827	LSPB	+	published / reissued	
EP1960775 A2	20080827	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20080327
EP1960775 A4	20091104	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	EFFECTIVE DATE : 20091005
EP1960775 A4	20100217	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20100121

EP1960775 A4	20110216	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R003
EP1960775 A4	20110727	LSRV	-18R	APPLICATION REFUSED	EFFECTIVE DATE : 20110216
EP1990639 A1	20081112	LSPB	+	published / reissued	
EP1990639 A1	20090617	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20090504
EP1990639 A1	20090715	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 : IS COUNTRY OF REF DOCUMENT : IT COUNTRY OF REF DOCUMENT : LI COUNTRY OF REF DOCUMENT : LT 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
EP1990639 A1	20090812	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20090710
EP1990639 A1	20100714	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20100121
JP2003513694 T2	20030415	LSPB	+	published / reissued	
JP2003513694 T2	20070922	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20070921
JP2003513694 T2	20100608	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20100607
JP2003513694 T2	20101204	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20101203
JP2003513694 T2	20110601	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2003513694 T2	20110607	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20110606

JP2003513694 T2	20110609	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01
JP2003513694 T2	20110630	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20110623
JP2003513694 T2	20110701	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP2003513694 T2	20110701	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP2003513694 T2	20110701	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 4773019 COUNTRY OF REF DOCUMENT : JP
JP2005530553 T2	20051013	LSPB	+	published / reissued	
JP2005530553 T2	20050726	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20050725
JP2005530553 T2	20050726	LSAS	A711	NOTIFICATION OF CHANGE IN APPLICANT	TEXT : JAPANESE INTERMEDIATE CODE: A711 EFFECTIVE DATE : 20050725
JP2005530553 T2	20050822	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A821 EFFECTIVE DATE : 20050725
JP2005530553 T2	20060801	LSWD	-A300	WITHDRAWAL OF APPLICATION BECAUSE OF NO REQUEST FOR EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A300 EFFECTIVE DATE : 20060801
JP2007525670 T2	20070906	LSPB	+	published / reissued	
JP2007525670 T2	20071006	LSRE	A524	WRITTEN SUBMISSION OF COPY OF AMENDMENT UNDER SECTION 19 (PCT)	TEXT : JAPANESE INTERMEDIATE CODE: A524 EFFECTIVE DATE : 20071005
JP2007525670 T2	20071006	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20071005
JP2007525670 T2	20100406	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20100405
JP2007525670 T2	20100907	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20100906
JP2009519467 T2	20090514	LSPB	+	published / reissued	
JP2009519467 T2	20091203	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20091202
JP2009519467 T2	20091203	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20091202
JP2009519467 T2	20110510	LSWD	-A300	WITHDRAWAL OF APPLICATION BECAUSE OF NO REQUEST FOR EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A300 EFFECTIVE DATE : 20110510
JP4773019 B2	20110914	LSGT	+	granted / extensions (spc, cpc, pte)	
JP4773019 B2	20110628	LSFE	R100	特許料納付書 (Patent fee payment form)	TEXT : 51101268203 EFFECTIVE DATE : 20110623
JP4773019 B2	20110628	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP4773019 B2	20140626	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4773019 B2	20140626	LSFE	R20	特許料納付書 (Patent fee payment form)	TEXT : 51401304286 EFFECTIVE DATE : 20140623

JP4773019 B2	20140701	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4773019 B2	20150625	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4773019 B2	20150625	LSFE	R20	特許料納付書 (Patent fee payment form)	TEXT : 51501276577 EFFECTIVE DATE : 20150624
JP4773019 B2	20150630	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4773019 B2	20160630	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4773019 B2	20160630	LSFE	R20	特許料納付書 (Patent fee payment form)	TEXT : 51601347528 EFFECTIVE DATE : 20160627
JP4773019 B2	20160705	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4773019 B2	20170706	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4773019 B2	20170706	LSFE	R20	特許料納付書 (Patent fee payment form)	TEXT : 51701387315 EFFECTIVE DATE : 20170630
JP4773019 B2	20170718	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4773019 B2	20180628	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4773019 B2	20180628	LSFE	R20	特許料納付書 (Patent fee payment form)	TEXT : 51801298152 EFFECTIVE DATE : 20180625
JP4773019 B2	20180703	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4773019 B2	20190711	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4773019 B2	20190711	LSFE	R20	特許料納付書 (Patent fee payment form)	TEXT : 51901444909 EFFECTIVE DATE : 20190709
JP4773019 B2	20190716	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4773019 B2	20200626	LSFE	R20	特許料納付書 (Patent fee payment form)	TEXT : 52001300911 EFFECTIVE DATE : 20200625
JP4773019 B2	20200629	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4773019 B2	20201108	PEXP		Calculated Patent Term Expiry	
MXPA02004618 A1	20020902	LSPB	+	published / reissued	
NZ518740 A	20040430	LSPB	+	published / reissued	
NZ518740 A	20040827	LSGT	+PSEA	PATENT SEALED	
US2002177232 AA	20021128	LSPB	+	published / reissued	
US2002177232 AA	20020617	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : FLORIDA, UNIVERSITY OF, FLORIDA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:MELKER, RICHARD J.; GOLDBERGER, BRUCE A.; GOLD, MARK; REEL/FRAME:013008/0062; SIGNING DATES FROM 20020524 TO 20020531
US2002177232 AA	20030818	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : UNIVERSITY OF FLORIDA RESEARCH FOUNDATION, INC., F OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:UNIVERSITY OF FLORIDA; REEL/FRAME:013884/0198 EFFECTIVE DATE : 20030806
US2002177232 AA	20070328	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	

US2003139681 AA	20030724	LSPB	+	published / reissued	
US2003139681 AA	20060823	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2003176804 AA	20030918	LSPB	+	published / reissued	
US2003176804 AA	20040715	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : UNIVERSITY OF FLORIDA RESEARCH FOUNDATION, INC., F OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:MELKER, RICHARD J.; BJORAKER, DAVID G.; LAMPOTANG, SAMSUN; REEL/FRAME:014857/0667 EFFECTIVE DATE : 20040615
US2004076681 AA	20040422	LSPB	+	published / reissued	
US2004076681 AA	20070307	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2004081587 AA	20040429	LSPB	+	published / reissued	
US2004081587 AA	20101006	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2005037374 AA	20050217	LSPB	+	published / reissued	
US2005037374 AA	20040319	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : FLORIDA, UNIVERSITY OF, FLORIDA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:MELKER, RICHARD J.; DENNIS, DONN MICHAEL; REEL/FRAME:014444/0665; SIGNING DATES FROM 20040126 TO 20040210
US2005037374 AA	20070529	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2005054942 AA	20050310	LSPB	+	published / reissued	
US2005054942 AA	20040630	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : UNIVERSITY OF FLORIDA, FLORIDA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:MELKER, RICHARD J.; SACKELLARES, JAMES CHRIS; GOLD, MARK S.; REEL/FRAME:014801/0537; SIGNING DATES FROM 20040318 TO 20040331
US2005054942 AA	20070126	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2005233459 AA	20051020	LSPB	+	published / reissued	
US2005233459 AA	20050817	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : UNIVERSITY OF FLORIDA RESEARCH FOUNDATION, INC., F OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:MELKER, RICHARD J; DENNIS, DONN MICHAEL; PROKAI, LASZLO; REEL/FRAME:016413/0916; SIGNING DATES FROM 20050624 TO 20050729
US2005233459 AA	20150122	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2006040318 AA	20060223	LSPB	+	published / reissued	
US2006160134 AA	20060720	LSPB	+	published / reissued	
US2006160134 AA	20060419	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : UNIVERSITY OF FLORIDA RESEARCH FOUNDATION, INC., F OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:MELKER, RICHARD J.; DENNIS, DONN MICHAEL; MARTIN, CHARLES R.; AND OTHERS; REEL/FRAME:017491/0847; SIGNING DATES FROM 20051212 TO 20060103

US2006160134 AA	20081222	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2007167853 AA	20070719	LSPB	+	published / reissued	
US2007167853 AA	20060714	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : UNIVERSITY OF FLORIDA RESEARCH FOUNDATION, INC., F OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:MELKER, RICHARD J.; DENNIS, DONN MICHAEL; BJORAKER, DAVID G.; AND OTHERS; REEL/FRAME:017936/0713; SIGNING DATES FROM 20060103 TO 20060627
US2007167853 AA	20160218	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2007203448 AA	20070830	LSPB	+	published / reissued	
US2007203448 AA	20120613	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2007258894 AA	20071108	LSPB	+	published / reissued	
US2007258894 AA	20080915	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : UNIVERSITY OF FLORIDA RESEARCH FOUNDATION, INC., F OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:MELKER, RICHARD J.; SACKELLARES, JAMES CHRIS; GOLD, MARK S.; AND OTHERS; REEL/FRAME:021529/0067; SIGNING DATES FROM 20070103 TO 20080911
US2007258894 AA	20101122	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2012016252 AA	20120119	LSPB	+	published / reissued	
US2012016252 AA	20150927	LSES	NFA1	Non Final Action Mailed	
US2012016252 AA	20161122	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2014294675 AA	20141002	LSPB	+	published / reissued	
US2014294675 AA	20150924	LSES	NFA1	Non Final Action Mailed	
US2014294675 AA	20170915	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US6974706 BA	20051213	LSGT	+	granted / extensions (spc, cpc, pte)	
US6974706 BA	20030317	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : FLORIDA, UNIVERSITY OF, FLORIDA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:MELKER, RICHARD J.; DENNIS DONN MICHAEL; REEL/FRAME:013847/0635; SIGNING DATES FROM 20030130 TO 20030203
US6974706 BA	20091213	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US6974706 BA	20100111	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US6974706 BA	20100111	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US6974706 BA	20100202	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20091213
US6974706 BA	20230412	PEXP		Calculated Patent Term Expiry (PTA 86 days)	

US6981947 BB	20060103	LSGT	+	granted / extensions (spc, cpc, pte)	
US6981947 BB	20030515	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : UNIVERSITY OF FLORIDA, FLORIDA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:MELKER, RICHARD J.; BJORAKER, DAVID G.; REEL/FRAME:014067/0059; SIGNING DATES FROM 20030422 TO 20030428
US6981947 BB	20030818	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : FLORIDA RESEARCH FOUNDATION, INC., UNIVERSITY OF, OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:FLORIDA, UNIVERSITY OF; REEL/FRAME:013884/0217 EFFECTIVE DATE : 20030806
US6981947 BB	20051214	LSGT	PAT1	Patented Case	
US6981947 BB	20070814	LSRE	CC	CERTIFICATE OF CORRECTION	
US6981947 BB	20090115	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6981947 BB	20130418	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US6981947 BB	20180129	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	TEXT : PATENT EXPIRED FOR FAILURE TO PAY MAINTENANCE FEES (ORIGINAL EVENT CODE: EXP.)
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US6981947 BB	20180129	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US6981947 BB	20180220	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20180103
US6981947 BB	20220901	PEXP		Calculated Patent Term Expiry (PTA 69 days)	
US7052854 BB	20060530	LSGT	+	granted / extensions (spc, cpc, pte)	
US7052854 BB	20040108	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : UNIVERSITY OF FLORIDA, FLORIDA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:MELKER, RICHARD J.; HAYES, RONALD L.; WANG, KA-WANG KEVIN; AND OTHERS; REEL/FRAME:014244/0386; SIGNING DATES FROM 20031020 TO 20031104
US7052854 BB	20040209	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : UNIVERSITY OF FLORIDA RESEARCH FOUNDATION, INC., F OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:UNIVERSITY OF FLORIDA; REEL/FRAME:014316/0879 EFFECTIVE DATE : 20030806
US7052854 BB	20060105	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : UNIVERSITY OF FLORIDA RESEARCH FOUNDATION, INC., F OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:MARTIN, CHARLES R.; STEWART, JON D.; REEL/FRAME:016973/0914; SIGNING DATES FROM 20051208 TO 20051213
US7052854 BB	20061128	LSRE	CC	CERTIFICATE OF CORRECTION	
US7052854 BB	20091028	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4

US7052854 BB	20140530	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US7052854 BB	20140630	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US7052854 BB	20140630	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US7052854 BB	20140722	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20140530
US7052854 BB	20240111	PEXP		Calculated Patent Term Expiry (PTA 101 days)	
US7104963 BB	20060912	LSGT	+	granted / extensions (spc, cpc, pte)	
US7104963 BB	20020122	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : UNIVERSITY OF FLORIDA, FLORIDA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:MELKER, RICHARD J.; BJORAKER, DAVID G.; REEL/FRAME:012529/0713 EFFECTIVE DATE : 20011119
US7104963 BB	20020930	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : UNIVERSITY OF FLORIDA RESEARCH FOUNDATION INC., FL OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:UNIVERSITY OF FLORIDA; REEL/FRAME:013337/0436 EFFECTIVE DATE : 20020731
US7104963 BB	20060823	LSGT	PAT1	Patented Case	
US7104963 BB	20070213	LSRE	CC	CERTIFICATE OF CORRECTION	
US7104963 BB	20091209	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US7104963 BB	20140113	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US7104963 BB	20180423	LSFE	FEPP	FEE PAYMENT PROCEDURE	TEXT : MAINTENANCE FEE REMINDER MAILED (ORIGINAL EVENT CODE: REM.)
US7104963 BB	20180831	LSFE	FEPP	FEE PAYMENT PROCEDURE	TEXT : 11.5 YR SURCHARGE-LATE PMT W/IN 6 MO, SMALL ENTITY (ORIGINAL EVENT CODE: M2556); ENTITY STATUS OF PATENT OWNER: SMALL ENTITY
US7104963 BB	20180831	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US7104963 BB	20220603	PEXP		Calculated Patent Term Expiry (PTA 132 days)	
US7195780 BB	20070327	LSGT	+	granted / extensions (spc, cpc, pte)	
US7195780 BB	20030122	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : UNIVERSITY OF FLORIDA, FLORIDA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:DENNIS, DONN M.; MARTIN, CHARLES R.; ROGERS, RICHARD J.; AND OTHERS; REEL/FRAME:013673/0229; SIGNING DATES FROM 20021202 TO 20021211
US7195780 BB	20070307	LSGT	PAT1	Patented Case	
US7195780 BB	20070703	LSRE	CC	CERTIFICATE OF CORRECTION	
US7195780 BB	20080502	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : FLORIDA RESEARCH FOUNDATION, INCORPORATED, FLORIDA OLDPARTY : ASSIGNMENT OF

					ASSIGNORS INTEREST; ASSIGNOR:UNIVERSITY OF FLORIDA; REEL/FRAME:020886/0306 EFFECTIVE DATE : 20080423
US7195780 BB	20100805	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US7195780 BB	20140825	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US7195780 BB	20181112	LSFE	FEPP	FEE PAYMENT PROCEDURE	TEXT : MAINTENANCE FEE REMINDER MAILED (ORIGINAL EVENT CODE: REM.); ENTITY STATUS OF PATENT OWNER: SMALL ENTITY
US7195780 BB	20190429	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
US7195780 BB	20190429	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US7195780 BB	20190429	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US7195780 BB	20190521	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20190327
US7195780 BB	20240311	PEXP		Calculated Patent Term Expiry (PTA 507 days)	
US7820108 BB	20101026	LSGT	+	granted / extensions (spc, cpc, pte)	
US7820108 BB	20101006	LSGT	PAT1	Patented Case	
US7820108 BB	20140422	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US7820108 BB	20180321	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US7820108 BB	20260807	PEXP		Calculated Patent Term Expiry (PTA 985 days)	
US8211035 BB	20120703	LSGT	+	granted / extensions (spc, cpc, pte)	
US8211035 BB	20061016	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : UNIVERSITY OF FLORIDA RESEARCH FOUNDATION, INC., F OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:MELKER, RICHARD J.; BJORAKER, DAVID G.; LAMPOTANG, SAMSUN; REEL/FRAME:018392/0181 EFFECTIVE DATE : 20060907
US8211035 BB	20120613	LSGT	PAT1	Patented Case	
US8211035 BB	20150731	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8211035 BB	20200224	LSFE	FEPP	FEE PAYMENT PROCEDURE	TEXT : MAINTENANCE FEE REMINDER MAILED (ORIGINAL EVENT CODE: REM.); ENTITY STATUS OF PATENT OWNER: SMALL ENTITY
US8211035 BB	20301028	PEXP		Calculated Patent Term Expiry (PTA 1521 days)	
WO0134024 A1	20010517	LSPB	+	published / reissued	
WO0134024 A1	20020418	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 15893/01 COUNTRY OF REF DOCUMENT : AU
WO0134024 A1	20020503	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 518740 COUNTRY OF REF DOCUMENT : NZ
WO0134024 A1	20020507	LSNP	+WWE	WIPO	REF DOCUMENT NUMBER :

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WO0134024 A1	20020507	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : PA/A/2002/004618 COUNTRY OF REF DOCUMENT : MX
WO0134024 A1	20020508	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2001 536039 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO0134024 C2	20020516	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2000978427 COUNTRY OF REF DOCUMENT : EP
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WO0134024 C2	20040812	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 518740 COUNTRY OF REF DOCUMENT : NZ
WO0134024 C2	20050224	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 15893/01 COUNTRY OF REF DOCUMENT : AU
WO02095359 A2	20021128	LSPB	+	published / reissued	
WO02095359 A3	20031211	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2002737070 COUNTRY OF REF DOCUMENT : EP
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WO02095359 A3	20040407	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2002737070 COUNTRY OF REF DOCUMENT : EP
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WO04000400 A3	20041224	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2004515691 COUNTRY OF REF DOCUMENT : JP
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WO04000400 A3	20050406	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2003731241 COUNTRY OF REF DOCUMENT : EP
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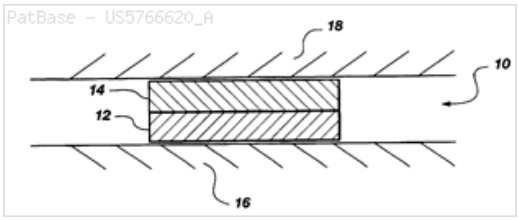
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WO04037316 A3	20060919	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE	REF COUNTRY CODE : JP
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WO04065404 A1	20060222	LSNE	-122	EP: PCT APPLICATION NON-ENTRY IN EUROPEAN PHASE	REF COUNTRY CODE : WO
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WO05033707 A1	20050414	LSPB	+	published / reissued	
WO05033707 A1	20061102	LSNE	-122	EP: PCT APPLICATION NON-ENTRY IN EUROPEAN PHASE	REF COUNTRY CODE : WO
WO05098429 A2	20051020	LSPB	+	published / reissued	
WO05098429 A2	20051213	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 11301911 COUNTRY OF REF DOCUMENT : US
WO05098429 A3	20060809	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2005756623 COUNTRY OF REF DOCUMENT : EP
WO05098429 A3	20060828	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2007500789 COUNTRY OF REF DOCUMENT : JP
WO05098429 A3	20061108	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2005756623 COUNTRY OF REF DOCUMENT : EP
WO05098429 A3	20070514	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 10588749 COUNTRY OF REF DOCUMENT : US
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WO05098429 A3	20071108	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 10588749 COUNTRY OF REF DOCUMENT : US
WO07086986 A2	20070802	LSPB	+	published / reissued	
WO07086986 A3	20080610	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE	REF COUNTRY CODE : DE
WO07086986 A3	20090121	LSNE	-122	EP: PCT APPLICATION NON-ENTRY IN EUROPEAN PHASE	REF DOCUMENT NUMBER : 06849877 COUNTRY OF REF DOCUMENT : EP KIND CODE OF REF DOCUMENT : A2 DESIGNATED STATE(S) :
WO07089328 A2	20070809	LSPB	+	published / reissued	
WO07089328 A3	20080327	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2006849923 COUNTRY OF REF DOCUMENT : EP

WO07089328 A3	20080523	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2008545656 COUNTRY OF REF DOCUMENT : JP
WO07089328 A3	20080609	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2633826 COUNTRY OF REF DOCUMENT : CA
WO07089328 A3	20080614	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE	REF COUNTRY CODE : DE

17) Family number: 20713008 (US5766620A)

Title: BUCCAL DELIVERY OF GLUCAGON-LIKE INSULINOTROPIC PEPTIDES

Abstract: Drug delivery systems and methods for administering a glucagon-like insulinotropic peptide to the buccal mucosa for transmucosal drug delivery are described. The drug delivery systems comprise a drug composition containing an effective amount of the glucagon-like insulinotropic peptide and an effective amount of a permeation enhancer for enhancing permeation of glucagon-like insulinotropic peptide through the buccal mucosa and means for maintaining the drug composition in a drug transferring relationship with buccal mucosa. These systems can be in free form, such as creams, gels, and ointments, or can comprise a device of determined physical form, such as tablets, patches, and troches. A preferred glucagon-like insulinotropic peptide is GLP-1(7-36)amide.



Classifications:
International (IPC 8-9): A61J3/06 A61K38/04 A61K38/26 A61K9/00 A61K9/22 A61K9/28 A61K9/30 A61K9/70 A61L15/00 A61L15/16 (Advanced/Invention); A61K38/04 A61K9/70 A61L15/00 (Advanced/Non-invention); A61K38/04 A61K38/26 A61K9/00 A61K9/70 A61L15/00 (Core/Invention)
International (IPC 1-7): A01N25/34 A61F13/02 A61F9/02 A61K A61K38/04 A61K38/26 A61K47/30 A61K47/32 A61K9/22 A61K9/24 A61K9/28 A61K9/70 A61L A61L15/00 A61L15/16
CPC: A61K9/006 A61K38/26
European: A61K38/26 A61K9/00M18D
US: 424/435 424/436 514/772.3 514/772.6 514/774 514/777 514/781

Family:

Publication number	Publication date	Application number	Application date
AR004521 AA	19981216	AR1996P104865	19961023
AU199674647 A1	19970515	AU19960074647	19961022
AU716038 B2	20000217	AU19960074647	19961022
BRPI9611139 A	19990406	BR1996PI11139	19961022
CA2235369 AA	19980420	CA19962235369	19961022
CN1202820 A	19981223	CN19961098618	19961022
EP0859606 A1	19980826	EP19960936815	19961022
EP0859606 A4	20000315	EP19960936815	19961022
JP11513982 T2	19991130	JP19970516712T	19961022
KR19990064288 A	19990726	KR19980702782	19961022
TW416854 B	20010101	TW19960112962	19961022
US5766620 A	19980616	US19950553807	19951023
US5863555 A	19990126	US19970964731	19971105
WO9715296 A1	19970501	WO1996US16890	19961022
ZA9608909 A	19970528	ZA19960008909	19961023

Priority:

US19950553807 19951023 WO1996US16890 19961022 US19970964731 19971105

Probable Assignee: ALLERGAN SALES LLC

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Inventor(s): (std): C D EBERT ; CHARLES D EBERT ; EBERT C D ; EBERT CHARLES D ; GUTNIAK M K ; GUTNIAK MARK K ; HEIBER S J ; HEIBER SONIA J ; M K GUTNIAK ; MARK K GUTNIAK ; S J HEIBER ; SONIA J HEIBER

Agent(s): FB RICE; FB RICE PTY LTD; SMART AND BIGGAR

Designated states: AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI 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 UZ VN

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AR004521 AA	19981216	LSPB	+	published / reissued	
AR004521 AA	20050221	LSWD	-FA	ABANDONMENT OR WITHDRAWAL	
AU199674647 A1	19970515	LSPB	+	published / reissued	
AU716038 B2	20000217	LSGT	+	granted / extensions (spc, cpc, pte)	
AU716038 B2	20000615	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU716038 B2	20020523	LSLE	-MK14	PATENT CEASED SECTION 143(A) (ANNUAL FEES NOT PAID) OR EXPIRED	
AU716038 B2	20161022	PEXP		Calculated Patent Term Expiry	
BRPI9611139 A	19990406	LSPB	+	published /	

				reissued	
BRPI9611139 A	20021210	LSRV	-FA14	DISMISSAL: DISMISSAL - ARTICLE 34 OF INDUSTRIAL PROPERTY LAW	
CA2235369 AA	19980420	LSPB	+	published / reissued	
CA2235369 AA	19980923	LSES	+EEER	EXAMINATION REQUEST	
CA2235369 AA	20021022	LSLE	-FZDE	DEAD	
CN1202820 A	19981223	LSPB	+	published / reissued	
CN1202820 A	19981223	LSPB	+C06	PUBLICATION	
CN1202820 A	20020123	LSDW	-C02	DEEMED WITHDRAWAL OF PATENT APPLICATION AFTER PUBLICATION (PATENT LAW 2001)	
EP0859606 A1	19980826	LSPB	+	published / reissued	
EP0859606 A1	19980826	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19980424
EP0859606 A4	20000315	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	EFFECTIVE DATE : 20000201
EP0859606 A4	20021120	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20020501
EP0859606 A4	20050603	LSWD	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HK REF LEGAL EVENT CODE : WD REF DOCUMENT NUMBER : 1009745 COUNTRY OF REF DOCUMENT : HK
JP11513982 T2	19991130	LSPB	+	published / reissued	
KR19990064288 A	19990726	LSPB	+	published / reissued	
KR19990064288 A	20020313	LSDW	-WITN	WITHDRAWAL DUE TO NO REQUEST FOR EXAMINATION	
TW416854 B	20010101	LSGT	+	granted / extensions (spc, cpc, pte)	
TW416854 B	20161022	PEXP		Calculated Patent Term Expiry	
US5766620 A	19980616	LSGT	+	granted / extensions (spc, cpc, pte)	
US5766620 A	19960116	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : THERATECH, INC., UTAH OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:HEIBER, SONIA J.; EBERT, CHARLES D.; GUTNIAK, MARK K.; REEL/FRAME:007901/0454 EFFECTIVE DATE : 19951027
US5766620 A	20011214	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5766620 A	20060616	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5766620 A	20060719	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US5766620 A	20060719	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US5766620 A	20060815	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20060616

US5766620 A	20151023	PEXP		Calculated Patent Term Expiry	
US5863555 A	19990126	LSGT	+	granted / extensions (spc, cpc, pte)	
US5863555 A	19981228	LSGT	PAT1	Patented Case	
US5863555 A	19981228	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5863555 A	20020725	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5863555 A	20060726	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5863555 A	20100726	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5863555 A	20160926	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ALLERGAN SALES, LLC, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ACTAVIS LABORATORIES UT, INC.; REEL/FRAME:039857/0661 EFFECTIVE DATE : 20151231
US5863555 A	20171105	PEXP		Calculated Patent Term Expiry	
WO9715296 A1	19970501	LSPB	+	published / reissued	
WO9715296 A1	19961022	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 96198618.2 COUNTRY OF REF DOCUMENT : CN
WO9715296 A1	19980417	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1019980702782 COUNTRY OF REF DOCUMENT : KR
WO9715296 A1	19980420	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2235369 COUNTRY OF REF DOCUMENT : CA
WO9715296 A1	19980420	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2235369 COUNTRY OF REF DOCUMENT : CA KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO9715296 A1	19980422	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : PA/A/1998/003137 COUNTRY OF REF DOCUMENT : MX
WO9715296 A1	19980423	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 1997 516712 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO9715296 A1	19980424	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1996936815 COUNTRY OF REF DOCUMENT : EP
WO9715296 A1	19980826	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1996936815 COUNTRY OF REF DOCUMENT : EP
WO9715296 A1	19980827	LSWD	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : 8642
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WO9715296 A1	20020313	LSWD	-WWW	WIPO INFORMATION: WITHDRAWN IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1019980702782 COUNTRY OF REF DOCUMENT : KR

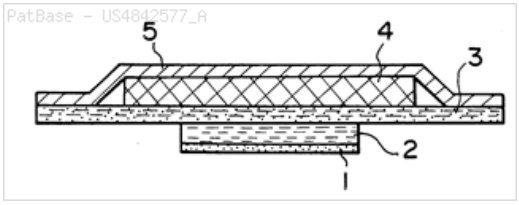
WO9715296 A1	20020501	LSWD	-WWW	WIPO INFORMATION: WITHDRAWN IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1996936815 COUNTRY OF REF DOCUMENT : EP
ZA9608909 A	19970528	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA9608909 A	20161022	PEXP		Calculated Patent Term Expiry	

18) Family number: 3051008 (US4842577A)

Title: PLASTER STRUCTURAL ASSEMBLY FOR IONTOPHORESIS

Abstract: A novel plaster structural assembly is provided for iontophoresis wherein th e assembly is comprised of an electrode layer and a medicament-containing layer in which a water supplying layer is disposed between the electrode layer and the medicament-containing layer with a sealing cover disposed on the outside of the electrode layer. A method for using the structural assembly for iontophoresis is also provided.

Classifications:
International (IPC 8-9): A61K9/70 A61N1/30
H05H3/02 (Advanced/Invention);
A61K9/70 A61N1/30 H05H3/00 (Core/Invention)
International (IPC 1-7): A61J3/00 A61K9/70 A61N1/30
CPC: A61N1/0436 A61N1/0448
European: K61N1/04E1I1M
US: 128/803 604/20 607/3



Family:

Publication number	Publication date	Application number	Application date
DE3783877 D1	19930311	DE19873783877	19871020
DE3783877 D1	19930311	DE19873783877T	19871020
DE3783877 T2	19930812	DE19873783877T	19871020
EP0269246 A2	19880601	EP19870309273	19871020
EP0269246 A3	19880608	EP19870309273	19871020
EP0269246 B1	19930127	EP19870309273	19871020
JP1872334 C3	19940926	JP19860250364	19861020
JP5084180 B4	19931201	JP19860250364	19861020
JP63102768 A2	19880507	JP19860250364	19861020
KR19880004796 A	19880627	KR19870011631	19871020
KR950013631 B1	19951113	KR19870011631	19871020
US4842577 A	19890627	US19870109083	19871016

Priority:

JP19860250364 19861020

Probable Assignee: YAMANOUCHI PHARMACEUTICAL CO LTD

Assignee(s): (std): YAMANOUCHI SEIYAKIU K K ; YAMANOUCHI SEIYAKIU KK ; YAMANOUCHI PHARMA CO LTD

Assignee(s): YAMANOUCHI PHARMACEUTICAL CO LTD ; YAMANOUCHI PHARMACEUTICAL CO LTD TOKIO TOKYO JP ; YAMANOUCHI PHARMACEUTICAL CO ; YAMANOUCHI PHARMACEUT CO LTD

Inventor(s): (std): KONNO YU ; KONNO YUTAKA ; MITOMI MITSUO ; SONOBE TAKASHI ; YAMAGUCHI SHUMPEI ; YAMAGUCHI SHUNPEI ; KONNO JU

Inventor(s): YAMAGUCHI SHUMPEI TOKYO JP ; SONOBE TAKASHI FUJIEDA SHI SHIZUOKA JP ; MITOMI MITSUO FUJIEDA SHI SHIZUOKA JP ; KONNO YUTAKA YAUZU SHI SHIZUOKA JP

Designated states: DE FR GB IT

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
DE3783877 D1	19940303	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE3783877 D1	19940303	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE3783877 D1	19951005	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
DE3783877 D1	19951005	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
DE3783877 T2	19930812	LSGT	+	granted / extensions (spc, cpc, pte)	
DE3783877 T2	19940303	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE3783877 T2	19951005	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
EP0269246 A2	19880601	LSPB	+	published / reissued	
EP0269246 A3	19881123	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19880930
EP0269246 A3	19910814	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 19910627
EP0269246 B1	19930127	LSGT	+	granted / extensions (spc, cpc, pte)	

EP0269246 B1	19931012	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 19931012 YEAR OF FEE PAYMENT : 7
EP0269246 B1	19931015	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 19931015 YEAR OF FEE PAYMENT : 7
EP0269246 B1	19931025	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 19931025 YEAR OF FEE PAYMENT : 7
EP0269246 B1	19940119	LSGT	+26N	NO OPPOSITION FILED	
EP0269246 B1	19941020	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB LAPSED DATE : 19941020
EP0269246 B1	19950614	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 19941020
EP0269246 B1	19950630	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR LAPSED DATE : 19950630
EP0269246 B1	19950701	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE LAPSED DATE : 19950701
EP0269246 B1	19950825	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST
EP0269246 B1	20051020	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 : 20051020
EP0269246 B1	20071020	PEXP		Calculated Patent Term Expiry	
JP1872334 C3	19940926	LSGT	+	granted / extensions (spc, cpc, pte)	
JP1872334 C3	20061020	PEXP		Calculated Patent Term Expiry	
JP5084180 B4	19931201	LSPB	+	published / reissued	
JP63102768 A2	19880507	LSPB	+	published / reissued	
KR19880004796 A	19880627	LSPB	+	published / reissued	
KR950013631 B1	19951113	LSGT	+	granted / extensions (spc, cpc, pte)	
KR950013631 B1	19921016	LSES	A201	REQUEST FOR EXAMINATION	
KR950013631 B1	19951017	LSPB	G160	DECISION TO PUBLISH PATENT APPLICATION	
KR950013631 B1	19960203	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
KR950013631 B1	20101113	PEXP		Calculated Patent Term Expiry	
US4842577 A	19890627	LSGT	+	granted / extensions (spc, cpc, pte)	
US4842577 A	19871125	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : YAMANOUCHI PHARMACEUTICAL CO., LTD., TOKYO, JAPAN OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNORS:KONNO, YUTAKA; MITOMI, MITSUO; SONOBE, TAKASHI; AND OTHERS; REEL/FRAME:004876/0152 EFFECTIVE DATE : 19871013

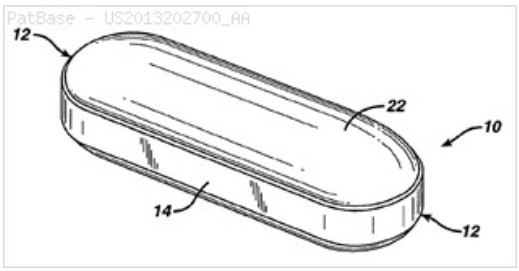
US4842577 A	19871125	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : YAMANOUCHI PHARMACEUTICAL CO., LTD.,JAPAN OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:KONNO, YUTAKA; MITOMI, MITSUO; SONOBE, TAKASHI; AND OTHERS; REEL/FRAME:004876/0152 EFFECTIVE DATE : 19871013
US4842577 A	19890506	LSGT	PAT1	Patented Case	
US4842577 A	19921217	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US4842577 A	19970629	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US4842577 A	19970909	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 19970702
US4842577 A	20180130	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US4842577 A	20180130	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US4842577 A	20071016	PEXP		Calculated Patent Term Expiry	

19) Family number: 54514009 (US2013202700A)

Title: RAPIDLY DISINTEGRATING COATED TABLETS

Abstract: Coated dosage forms comprising a tablet core, preferably in compressed form, that has a coating over its exterior surface and one or more patterns debossed in the tablet surface are disclosed. Methods for manufacturing such dosage forms are also disclosed.

Classifications:
International (IPC 8-9): A61J3/10 A61K A61K31/00 A61K31/167 A61K9/20 A61K9/22 A61K9/28 (Advanced/Invention); A61J3/10 (Advanced/Non-invention); A61K (Subclass/Invention)
CPC: A61K9/2072 A61K9/2893 A61K9/0053 A61K9/0056 A61K9/20 A61K9/2095 A61K9/28 A61K31/00 A61K2121/00 A61K9/2866 A61K31/167
US: 424/467 424/474 424/480 427/2.14 514/630



Family:

Publication number	Publication date	Application number	Application date
AU2013217564 AA	20130815	AU20130217564	20130201
AU2013217564 AA	20140821	AU20130217564	20130201
AU2013217564 BB	20170406	AU20130217564	20130201
BR112014019526 A2	20170620	BR20141119526	20130201
BR112014019526 A8	20170711	BR20141119526	20130201
CA2862915 AA	20140728	CA20132862915	20130201
CA2862915 C	20200526	CA20132862915	20130201
CN104114160 A	20141022	CN201380008496	20130201
EP2811985 A1	20141217	EP20130704694	20130201
EP2811985 B1	20181017	EP20130704694	20130201
HK1203162 A1	20151023	HK20150103785	20150420
HK1204968 A1	20151211	HK20150105768	20150617
MX2014009497 A1	20150204	MX20140009497	20130201
MX359529 B	20181001	MX20140009497	20130201
RU2014136342 A	20160327	RU20140136342	20130201
RU2609836 C2	20170206	RU20140136342	20130201
US2013202700 AA	20130808	US20130757206	20130201
US8900632 BB	20141202	US20130757206	20130201
WO13119466 A1	20130815	WO2013US24384	20130201

Priority:
US20120595767P 20120207 US20130757206 20130201 WO2013US24384 20130201

Probable Assignee: MCNEIL PPC INC

Assignee(s): (std): JOHNSON AND JOHNSON CONSUMER INC ; MAKNEJL PPS INK ; MCNEIL PPC INC

Assignee(s): MCNEIL PPC INC199 GRANDVIEW ROADSKILLMANNJ08558US ; WALDMAN JOEL H ; BEAN ANTHONY S ; FRANZOI FERNANDA

Inventor(s): (std): BEAN ANTHONY S ; BEAN ANTHONY S AS ; BIN ENTONI S ; FRANZOI FERNANDA ; FRANZOI FERNANDA F ; FRANZOJ FERNANDA ; UOLDMAN DZHOEL KH ; WALDMAN JOEL H ; WALDMAN JOEL H JH

Inventor(s): WALDMAN JOEL HUS ; ANTHONY S BEAN ; JOEL H WALDMAN ; FRANZOI FERNANDABR ; FERNANDA FRANZOI ; BEAN ANTHONY SUS

Agent(s): SHELSTON IP; SHELSTON IP PTY LTD; SMART AND BIGGAR; SMART AND BIGGAR LLP; CARPMAELS AND RANSFORD LLP; SHANGHAI INTELLECTUAL PROPERTY OFFICE; CHINA PATENT AGENT HK LTD; LAURA A; JOHNSON PHILIP S 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
AU2013217564 AA	20130815	LSPB	+	published / reissued	
AU2013217564 AA	20140821	LSPB	+	published / reissued	
AU2013217564 AA	20170803	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU2013217564 AA	20170803	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU2013217564 BB	20170406	LSGT	+	granted /	

				extensions (spc, cpc, pte)	
AU2013217564 BB	20330201	PEXP		Calculated Patent Term Expiry	
CA2862915 AA	20140728	LSPB	+	published / reissued	
CA2862915 AA	20180209	LSES	+EEER	EXAMINATION REQUEST	EFFECTIVE DATE : 20180131
CA2862915 C	20200526	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2862915 C	20330201	PEXP		Calculated Patent Term Expiry	
CN104114160 A	20141022	LSPB	+	published / reissued	
CN104114160 A	20141022	LSPB	+C06	PUBLICATION	
CN104114160 A	20141022	LSPB	PB01	公开 (The publication of application)	TEXT : 公开 (DISCLOSURE)
CN104114160 A	20190628	LSRV	-RJ01	REJECTION OF INVENTION PATENT APPLICATION AFTER PUBLICATION	
EP2811985 A1	20141217	LSPB	+	published / reissued	
EP2811985 A1	20141217	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20140908
EP2811985 A1	20160608	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : JOHNSON & JOHNSON CONSUMER INC.
EP2811985 A1	20170111	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20161212
EP2811985 A1	20180620	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20180524
EP2811985 B1	20181017	LSGT	+	granted / extensions (spc, cpc, pte)	
EP2811985 B1	20181017	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP2811985 B1	20181031	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP2811985 B1	20181114	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP2811985 B1	20181115	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602013045164 COUNTRY OF REF DOCUMENT : DE
EP2811985 B1	20181115	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 1053156 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20181115
EP2811985 B1	20190312	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : LT REF LEGAL EVENT CODE : MG4D
EP2811985 B1	20190315	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MK05 REF DOCUMENT NUMBER : 1053156 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20181017
EP2811985 B1	20190329	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION	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-

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EP2811985 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
EP2811985 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
EP2811985 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
EP2811985 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
EP2811985 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
EP2811985 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
EP2811985 B1	20190430	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 : 20181017
EP2811985 B1	20190430	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 : 20181017
EP2811985 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
EP2811985 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
EP2811985 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20190122 YEAR OF FEE PAYMENT : 7

				FROM NATIONAL OFFICE TO EPO]	
EP2811985 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 : 7
EP2811985 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 : 7
EP2811985 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20190130 YEAR OF FEE PAYMENT : 7
EP2811985 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 : 7
EP2811985 B1	20190531	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 : 20181017
EP2811985 B1	20190531	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 : 20181017
EP2811985 B1	20190531	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 : 20190217
EP2811985 B1	20190531	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 : 20190118
EP2811985 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 : 7
EP2811985 B1	20190718	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 602013045164 COUNTRY OF REF DOCUMENT : DE
EP2811985 B1	20190731	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 : 20181017
EP2811985 B1	20190731	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 : 20181017
EP2811985 B1	20190830	LSLE	-PG25	LAPSED IN A CONTRACTING STATE	COUNTRY OF REF DOCUMENT : RO NOTIFICATIONOFLAPSE : LAPSE

				[ANNOUNCED VIA 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 : 20181017
EP2811985 B1	20190830	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 : 20181017
EP2811985 B1	20190830	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 : 20181017
EP2811985 B1	20190830	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 : 20181017
EP2811985 B1	20190925	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20190718
EP2811985 B1	20191031	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 : 20181017
EP2811985 B1	20191031	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 : 20190201
EP2811985 B1	20191031	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 : 20181017
EP2811985 B1	20191127	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP2811985 B1	20200131	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 : 20190201
EP2811985 B1	20200228	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 : 20190228
EP2811985 B1	20200331	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 : 20181017
EP2811985 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20200128 YEAR OF FEE PAYMENT : 8

				OFFICE TO EPO]	
EP2811985 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20200210 YEAR OF FEE PAYMENT : 8
EP2811985 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20200121 YEAR OF FEE PAYMENT : 8
EP2811985 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20200122 YEAR OF FEE PAYMENT : 8
EP2811985 B1	20200529	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20200213 YEAR OF FEE PAYMENT : 8
EP2811985 B1	20200630	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 : 20190201
EP2811985 B1	20200630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20200113 YEAR OF FEE PAYMENT : 8
EP2811985 B1	20330201	PEXP		Calculated Patent Term Expiry	
HK1203162 A1	20151023	LSPB	+	published / reissued	
HK1203162 A1	20350420	PEXP		Calculated Patent Term Expiry	
HK1204968 A1	20151211	LSPB	+	published / reissued	
HK1204968 A1	20350617	PEXP		Calculated Patent Term Expiry	
MX2014009497 A1	20150204	LSPB	+	published / reissued	
MX359529 B	20181001	LSGT	+	granted / extensions (spc, cpc, pte)	
MX359529 B	20181001	LSGT	+FG	GRANT OR REGISTRATION	
MX359529 B	20330201	PEXP		Calculated Patent Term Expiry	
RU2014136342 A	20160327	LSPB	+	published / reissued	
RU2609836 C2	20170206	LSGT	+	granted / extensions (spc, cpc, pte)	
RU2609836 C2	20330201	PEXP		Calculated Patent Term Expiry	
US2013202700 AA	20130808	LSPB	+	published / reissued	
US2013202700 AA	20141112	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US8900632 BB	20141202	LSGT	+	granted / extensions (spc, cpc, pte)	
US8900632 BB	20130227	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MCNEIL-PPC, INC., NEW JERSEY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:WALDMAN, JOEL H.; BEAN, ANTHONY S.; FRANZOI, FERNANDA; SIGNING DATES FROM 20130208 TO 20130220; REEL/FRAME:029883/0250
US8900632 BB	20141112	LSGT	PAT1	Patented Case	

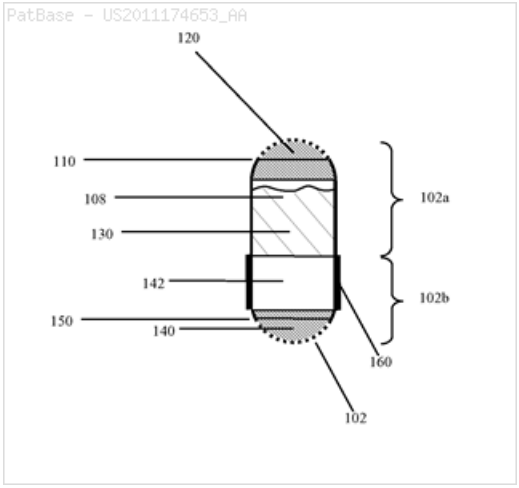
US8900632 BB	20150702	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : JOHNSON & JOHNSON CONSUMER INC., NEW JERSEY OLDPARTY : MERGER AND CHANGE OF NAME; ASSIGNORS:MCNEIL-PPC, INC.; JOHNSON & JOHNSON CONSUMER INC.; REEL/FRAME:036049/0254 EFFECTIVE DATE : 20150623
US8900632 BB	20180517	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8900632 BB	20330201	PEXP		Calculated Patent Term Expiry	
WO13119466 A1	20130815	LSPB	+	published / reissued	
WO13119466 A1	20140728	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2862915 COUNTRY OF REF DOCUMENT : CA
WO13119466 A1	20140806	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : MX/A/2014/009497 COUNTRY OF REF DOCUMENT : MX
WO13119466 A1	20140807	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE	REF COUNTRY CODE : DE
WO13119466 A1	20140821	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2013217564 COUNTRY OF REF DOCUMENT : AU DATE OF REF DOCUMENT : 20130201 KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO13119466 A1	20140908	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2014136342 COUNTRY OF REF DOCUMENT : RU
WO13119466 A1	20140908	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2013704694 COUNTRY OF REF DOCUMENT : EP
WO13119466 A1	20170620	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 112014019526 COUNTRY OF REF DOCUMENT : BR KIND CODE OF REF DOCUMENT : A2 DESIGNATED STATE(S) : EFFECTIVE DATE : 20140807

20) Family number: 44524009 (US2011174653A)

Title: CAPSULE WITH SOLUBLE BLOCKING ELEMENT

Abstract: The invention relates to a capsule comprising an inlet and an outlet connected by a passage, in which a dissolvable blocking element and a composition to be orally administered are arranged. The blocking element is fluid permeable and, in a non-dissolved condition, is arranged in the passage to block delivery of the composition to an outlet of the passage. The invention further relates to a method for releasable sealing a capsule comprising a composition to be orally administered, comprising the steps of providing the composition chamber in a passage and filling composition into the composition chamber. The passage formed by the capsule is occluded with a blocking element and the blocking element comprises dissolvable material and has a fluid permeable structure.

Classifications:
International (IPC 8-9): A47G21/18 A61J3/07 A61J7/00 A61K9/48 A61M15/00 B65B1/04 B65D73/00 (Advanced/Invention); A47G21/18 A61J7/00 (Advanced/Non-invention); A47G21/00 A61J7/00 A61K9/48 (Core/Invention)
CPC: A61K9/0095 A47G21/18 A47G21/183 A61M15/0016 A61M15/0028 A61M15/0043 A61K9/4808 A61J3/071 A61J7/0038
European: A61J3/07B A61K9/00Z6 A61K9/48A K61J3/07B K61J7/00D6
US: 206/461 424/451 424/451S 53/467 53/467S



Family:

Publication number	Publication date	Application number	Application date
EP2163242 A1	20100317	EP20080164093	20080910
EP2349222 A2	20110803	EP20090782800	20090909
EP2349222 B1	20160824	EP20090782800	20090909
ES2604590 T3	20170307	ES20090782800T	20090909
PL2349222 T3	20170831	PL20090782800T	20090909
US2011174653 AA	20110721	US20090063045	20090909
US9629810 BB	20170425	US20090063045	20090909
WO10029095 A2	20100318	WO2009EP61670	20090909
WO10029095 A3	20100819	WO2009EP61670	20090909

Priority:
EP20080164093 20080910 EP20090159784 20090508 WO2009EP61670 20090909 EP20090782800 20090909

Probable Assignee: SANDOZ AG
Assignee(s): (std): SANDOZ AG ; SCHWARZ FRANZ XAVER
Inventor(s): (std): SCHWARZ FRANZ ; SCHWARZ FRANZ XAVER
Inventor(s): THE DESIGNATION OF THE INVENTOR HAS NOT YET...
Agent(s): ENGLMEIER LUDWIG; ALTMANN ANDREAS; HERZOG FIESSER AND PARTNER PATENTANWAELTE PARTG MBB; CARVAJAL Y ISABEL; MANELLI SELTER PLLC; JEFFREY S; WICHMANN HENDRIK
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 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
EP2163242 A1	20100317	LSPB	+	published / reissued	
EP2163242 A1	20100915	LSRV	-18R	APPLICATION REFUSED	EFFECTIVE DATE : 20100416
EP2349222 A2	20110803	LSPB	+	published / reissued	
EP2349222 A2	20110803	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20110406
EP2349222 A2	20140723	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20140618
EP2349222 A2	20160330	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20160302

EP2349222 A2	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20160907 YEAR OF FEE PAYMENT : 8
EP2349222 A2	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20160907 YEAR OF FEE PAYMENT : 8
EP2349222 A2	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20160914 YEAR OF FEE PAYMENT : 8
EP2349222 A2	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20160826 YEAR OF FEE PAYMENT : 8
EP2349222 A2	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20160831 YEAR OF FEE PAYMENT : 8
EP2349222 A2	20170228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20161216 YEAR OF FEE PAYMENT : 8
EP2349222 B1	20160824	LSGT	+	granted / extensions (spc, cpc, pte)	
EP2349222 B1	20160824	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP2349222 B1	20160826	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
EP2349222 B1	20160831	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP2349222 B1	20160915	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 822420 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20160915
EP2349222 B1	20160921	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP2349222 B1	20161006	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602009040644 COUNTRY OF REF DOCUMENT : DE
EP2349222 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 : 8
EP2349222 B1	20161227	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : LT REF LEGAL EVENT CODE : MG4D
EP2349222 B1	20161230	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20160829 YEAR OF FEE PAYMENT : 8
EP2349222 B1	20161230	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20160824 YEAR OF FEE PAYMENT : 8

EP2349222 B1	20170131	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 : 20160824
EP2349222 B1	20170131	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 : 20161124
EP2349222 B1	20170131	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 : 20160824
EP2349222 B1	20170131	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 : 20160824
EP2349222 B1	20170131	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 : 20160824
EP2349222 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 : 20160824
EP2349222 B1	20170228	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 : 20160824
EP2349222 B1	20170228	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 : 20161125
EP2349222 B1	20170228	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 : 20161226
EP2349222 B1	20170307	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2604590 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :

					EFFECTIVE DATE : 20170307
EP2349222 B1	20170428	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 : 20160824
EP2349222 B1	20170428	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 : 20160824
EP2349222 B1	20170526	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 602009040644 COUNTRY OF REF DOCUMENT : DE
EP2349222 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 : 20160824
EP2349222 B1	20170531	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 : 20160824
EP2349222 B1	20170531	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 : 20160824
EP2349222 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 : 20161124
EP2349222 B1	20170628	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP2349222 B1	20170630	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 : 20160824
EP2349222 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 : 20160909
EP2349222 B1	20170802	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20170526
EP2349222 B1	20170829	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 9

EP2349222 B1	20170831	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 : 20160824
EP2349222 B1	20170831	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 : 20160909
EP2349222 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20160901 YEAR OF FEE PAYMENT : 8
EP2349222 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20170912 YEAR OF FEE PAYMENT : 9
EP2349222 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20170824 YEAR OF FEE PAYMENT : 9
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EP2349222 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20170906 YEAR OF FEE PAYMENT : 9
EP2349222 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170905 YEAR OF FEE PAYMENT : 9
EP2349222 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20170823 YEAR OF FEE PAYMENT : 9
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EP2349222 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 : 20160824
EP2349222 B1	20180531	LSLE	-PG25	LAPSED IN A CONTRACTING	COUNTRY OF REF DOCUMENT : HU

				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; INVALID AB INITIO LAPSED DATE : 20090909
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EP2349222 B1	20180828	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 10
EP2349222 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20180828 YEAR OF FEE PAYMENT : 10
EP2349222 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 : 10
EP2349222 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180828 YEAR OF FEE PAYMENT : 10
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EP2349222 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20180828 YEAR OF FEE PAYMENT : 10

				TO EPO]	
EP2349222 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20180822 YEAR OF FEE PAYMENT : 10
EP2349222 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 : 10
EP2349222 B1	20190415	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : UEP REF DOCUMENT NUMBER : 822420 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20160824
EP2349222 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20190828 YEAR OF FEE PAYMENT : 11
EP2349222 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20190827 YEAR OF FEE PAYMENT : 11
EP2349222 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20190917 YEAR OF FEE PAYMENT : 11
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EP2349222 B1	20191129	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20190827 YEAR OF FEE PAYMENT : 11
EP2349222 B1	20191129	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20190820 YEAR OF FEE PAYMENT : 11
EP2349222 B1	20191231	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20190906 YEAR OF FEE PAYMENT : 11
EP2349222 B1	20191231	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20190827 YEAR OF FEE PAYMENT : 11
EP2349222 B1	20200131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20190913 YEAR OF FEE PAYMENT : 11
EP2349222 B1	20200228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20191001 YEAR OF FEE PAYMENT : 11
EP2349222 B1	20290909	PEXP		Calculated Patent Term Expiry	
ES2604590 T3	20170307	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2604590 T3	20290909	PEXP		Calculated Patent Term Expiry	
PL2349222 T3	20170831	LSGT	+	granted /	

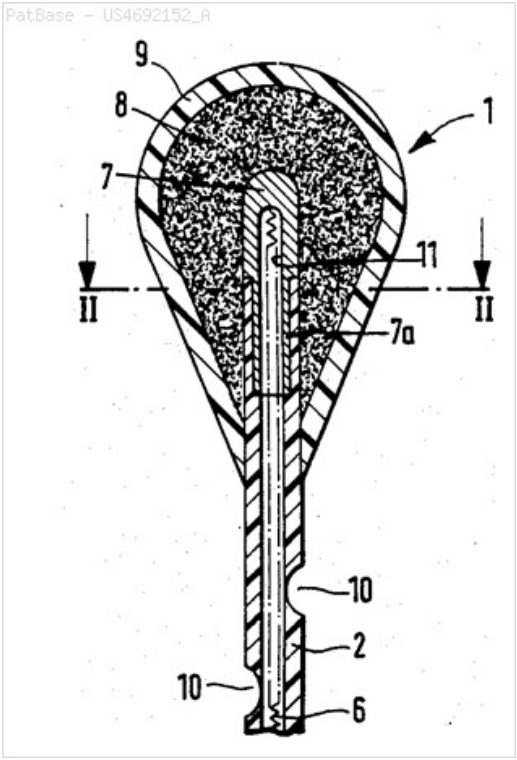
				extensions (spc, cpc, pte)	
US2011174653 AA	20110721	LSPB	+	published / reissued	
US2011174653 AA	20170405	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US9629810 BB	20170425	LSGT	+	granted / extensions (spc, cpc, pte)	
US9629810 BB	20110401	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SANDOZ AG, SWITZERLAND OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:SCHWARZ, FRANZ XAVER; REEL/FRAME:026059/0221 EFFECTIVE DATE : 20110325
US9629810 BB	20170405	LSGT	PAT1	Patented Case	
US9629810 BB	20321101	PEXP		Calculated Patent Term Expiry (PTA 1149 days)	
WO10029095 A2	20100318	LSPB	+	published / reissued	
WO10029095 A3	20110311	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE	REF COUNTRY CODE : DE
WO10029095 A3	20110401	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 13063045 COUNTRY OF REF DOCUMENT : US
WO10029095 A3	20110406	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2009782800 COUNTRY OF REF DOCUMENT : EP

21) Family number: 18016010 (US4692152A)

Title: MEDICAL TUBE

Abstract: Medical probe or tube suitable in particular for enteral feeding and comprising a flexible tube which has at its distal end a closure cap and at its proximal end a connecting means, and a mandrin with securing means formed corresponding to the connecting means, wherein at the distal end of the tube near the closure cap in the tube openings are disposed and the closure cap has a **gelatin** coating, and preferably on the closure cap over the **gelatin** coating a further coating of gastric-juice-resistant material is disposed and preferably in the cap a metal head is located.

Classifications:
International (IPC 8-9): A61J15/00 A61M25/00 (Advanced/Invention); A61J15/00 A61M25/00 (Core/Invention)
International (IPC 1-7): A61J15/00 A61M25/00 A61M31/00 A61M37/00 A61M5/00
CPC: A61J15/0003 A61J15/0026 A61J2200/60
European: A61J15/00
US: 604/164 604/164.01 604/265 604/270



Family:

Publication number	Publication date	Application number	Application date
AT47308 E	19891115	AT19850103028T	19850315
AU198539768 A1	19850919	AU19850039768	19850312
AU577839 B2	19881006	AU19850039768	19850312
DE3409663 A1	19850919	DE19843409663	19840316
DE3409663 C2	19870219	DE19843409663	19840316
DE3573721 D1	19891123	DE19853573721	19850315
DE3573721 D1	19891123	DE19853573721T	19850315
EP0155009 A2	19850918	EP19850103028	19850315
EP0155009 A3	19860723	EP19850103028	19850315
EP0155009 B1	19891018	EP19850103028	19850315
ES296032 U	19880516	ES19850296032U	19850315
ES296032 Y	19890201	ES19850296032U	19850315
ES296032 Y1	19890301	ES19850296032U	19850315
PT80114 A	19850401	PT19850080114	19850315
PT80114 B	19861028	PT19850080114	19850315
US4692152 A	19870908	US19850712265	19850315

Priority:
DE19843409663 19840316 DE19853573721T 19850315 EP19850103028 19850315

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Inventor(s): (std): EMDE CARSTEN ; EMDE CARSTEN DR FREIE UNIVERSI ; HINDENBURGDAMM ; EMDE CARSTEN DR ; CARSTEN EMDE DR ; CARSTEN EMDE
Inventor(s): EMDE CARSTEN DR FREIE UNIVERSITAET B ; EMDE CARSTEN DR FREIE UNIVERSITAT BERLIN ; EMDE CARSTEN DR 1000 BERLIN DE ; HINDENBURGDAMM 30 ; EMDE CARSTEN DR FREIE UNIV B
Agent(s): COLLISON 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
AT47308 E	19891115	LSGT	+	granted / extensions (spc, cpc, pte)	

AT47308 E	19931215	LSLE	-REN	CEASED DUE TO NON-PAYMENT OF THE ANNUAL FEE	
AT47308 E	20050315	PEXP		Calculated Patent Term Expiry	
AU198539768 A1	19850919	LSPB	+	published / reissued	
AU577839 B2	19881006	LSGT	+	granted / extensions (spc, cpc, pte)	
AU577839 B2	20050312	PEXP		Calculated Patent Term Expiry	
DE3409663 A1	19850919	LSPB	+	published / reissued	
DE3409663 A1	19850919	LSES	+OP8	REQUEST FOR EXAMINATION AS TO PARAGRAPH 44 PATENT LAW	
DE3409663 C2	19870219	LSGT	+	granted / extensions (spc, cpc, pte)	
DE3409663 C2	19870219	LSGT	+D2	GRANT AFTER EXAMINATION	
DE3409663 C2	19870813	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE3409663 C2	19940310	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
DE3573721 D1	19901031	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE3573721 D1	19901031	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE3573721 D1	19901031	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
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DE3573721 D1	19940310	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
EP0155009 A2	19850918	LSPB	+	published / reissued	
EP0155009 A3	19870128	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19861127
EP0155009 A3	19880504	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 19880322
EP0155009 B1	19891018	LSGT	+	granted / extensions (spc, cpc, pte)	
EP0155009 B1	19900926	LSGT	+26N	NO OPPOSITION FILED	
EP0155009 B1	19910331	LSFE	ITTA	IT: LAST PAID ANNUAL FEE	REF COUNTRY CODE : EP
EP0155009 B1	19920226	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 19920226 YEAR OF FEE PAYMENT : 8
EP0155009 B1	19920316	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 19920316 YEAR OF FEE PAYMENT : 8
EP0155009 B1	19920320	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 19920320 YEAR OF FEE PAYMENT : 8
EP0155009 B1	19920324	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 19920324 YEAR OF FEE PAYMENT : 8
EP0155009 B1	19920324	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 19920324

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EP0155009 B1	19920331	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 19920331 YEAR OF FEE PAYMENT : 8
EP0155009 B1	19920403	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 19920403 YEAR OF FEE PAYMENT : 8
EP0155009 B1	19920421	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 19920421 YEAR OF FEE PAYMENT : 8
EP0155009 B1	19920513	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 19920513 YEAR OF FEE PAYMENT : 8
EP0155009 B1	19920810	LSFE	+EPTA	LU: LAST PAID ANNUAL FEE	REF COUNTRY CODE : EP
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EP0155009 B1	19930316	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE LAPSED DATE : 19930316
EP0155009 B1	19930331	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE LAPSED DATE : 19930331
EP0155009 B1	19930331	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH LAPSED DATE : 19930331
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EP0155009 B1	19931001	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL LAPSED DATE : 19931001
EP0155009 B1	19931110	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 19930315
EP0155009 B1	19931116	LSLE	-NLV4	NL: LAPSED OR ANULLED DUE TO NON-PAYMENT OF THE ANNUAL FEE	REF COUNTRY CODE : EP
EP0155009 B1	19931130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR LAPSED DATE : 19931130
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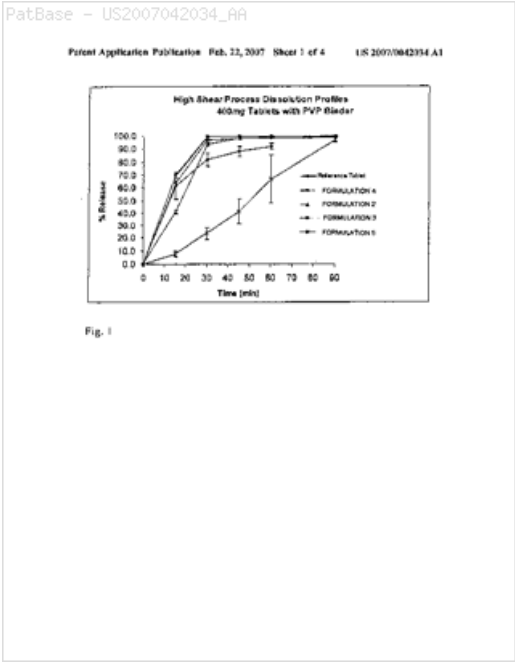
EP0155009 B1	19931201	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE LAPSED DATE : 19931201
EP0155009 B1	19940128	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST
EP0155009 B1	19950131	LSLE	-EUG	SE: EUROPEAN PATENT HAS LAPSED	REF COUNTRY CODE : EP TEXT : 85103028.8 EFFECTIVE DATE : 19931008
EP0155009 B1	20050315	PEXP		Calculated Patent Term Expiry	
ES296032 U	19880516	LSPB	+	published / reissued	
ES296032 Y	19890201	LSGT	+	granted / extensions (spc, cpc, pte)	
ES296032 Y	19961101	LSLE	-FD1K	UTILITY MODEL LAPSED	EFFECTIVE DATE : 19960603
ES296032 Y	19950315	PEXP		Calculated Patent Term Expiry	
ES296032 Y1	19890301	LSGT	+	granted / extensions (spc, cpc, pte)	
ES296032 Y1	19950315	PEXP		Calculated Patent Term Expiry	
PT80114 A	19850401	LSPB	+	published / reissued	
PT80114 B	19861028	LSGT	+	granted / extensions (spc, cpc, pte)	
PT80114 B	20010131	LSLE	-MM3A	ANNULMENT OR LAPSE	TEXT : LAPSE DUE TO NON-PAYMENT OF FEES EFFECTIVE DATE : 19930429
PT80114 B	20050315	PEXP		Calculated Patent Term Expiry	
US4692152 A	19870908	LSGT	+	granted / extensions (spc, cpc, pte)	
US4692152 A	19870604	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : FRESNIUS AG, A GERMAN COMPANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNOR:EMDE, CARSTEN; REEL/FRAME:004722/0126 EFFECTIVE DATE : 19870428
US4692152 A	19870709	LSGT	PAT1	Patented Case	
US4692152 A	19910225	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US4692152 A	19950910	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US4692152 A	19951121	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 19950913
US4692152 A	20180131	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US4692152 A	20180131	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US4692152 A	20050315	PEXP		Calculated Patent Term Expiry	

22) Family number: 34175011 (US2007042034A)

Title: HIGH DRUG LOAD FORMULATIONS AND DOSAGE FORMS

Abstract: The invention relates to high drug load formulations containing (R)-2-(2-fluoro-4-biphenylyl)propionic acid as an active pharmaceutical ingredient.

Classifications:
International (IPC 8-9): A61J3/10 A61K31/13 A61K31/192 A61K47/04 A61K47/12 A61K47/26 A61K47/38 A61K9/20 A61K9/28 A61K9/48 A61P25/14 A61P25/16 A61P25/28 A61P35/00 (Advanced/Invention);
A61K31/192 A61K9/20 (Advanced/Non-invention);
A61K31/13 A61K31/185 A61K47/02 A61K47/12 A61K47/26 A61K47/38 A61K9/20 A61K9/48 A61P25/00 A61P35/00 (Core/Invention);
A61K (Subclass/Invention)
International (IPC 1-7): A61K9/20 A61K9/48
CPC: A61K9/2018 A61K9/2054 A61K9/2077 A61K9/2095 A61K31/192 A61P25/14 A61P25/16 A61P25/28 A61P35/00
European: A61K31/192 A61K9/20H4B A61K9/20H6F2 A61K9/20K2 A61K9/20P
US: 424/451 424/451P 424/464 424/464S 424/465 424/465P 514/570 514/570S



Family:

Publication number	Publication date	Application number	Application date
AU2006272760 AA	20070201	AU20060272760	20060724
BRPI0613611 A2	20110118	BR2006PI13611	20060724
CA2615063 AA	20080110	CA20062615063	20060724
CN101227899 A	20080723	CN200680026900	20060724
EA200800360 A1	20080630	EA20080000360	20060724
EP1909777 A2	20080416	EP20060788261	20060724
IL188744 A0	20081229	IL20060188744	20060724
IN00139KN2008 A	20080912	IN2008KN00139	20080109
JP2009502807 T2	20090129	JP20080523032T	20060724
KR20080039876 A	20080507	KR20087001758	20060724
NO20080220 A	20080421	NO20080000220	20080114
NO20080220 L	20080421	NO20080000220	20080114
NZ564789 A	20100730	NZ20060564789	20060724
US2007042034 AA	20070222	US20060491771	20060724
US2011111025 AA	20110512	US20100771621	20100430
WO07014124 A2	20070201	WO2006US28602	20060724
WO07014124 A3	20071004	WO2006US28602	20060724

Priority:

US20050701710 20050722 US20050701710P 20050722 US20050706344P 20050808
WO2006US28602 20060724 US20060491771 20060724 US20100771621 20100430

Probable Assignee: MYREXIS INC

Assignee(s): (std): MCREA JAMES C ; MYRIAD GENETICS INC ; OEHRTMAN GREGORY T ; POWERS TRACY ANNETTE ; WILLIAMS MARK S ; ZENTNER GAYLEN M ; MYRIAD PHARMACEUTICALS INC

Assignee(s): MYREXIS INC ; APTUIT INC

Inventor(s): (std): MCREA JAMES C ; OEHRTMAN GREGORY T ; OERHTMAN GREGORY T ; POWERS TRACY A ; POWERS TRACY ANNETTE ; WILLIAMS MARK S ; ZENTNER GAYLEN M

Inventor(s): ZENTNER GAYLEN ; TRACY ANNETTE POWERS ; WILLIAMS MARK ; POWERS TRACY ; OEHRTMAN GREGORY ; GAYLEN M ZENTNER ; GREGORY T OEHRTMAN ; JAMES C MCREA ; MARK S WILLIAMS ; MCREA JAMES

Agent(s): PETER MAXWELL AND ASSOCIATES; MAXWELLS PATENT AND TRADE MARK ATTORNEYS PTY LTD; BERESKIN AND PARR LLP SENCRL SRL; ADAM HOLGER ET AL; MYRIAD GENETICS INC INTELLECUTAL PROPERTY DEPARTMENT

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 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

AU2006272760 AA	20070201	LSPB	+	published / reissued	
AU2006272760 AA	20110310	LSLE	-MK3	APPLICATION LAPSED SECTION 142(2)(C) - EXAMINATION DEFERRED UNDER SECTION 46 NO REQUEST FOR EXAMINATION	
BRPI0613611 A2	20110726	LSRV	-B11A	DISMISSAL ACC. ART.33 OF IPL - EXAMINATION NOT REQUESTED WITHIN 36 MONTHS OF FILING	
BRPI0613611 A2	20111101	LSRV	-B11Y	DEFINITIVE DISMISSAL ACC. ARTICLE 33 OF IPL - EXTENSION OF TIME LIMIT FOR REQUEST OF EXAMINATION EXPIRED	
CA2615063 AA	20080110	LSPB	+	published / reissued	
CA2615063 AA	20080110	LSES	+EEER	EXAMINATION REQUEST	
CA2615063 AA	20120410	LSLE	-FZDE	DEAD	
CN101227899 A	20080723	LSPB	+	published / reissued	
CN101227899 A	20080723	LSPB	+C06	PUBLICATION	
CN101227899 A	20111019	LSDW	-C02	DEEMED WITHDRAWAL OF PATENT APPLICATION AFTER PUBLICATION (PATENT LAW 2001)	
EA200800360 A1	20080630	LSPB	+	published / reissued	
EP1909777 A2	20080416	LSPB	+	published / reissued	
EP1909777 A2	20080416	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20080121
EP1909777 A2	20110406	LSWD	-18W	APPLICATION WITHDRAWN	EFFECTIVE DATE : 20110126
IN00139KN2008 A	20080912	LSPB	+	published / reissued	
JP2009502807 T2	20090129	LSPB	+	published / reissued	
JP2009502807 T2	20090710	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20090709
JP2009502807 T2	20090710	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20090709
JP2009502807 T2	20101207	LSWD	-A300	WITHDRAWAL OF APPLICATION BECAUSE OF NO REQUEST FOR EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A300 EFFECTIVE DATE : 20101207
KR20080039876 A	20080507	LSPB	+	published / reissued	
KR20080039876 A	20110825	LSDW	-WITN	WITHDRAWAL DUE TO NO REQUEST FOR EXAMINATION	
NO20080220 A	20080421	LSPB	+	published / reissued	
NO20080220 A	20120220	LSRV	-FC2A	WITHDRAWAL, REJECTION OR DISMISSAL OF LAID OPEN PATENT APPLICATION	
NZ564789 A	20100730	LSPB	+	published / reissued	
NZ564789 A	20101126	LSGT	+PSEA	PATENT SEALED	
NZ564789 A	20110225	LSFE	+RENW	RENEWAL	

				(RENEWAL FEES ACCEPTED)	
NZ564789 A	20140131	LSLE	-LAPS	PATENT LAPSED	
US2007042034 AA	20070222	LSPB	+	published / reissued	
US2007042034 AA	20061020	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MYRIAD GENETICS, INC., UTAH OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ZENTNER, GAYLEN M.; MCREA, JAMES C.; REEL/FRAME:018425/0341; SIGNING DATES FROM 20061005 TO 20061016
US2007042034 AA	20061020	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : APTUIT, INC., MISSOURI OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:WILLIAMS, MARK S.; OEHRTMAN, GREGORY T.; POWERS, TRACY ANNETTE; REEL/FRAME:018425/0353; SIGNING DATES FROM 20060929 TO 20061011
US2007042034 AA	20061020	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MYRIAD GENETICS, INC., UTAH OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ZENTNER, GAYLEN M.; MCREA, JAMES C.; REEL/FRAME:018425/0363; SIGNING DATES FROM 20061005 TO 20061016
US2007042034 AA	20061103	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MYRIAD GENETICS, INC., UTAH OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:APTUIT, INC.; REEL/FRAME:018482/0659 EFFECTIVE DATE : 20061026
US2007042034 AA	20090821	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MYRIAD PHARMACEUTICALS, INC., UTAH OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:MYRIAD GENETICS, INC.; REEL/FRAME:023132/0053 EFFECTIVE DATE : 20090630
US2007042034 AA	20100803	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MYREXIS, INC., UTAH OLDPARTY : CHANGE OF NAME; ASSIGNOR:MYRIAD PHARMACEUTICALS, INC.; REEL/FRAME:024779/0575 EFFECTIVE DATE : 20100701
US2007042034 AA	20100809	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2011111025 AA	20110512	LSPB	+	published / reissued	
US2011111025 AA	20100802	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MYREXIS, INC., UTAH OLDPARTY : CHANGE OF NAME; ASSIGNOR:MYRIAD PHARMACEUTICALS, INC.; REEL/FRAME:024777/0364 EFFECTIVE DATE : 20100701
US2011111025 AA	20121214	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
WO07014124 A2	20070201	LSPB	+	published / reissued	
WO07014124 A2	20060724	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 200680026900.7 COUNTRY OF REF DOCUMENT : CN
WO07014124 A3	20080102	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2006272760 COUNTRY OF REF DOCUMENT : AU

WO07014124 A3	20080103	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 564789 COUNTRY OF REF DOCUMENT : NZ
WO07014124 A3	20080109	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 139/KOLNP/2008 COUNTRY OF REF DOCUMENT : IN
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WO07014124 A3	20080121	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2008523032 COUNTRY OF REF DOCUMENT : JP
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WO07014124 A3	20080121	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2006788261 COUNTRY OF REF DOCUMENT : EP
WO07014124 A3	20080122	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1020087001758 COUNTRY OF REF DOCUMENT : KR
WO07014124 A3	20080123	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE	REF COUNTRY CODE : DE
WO07014124 A3	20080131	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2006272760 COUNTRY OF REF DOCUMENT : AU DATE OF REF DOCUMENT : 20060724 KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO07014124 A3	20080218	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 200800360 COUNTRY OF REF DOCUMENT : EA
WO07014124 A3	20080219	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 10517 COUNTRY OF REF DOCUMENT : GE
WO07014124 A3	20110118	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : PI0613611 COUNTRY OF REF DOCUMENT : BR KIND CODE OF REF DOCUMENT : A2 DESIGNATED STATE(S) : EFFECTIVE DATE : 20080121

23) Family number: 8468011 (US5681584A)

Title: Controlled release drug delivery device

Abstract: A drug delivery device for delivering a drug either intermittently or to a pre-selected region of the gastro-intestinal tract, particularly to the colon, consists of an a solid core comprising an active agent coated with a delay jacket, then coated with a semi-permeable membrane which is optionally drilled to provide a release orifice, and then optionally further coated with an enteric material. The device delivers substantially all of the active agent to the targeted site.

Classifications:
International (IPC 8-9): A61K47/32 A61K47/38 A61K9/00 A61K9/22 A61K9/24 A61K9/28 A61K9/30 A61K9/34
A61K9/52 (Advanced/Invention);
A61K9/22 A61K9/30 A61K9/52 (Advanced/Non-invention);
A61K47/32 A61K47/38 A61K9/00 A61K9/22 A61K9/24 A61K9/28 A61K9/30 A61K9/52 (Core/Invention);
A61J (Subclass/Invention)
International (IPC 1-7): A61J A61J3/06 A61J3/07 A61K9/00 A61K9/22 A61K9/24 A61K9/28 A61K9/30 A61K9/32 A61M A61M31/00 A61M37/00
CPC: A61K9/0004 A61K9/209 A61K9/2886
European: A61K9/00L4 A61K9/20K4B A61K9/28K
US: 424/468 424/473



Family:

Publication number	Publication date	Application number	Application date
AT195252 E	20000815	AT19940810212T	19940414
AU199460505 A1	19941027	AU19940060505	19940415
AU687784 B2	19980305	AU19940060505	19940415
CA2121870 AA	19941024	CA19942121870	19940421
CA2121870 C	20050517	CA19942121870	19940421
CY2252 B1	20030704	CY20010000046	20011217
DE69425453 D1	20000914	DE19946025453T	19940414
DE69425453 D1	20000914	DE19946025453	19940414
DE69425453 T2	20010412	DE19946025453T	19940414
DK0621032 T3	20001023	DK19940810212T	19940414
EP0621032 A1	19941026	EP19940810212	19940414
EP0621032 B1	20000809	EP19940810212	19940414
ES2149250 T3	20001101	ES19940810212T	19940414
GR3034571 T3	20010131	GR20000402260T	20001006
IL109338 A0	19940418	IL19940109338	19940418
IL109338 A1	19971120	IL19940109338	19940418
JP2006342187 A2	20061221	JP20060263380	20060927
JP3943144 B2	20070711	JP19940084282	19940422
JP7002648 A2	19950106	JP19940084282	19940422
KR100354644 B1	20021228	KR19940008534	19940422
NZ260365 A	19940826	NZ19940260365	19940421
PT621032 T	20010131	PT19940810212T	19940414
US5681584 A	19971028	US19960622238	19960322
ZA9402806 A	19941026	ZA19940002806	19940422

Priority:

US19930052435 19930423 US19930165437 19931210 JP19940084282 19940422
US19960622238 19960322

Probable Assignee: CIBA GEIGY CORP

Assignee(s): (std): CIBA GEIGY AG ; CIBA GEIGY CORP ; NOVARTIS AG ; NOVARTIS BASEL AG ; NOVARTIS ERFIND VERWALT GMBH ; CIBA GEIGY ; NOVARTIS INT AG

Assignee(s): CIBA GEIGY A G ; NOVARTIS ERFINDUNGEN VERWALTUNGSGESELLSCHAFT M B H ; NOVARTIS ERFINDUNGEN VERWALTUNGSGESELLSCHAFT M B H WIEN ; NOVARTIS ERFINDUNGEN VERWALTUNGSGESELLSCHAFT MBH

Inventor(s): (std): CARR JAMES ; ERIZABESU KADOROSU ; JIEEMUZU KAA ; KHANNA SATISH C ; KHANNA SATISH CHANDRA ; QUADROS ELIZABETH ; RUISU SABASUTANO ; SATEISHIYU CHIYANDORA HANNA ; SATISH CHANDRA KHANNA ; SAVASTANO LOUIS ; SHAH SHAILESH ; SHAILESH SHAH ; SHIEIRITSUSHIYU SHIYAA ; KHANNA SATISH CHAUDRA

Inventor(s): LOUIS SAVASTANO ; JAMES CARR ; ELIZABETH QUADROS
Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; LUZZATTO AND LUZZATTO
Designated states: AT BE CH DE DK ES 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
AT195252 E	20000815	LSGT	+	granted / extensions (spc, cpc, pte)	
AT195252 E	20010115	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	
AT195252 E	20140414	PEXP		Calculated Patent Term Expiry	
AU199460505 A1	19941027	LSPB	+	published / reissued	
AU687784 B2	19980305	LSGT	+	granted / extensions (spc, cpc, pte)	
AU687784 B2	20140415	PEXP		Calculated Patent Term Expiry	
CA2121870 AA	19941024	LSPB	+	published / reissued	
CA2121870 AA	20010423	LSES	+EEER	EXAMINATION REQUEST	
CA2121870 C	20050517	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2121870 C	20140624	LSLE	-MKEX	EXPIRY	EFFECTIVE DATE : 20140422
CA2121870 C	20140421	PEXP		Calculated Patent Term Expiry	
CY2252 B1	20030704	LSGT	+	granted / extensions (spc, cpc, pte)	
CY2252 B1	20211217	PEXP		Calculated Patent Term Expiry	
DE69425453 D1	20010830	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE69425453 D1	20010830	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE69425453 T2	20010412	LSGT	+	granted / extensions (spc, cpc, pte)	
DE69425453 T2	20010830	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE69425453 T2	20140414	PEXP		Calculated Patent Term Expiry	
DK0621032 T3	20001023	LSGT	+	granted / extensions (spc, cpc, pte)	
DK0621032 T3	20140414	PEXP		Calculated Patent Term Expiry	
EP0621032 A1	19941026	LSPB	+	published / reissued	
EP0621032 A1	19950614	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19950418
EP0621032 A1	19970402	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : NOVARTIS AG
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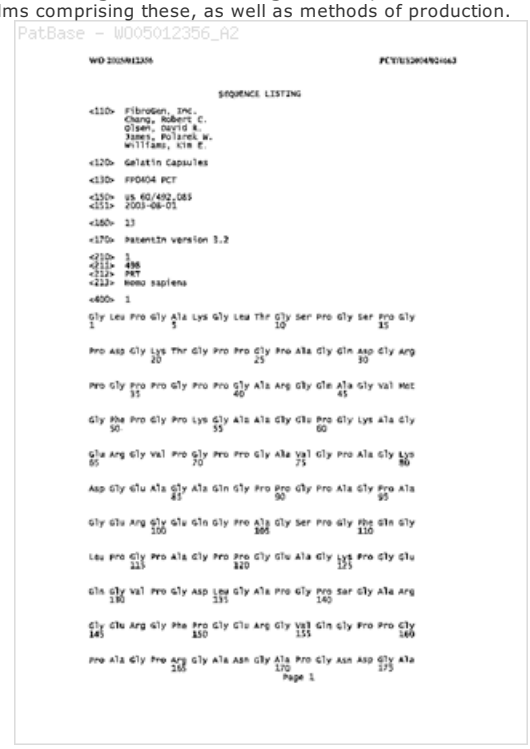
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ZA9402806 A	19941026	LSGT	+	granted / extensions (spc, cpc, pte)	
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24) Family number: 31518012 (US2005058703A)

Title: **GELATIN** CAPSULES

Abstract: The invention relates to recombinant **gelatins**, and to recombinant **gelatins** useful in **gelatin** capsule manufacture, and to compositions, **gelatin** capsules, and **gelatin** films comprising these, as well as methods of production.

Classifications:
International (IPC 8-9): A61J3/07 A61K9/20 A61K9/48 A61K9/64 C07K14/78 (Advanced/Invention);
A61K9/20 A61K9/48 A61K9/52 C07K14/435 (Core/Invention)
International (IPC 1-7): A61K9/48 A61K9/64 C07K14/78
CPC: A61K9/2077 A61K9/4825 C07K14/78
European: A61K9/20K2 A61K9/48B1 C07K14/78
US: 424/456 530/354


PatBase - WO05012356_A2

WO 2005012356 PCT/US2004/024663

SEQUENCE LISTING

<110> FibroGen, Inc.
Chang, Robert C.
Olsen, David R.
Jones, Polarek W.
Williams, Kim E.

<120> Gelatin Capsules

<130> FP0404 PCT

<150> US 60/492,085
<151> 2003-08-01

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Family:

Publication number	Publication date	Application number	Application date
AT490273 E	20101215	AT20040779661T	20040730
AU2004262007 AA	20050210	AU20040262007	20040730
DE602004030346 D1	20110113	DE200460030346T	20040730
EP1654282 A2	20060510	EP20040779661	20040730
EP1654282 B1	20101201	EP20040779661	20040730
JP2007523047 T2	20070816	JP20060522097T	20040730
US2005058703 AA	20050317	US20040901816	20040729
WO05012356 A2	20050210	WO2004US24663	20040730
WO05012356 A3	20050811	WO2004US24663	20040730

Priority:

US20030492085P 20030801 US20040901816 20040729 WO2004US24663 20040730

Probable Assignee: FIBROGEN INC

Assignee(s): (std): CHANG ROBERT C ; FIBROGEN INC ; OLSEN DAVID R ; POLAREK JAMES W ; WILLIAMS KIM E

Inventor(s): (std): CHANG ROBERT C ; OLSEN DAVID R ; POLAREK JAMES W ; WILLIAMS KIM E ; WILLIAMS KIM ; POLAREK JAMES ; OLSEN DAVID ; CHANG ROBERT ; ROBERT C CHANG ; KIM E WILLIAMS ; JAMES W POLAREK ; DAVID R OLSEN

Agent(s): FB RICE; FB RICE PTY LTD; GOODFELLOW HUGH ROBIN; FIBROGEN INC INTELLECTUAL PROPERTY DEPARTMENT

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
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AT490273 E	20240730	PEXP		Calculated Patent Term Expiry	
AU2004262007 AA	20050210	LSPB	+	published / reissued	
AU2004262007 AA	20100225	LSLE	-MK4	APPLICATION LAPSED SECTION	

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DE602004030346 D1	20111216	LSAS	R081	CHANGE OF APPLICANT/PATENTEE	PARTYTYPE : OWNER OWNER : FIBROGEN, INC., SAN FRANCISCO, CALIF., US OLDPARTY : FIBROGEN, INC., SOUTH SAN FRANCISCO, CALIF., US
DE602004030346 D1	20111229	LSRE	+R097	NO OPPOSITION FILED AGAINST GRANTED PATENT, OR EPO OPPOSITION PROCEEDINGS CONCLUDED WITHOUT DECISION	REF DOCUMENT NUMBER : 1654282 COUNTRY OF REF DOCUMENT : EP EFFECTIVE DATE : 20110902
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EP1654282 B1	20110309	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : T3
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EP1654282 B1	20110504	LSAS	RAP2	RIGHTS OF A PATENT TRANSFERRED	PARTYTYPE : OWNER OWNER : FIBROGEN, INC.
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EP1654282 B1	20110531	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 : 20101201
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EP1654282 B1	20110630	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 : 20110302
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EP1654282 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 : 20110401
EP1654282 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 : 20101201

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EP1654282 B1	20111109	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20110902
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EP1654282 B1	20111230	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 : 20101201
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EP1654282 B1	20130329	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20130107 YEAR OF FEE PAYMENT : 9
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EP1654282 B1	20130430	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 : 20130201
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EP1654282 B1	20140425	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20140331
EP1654282 B1	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 NON-PAYMENT OF DUE FEES LAPSED DATE : 20130730
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JP2007523047 T2	20070816	LSPB	+	published / reissued	
JP2007523047 T2	20090729	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20090728
JP2007523047 T2	20100113	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20100112
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US2005058703 AA	20041110	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : FIBROGEN, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:CHANG, ROBERT C.; OLSEN, DAVID R.; POLAREK, JAMES W.; AND OTHERS; REEL/FRAME:015366/0048; SIGNING DATES FROM 20040930 TO 20041022
US2005058703 AA	20060516	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
WO05012356 A2	20050210	LSPB	+	published / reissued	
WO05012356 A3	20060130	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2006522097 COUNTRY OF REF DOCUMENT : JP
WO05012356 A3	20060228	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2004262007 COUNTRY OF REF DOCUMENT : AU
WO05012356 A3	20060301	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2004779661 COUNTRY OF REF DOCUMENT : EP
WO05012356 A3	20060323	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2004262007 COUNTRY OF REF DOCUMENT : AU DATE OF REF DOCUMENT : 20040730 KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO05012356 A3	20060323	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2004262007 COUNTRY OF REF DOCUMENT : AU

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25) Family number: 49131012 (US7968120B)

Title: MODIFIED RELEASE DOSAGE FORMS

Abstract: In one embodiment a dosage form comprises at least one active ingredient and a molded matrix which comprises 10-100 percent of a material having a melting point of less than about 100 degrees C. selected from the stamp consisting of thermoplastic polyalkylene oxides, low melting hydrophobic materials, thermoplastic polymers, thermoplastic starches and combinations thereof, and the matrix is capable of providing modified release of the active ingredient upon contacting of the dosage form with a liquid medium. The dosage form may additionally comprise uncoated particles which may contain at least one active ingredient. In another embodiment, a dosage form comprises at least one active ingredient, a plurality of particles and a molded matrix, wherein at least a portion of the particles are coated. The coated particles, the matrix or both may comprise at least one active ingredient, and the coated particles or the matrix or a combination thereof is capable of providing modified release of the active ingredient upon contacting of the dosage form with a liquid medium.

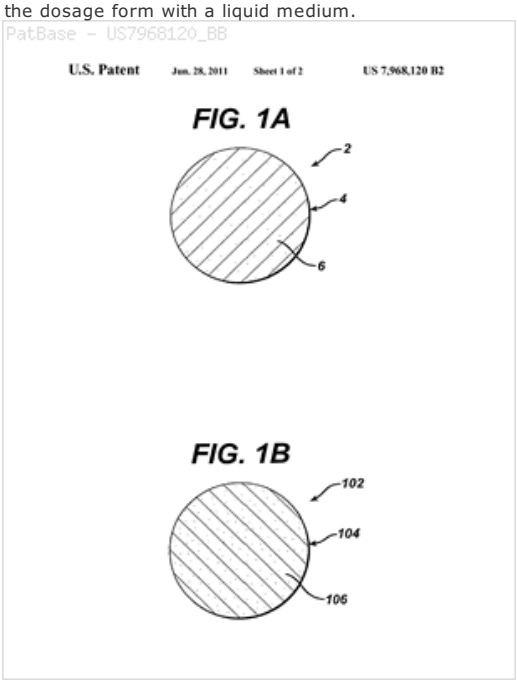
Classifications:

International (IPC 8-9): A23G1/00 A23G1/54 A23G3/00 A23G3/04 A23G3/34 A23G3/36 A23G3/54 A23L1/00 A23L1/09 A23L1/30 A61J3/00 A61J3/06 A61J3/10 A61K31/136 A61K31/137 A61K31/277 A61K47/10 A61K47/14 A61K47/26 A61K47/30 A61K47/32 A61K47/34 A61K47/36 A61K47/38 A61K47/44 A61K47/46 A61K9/00 A61K9/14 A61K9/20 A61K9/22 A61K9/24 A61K9/26 A61K9/28 A61K9/30 A61K9/32 A61K9/34 A61K9/36 A61K9/38 A61K9/48 A61P11/00 B30B11/08 B30B11/34 B30B15/30 G06F17/30 (Advanced/Invention);
A61K9/16 A61K9/50 (Advanced/Non-invention)

CPC: A23L29/30 A23G1/54 A23G3/0029 A23G3/04 A23G3/368 A23G3/54 A61J3/005 A61J3/06 A61J3/10 A61K9/0004 A61K9/0056 A61K9/2013 A61K9/2018 A61K9/2027 A61K9/2031 A61K9/2054 A61K9/2068 A61K9/2072 A61K9/2081 A61K9/209 A61K9/2095 A61K9/282 A61K9/2826 A61K9/284 A61K9/286 A61K9/2873 A61K9/2886 A61K9/2893 A61K9/5084 A61P11/00 B30B11/08 B30B11/34 B30B15/302 Y10T428/1352 A61P43/00

European: A23G1/54 A23G3/00P2M8F A23G3/04 A23G3/36M4 A23G3/54 A23L1/09 A61J3/00C A61J3/06 A61J3/10 A61K9/00L4 A61K9/00M18B A61K9/20H4 A61K9/20H4B A61K9/20H6B A61K9/20H6D A61K9/20K A61K9/20K2B A61K9/20K4B A61K9/20P A61K9/28H4 A61K9/28H4B A61K9/28H6B A61K9/28H6F A61K9/28H6H A61K9/28K A61K9/28P B30B11/08 B30B11/34 B30B15/30B K61K9/20H4 K61K9/20H4B K61K9/20H6F2 K61K9/20H8 K61K9/20K2B K61K9/20P K61K9/50M

US: 424/468 424/486P 424/494



Family:

Publication number	Publication date	Application number	Application date
US7968120 BB	20110628	US20020477334	20020928
US7968120 BB	20110628	US20050477334	20050524
US7968120 BB	20110628	US20050477334	20050524

Priority:

US20010966450 20010928 US20010966497 20010928 US20010966939 20010928
US20010966509 20010928 US20010967414 20010928 US20020477334 20020928
WO2002US31022 20020928 US20050477334 20050524

Probable Assignee: MCNEIL PPC INC

Assignee(s): (std): MCNEIL PPC INC

Inventor(s): (std): WYNN DAVID ; LI SHUN POR ; THOMAS MARTIN ; LEE DER YANG ; SOWDEN HARRY S

Agent(s): LAURA

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
US7968120 BB	20110628	LSGT	+	granted / extensions (spc, cpc, pte)	
US7968120 BB	20110628	LSGT	+	granted / extensions (spc, cpc, pte)	
US7968120 BB	20040524	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MCNEIL-PPC, INC., NEW JERSEY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:LI, SHUN-POR; SOWDEN, HARRY S.; WYNN, DAVID; AND OTHERS; REEL/FRAME:015358/0867; SIGNING DATES FROM 20040416 TO 20040511
US7968120 BB	20040524	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MCNEIL-PPC, INC., NEW JERSEY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:LI, SHUN-POR; SOWDEN, HARRY S.; WYNN, DAVID; AND OTHERS;

					REEL/FRAME:015358/0867; SIGNING DATES FROM 20040416 TO 20040511
US7968120 BB	20110608	LSGT	PAT1	Patented Case	
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US7968120 BB	20141203	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US7968120 BB	20141203	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US7968120 BB	20150702	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : JOHNSON & JOHNSON CONSUMER INC., NEW JERSEY OLDPARTY : MERGER AND CHANGE OF NAME; ASSIGNORS:MCNEIL-PPC, INC.; JOHNSON & JOHNSON CONSUMER INC.; REEL/FRAME:036049/0254 EFFECTIVE DATE : 20150623
US7968120 BB	20150702	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : JOHNSON & JOHNSON CONSUMER INC., NEW JERSEY OLDPARTY : MERGER AND CHANGE OF NAME; ASSIGNORS:MCNEIL-PPC, INC.; JOHNSON & JOHNSON CONSUMER INC.; REEL/FRAME:036049/0254 EFFECTIVE DATE : 20150623
US7968120 BB	20181213	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US7968120 BB	20181213	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US7968120 BB	20270302	PEXP		Calculated Patent Term Expiry (PTA 647 days and a terminal disclaimer has been filed)	
US7968120 BB	20270302	PEXP		Calculated Patent Term Expiry (PTA 647 days and a terminal disclaimer has been filed)	

26) Family number: 32125014 (US2005169985A)

Title: EXTENDED RELEASE FORMULATION OF VENLAFAXINE HYDROCHLORIDE

Abstract: The present invention relates to an extended release once daily pharmaceutical formulation comprising venlafaxine hydrochloride and pharmaceutically acceptable excipients. More particularly, the present invention relates to an extended release composition in the form of mini-tablets which are incorporated in hard **gelatin** capsules.

Classifications:
International (IPC 8-9): A61J3/07 A61K A61K31/135 A61K31/137 A61K47/32 A61K47/38 A61K9/20 A61K9/22 A61K9/28 A61K9/32 A61K9/36 A61K9/48 A61K9/52 A61K9/58 A61K9/64 A61P25/18 A61P25/24 (Advanced/Invention);
A61K31/137 A61K9/22 A61K9/28 A61K9/48 (Advanced/Non-invention);
A61K31/00 A61K31/135 A61K31/137 A61K47/32 A61K47/38 A61K9/00 A61K9/20 A61K9/22 A61K9/28 A61K9/30 A61K9/48 A61K9/52 A61P25/00 (Core/Invention);
A61K (Subclass/Invention)
International (IPC 1-7): A61K31/137 A61K9/20 A61K9/28 A61K9/32 A61K9/36 A61K9/48 A61K9/52 A61K9/64
CPC: A61K9/2866 A61K9/4808 A61K31/137 A61P25/18 A61P25/24
European: A61K31/137 A61K9/48A K61K9/28H6F2
US: 424/456 424/457 424/458

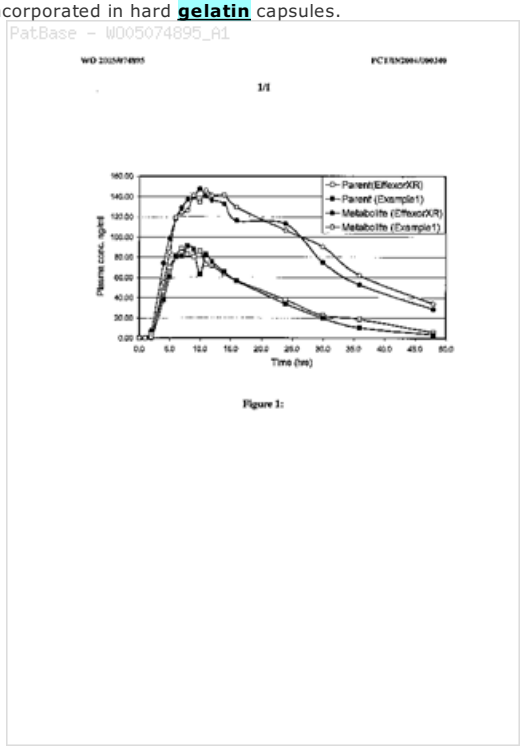


Figure 1:

Family:

Publication number	Publication date	Application number	Application date
AT361743 E	20070615	AT20040821278T	20041027
AU2004315136 AA	20050818	AU20040315136	20041027
AU2004315136 BB	20100617	AU20040315136	20041027
BRPI0418283 A	20070502	BR2004PI18283	20041027
CA2555295 AA	20060802	CA20042555295	20041027
CA2555295 AA	20050818	CA20042555295	20041027
CA2555295 C	20110118	CA20042555295	20041027
DE602004006443 D1	20070621	DE200460006443T	20041027
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NO20063809 A	20060825	NO20060003809	20060825
NO20063809 L	20060825	NO20060003809	20060825
NZ548504 A	20090331	NZ20040548504	20041027
PL1711169 T3	20071031	PL20040821278T	20041027
PT1711169 T	20070723	PT20040821278T	20041027
RU2006129034 A	20080310	RU20060129034	20041027
RU2340331 C2	20081210	RU20060129034	20041027
SI1711169 T1	20071031	SI20040030372T	20041027
TNSN06242 A1	20071203	TN2006SN00242	20060802
UA82597 C2	20080425	UA20060008949	20041027
US2005169985 AA	20050804	US20050031266	20050107
US7807195 BB	20101005	US20050031266	20050107
WO05074895 A1	20050818	WO2004IN00340	20041027

Priority:

IN2004MU00117 20040204 IN2004MU00980 20040913 EP20040821278 20041027
WO2004IN00340 20041027

Probable Assignee: ALEMBIC LTD

Assignee(s): (std):	ALEMBIK LTD ; SANDEEP PANDITA ; SAMPAD BHATTACHARYA ; RAJESH KSHIRSAGAR ; MAYANK JOSHI ; PANDITA SANDEEP ; KSHIRSAGAR RAJESH ; JOSHI MAYANK ; BHATTACHARYA SAMPAD ; ALEMBIC LTD
Assignee(s):	ALEMBIK LIMITED ; ALEMBIC LIMITED
Inventor(s): (std):	KSHIRSAGAR RAJESH ; JOSHI MAYANK ALEMBIC LTD ; JOSHI MAYANK ; BHATTACHARYA SAMPAD ; PANDITA SANDIP ; KSHIRSAGAR RADZHESH ; DZHOSHI MAJANK ; BKHATTACHARJA SAMPAD ; RAJESH KSHIRSAGAR ; SAMPAD BHATTACHARYA ; SANDEEP PANDITA ; MAYANK JOSHI ; PANDITA SANDEEP ; PANDITA SANDEEP ALEMBIC LIMITE ; KSHIRSAGAR RAJESH ALEMBIC LIMI ; JOSHI MAYANK ALEMBIC LIMITED
Inventor(s):	KSHIRSAGAR RAJESH ALEMBIC LIMITED ; PANDITA SANDEEP ALEMBIC LTD ; SHIRSAGAR RAJESH ; KSHIRSAGAR RAJESH ALEMBIC LTD ; PANDITA SANDEEP ALEMBIC LIMITED
Agent(s):	SHELSTON IP PTY LTD; SHELSTON IP; RICHES MCKENZIE AND HERBERT LLP; BIRD AND BIRD; PENDORF AND CUTLIFF; AKERMAN SENTERFITT; PETER A
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)

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Patent	Date recorded	Event group	Code	Event	Details
AT361743 E	20070615	LSGT	+	granted / extensions (spc, cpc, pte)	
AT361743 E	20071115	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	REF DOCUMENT NUMBER : 1711169 COUNTRY OF REF DOCUMENT : EP
AT361743 E	20100715	LSLE	-REN	CEASED DUE TO NON-PAYMENT OF THE ANNUAL FEE	
AT361743 E	20241027	PEXP		Calculated Patent Term Expiry	
AU2004315136 AA	20050818	LSPB	+	published / reissued	
AU2004315136 BB	20100617	LSGT	+	granted / extensions (spc, cpc, pte)	
AU2004315136 BB	20101014	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU2004315136 BB	20130523	LSLE	-MK14	PATENT CEASED SECTION 143(A) (ANNUAL FEES NOT PAID) OR EXPIRED	
AU2004315136 BB	20241027	PEXP		Calculated Patent Term Expiry	
BRPI0418283 A	20070502	LSPB	+	published / reissued	
BRPI0418283 A	20150616	LSES	B07D	TECHNICAL EXAMINATION (OPINION) RELATED TO ARTICLE 229 OF INDUSTRIAL PROPERTY LAW	
BRPI0418283 A	20151201	LSFE	-B08F	APPLICATION FEES: DISMISSAL - ARTICLE 86 OF INDUSTRIAL PROPERTY LAW	TEXT : REFERENTE AS 8A, 9A, 10A E 11A ANUIDADES.
BRPI0418283 A	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.
CA2555295 AA	20050818	LSPB	+	published / reissued	
CA2555295 AA	20060802	LSPB	+	published / reissued	
CA2555295 AA	20070411	LSES	+EEER	EXAMINATION REQUEST	

CA2555295 AA	20070411	LSES	+EEER	EXAMINATION REQUEST	
CA2555295 C	20110118	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2555295 C	20171209	LSLE	-MKLA	LAPSED	EFFECTIVE DATE : 20171027
CA2555295 C	20241027	PEXP		Calculated Patent Term Expiry	
DE602004006443 T2	20080110	LSGT	+	granted / extensions (spc, cpc, pte)	
DE602004006443 T2	20080529	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE602004006443 T2	20100819	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
DE602004006443 T2	20241027	PEXP		Calculated Patent Term Expiry	
DK1711169 T3	20070917	LSGT	+	granted / extensions (spc, cpc, pte)	
DK1711169 T3	20241027	PEXP		Calculated Patent Term Expiry	
EP1711169 A1	20061018	LSPB	+	published / reissued	
EP1711169 A1	20061018	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20060726
EP1711169 A1	20061102	LSRE	RTI1	TITLE (CORRECTION)	TEXT : EXTENDED RELEASE COATED MINITABLETS OF VENLAFAXINE HYDROCHLORIDE
EP1711169 B1	20070509	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1711169 B1	20070509	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP1711169 B1	20070531	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1711169 B1	20070613	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP1711169 B1	20070731	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : RO REF LEGAL EVENT CODE : EPE
EP1711169 B1	20070803	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HK REF LEGAL EVENT CODE : GR REF DOCUMENT NUMBER : 1091137 COUNTRY OF REF DOCUMENT : HK
EP1711169 B1	20070904	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : EP REF DOCUMENT NUMBER : 20070402197 COUNTRY OF REF DOCUMENT : GR
EP1711169 B1	20070911	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SE REF LEGAL EVENT CODE : RPOT
EP1711169 B1	20071216	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2287813 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP1711169 B1	20071228	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HU REF LEGAL EVENT CODE : AG4A REF DOCUMENT NUMBER : E002060 COUNTRY OF REF DOCUMENT : HU
EP1711169 B1	20080416	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20080212

EP1711169 B1	20080530	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY PAYMENT DATE : 20070925 YEAR OF FEE PAYMENT : 4
EP1711169 B1	20081031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20080930 YEAR OF FEE PAYMENT : 5
EP1711169 B1	20081128	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20081031 YEAR OF FEE PAYMENT : 5
EP1711169 B1	20081128	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK PAYMENT DATE : 20080926 YEAR OF FEE PAYMENT : 5
EP1711169 B1	20081231	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20080929 YEAR OF FEE PAYMENT : 5
EP1711169 B1	20090130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20081229 YEAR OF FEE PAYMENT : 5
EP1711169 B1	20090130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20080930 YEAR OF FEE PAYMENT : 5
EP1711169 B1	20090130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20081027 YEAR OF FEE PAYMENT : 5
EP1711169 B1	20090130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20081013 YEAR OF FEE PAYMENT : 5
EP1711169 B1	20090130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE PAYMENT DATE : 20081031 YEAR OF FEE PAYMENT : 5
EP1711169 B1	20090130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20081003 YEAR OF FEE PAYMENT : 5
EP1711169 B1	20090130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20081002 YEAR OF FEE PAYMENT : 5
EP1711169 B1	20090130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20081014 YEAR OF FEE PAYMENT : 5
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EP1711169 B1	20090227	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20081024 YEAR OF FEE PAYMENT : 5
EP1711169 B1	20090227	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20081001

				[ANNOUNCED FROM NATIONAL OFFICE TO EPO]	YEAR OF FEE PAYMENT : 5
EP1711169 B1	20090227	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20081021 YEAR OF FEE PAYMENT : 5
EP1711169 B1	20090227	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20081025 YEAR OF FEE PAYMENT : 5
EP1711169 B1	20090227	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20081023 YEAR OF FEE PAYMENT : 5
EP1711169 B1	20090331	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20081021 YEAR OF FEE PAYMENT : 5
EP1711169 B1	20090331	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20081002 YEAR OF FEE PAYMENT : 5
EP1711169 B1	20090331	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG PAYMENT DATE : 20081002 YEAR OF FEE PAYMENT : 5
EP1711169 B1	20090430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20080929 YEAR OF FEE PAYMENT : 5
EP1711169 B1	20090630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20081008 YEAR OF FEE PAYMENT : 5
EP1711169 B1	20090630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20080926 YEAR OF FEE PAYMENT : 5
EP1711169 B1	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 : 20081027
EP1711169 B1	20091030	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 : 20081027
EP1711169 B1	20100331	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20081110 YEAR OF FEE PAYMENT : 5
EP1711169 B1	20100430	LSLE	-BERE	BE: LAPSED	PARTYTYPE : OWNER REF COUNTRY CODE : EP OWNER : ALEMBIC LIMITED EFFECTIVE DATE : 20091031
EP1711169 B1	20100506	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 : 20100427
EP1711169 B1	20100526	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : V1 EFFECTIVE DATE : 20100501

EP1711169 B1	20100531	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 : 20091031
EP1711169 B1	20100531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20071025 YEAR OF FEE PAYMENT : 5
EP1711169 B1	20100531	LSRE	+PGRI	PATENT REINSTATED IN CONTRACTING STATE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT REINSTATED DATE : 20100401
EP1711169 B1	20100531	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP1711169 B1	20100602	LSLE	-EUG	SE: EUROPEAN PATENT HAS LAPSED	REF COUNTRY CODE : EP
EP1711169 B1	20100607	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DK REF LEGAL EVENT CODE : EBP
EP1711169 B1	20100615	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : EE REF LEGAL EVENT CODE : MM4A REF DOCUMENT NUMBER : E001307 COUNTRY OF REF DOCUMENT : EE EFFECTIVE DATE : 20091031
EP1711169 B1	20100707	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SK REF LEGAL EVENT CODE : MM4A REF DOCUMENT NUMBER : E 2260 COUNTRY OF REF DOCUMENT : SK EFFECTIVE DATE : 20091027
EP1711169 B1	20100723	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20100630
EP1711169 B1	20100730	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 THE APPLICANT RENOUNCES LAPSED DATE : 20100430
EP1711169 B1	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 : 20100501
EP1711169 B1	20100730	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 : 20091031
EP1711169 B1	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
EP1711169 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 NON-PAYMENT OF DUE FEES LAPSED DATE : 20091028
EP1711169 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 NON-PAYMENT OF DUE FEES LAPSED DATE : 20100501
EP1711169 B1	20100730	LSLE	-PG25	LAPSED IN A CONTRACTING	COUNTRY OF REF DOCUMENT : PT

				STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20100427
EP1711169 B1	20100730	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SI REF LEGAL EVENT CODE : KO00 EFFECTIVE DATE : 20100611
EP1711169 B1	20100831	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 : 20091027
EP1711169 B1	20100831	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 : 20091027
EP1711169 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 NON-PAYMENT OF DUE FEES LAPSED DATE : 20091027
EP1711169 B1	20100831	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 : 20091028
EP1711169 B1	20100831	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 : 20091027
EP1711169 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 : 20091031
EP1711169 B1	20101029	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 : 20091031
EP1711169 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 NON-PAYMENT OF DUE FEES LAPSED DATE : 20100504
EP1711169 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 NON-PAYMENT OF DUE FEES LAPSED DATE : 20091027
EP1711169 B1	20101029	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 : 20091031
EP1711169 B1	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 : 20091027
EP1711169 B1	20110131	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 : 20091031
EP1711169 B1	20110228	LSLE	-PG25	LAPSED IN A	COUNTRY OF REF DOCUMENT :

				CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	RO NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20091027
EP1711169 B1	20110318	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20110308
EP1711169 B1	20110331	LSRE	+PGRI	PATENT REINSTATED IN CONTRACTING STATE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT REINSTATED DATE : 20100401
EP1711169 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 : 20091027
EP1711169 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 : 20091028
EP1711169 B1	20110531	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 : 20091027
EP1711169 B1	20110630	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : PL REF LEGAL EVENT CODE : LAPE
EP1711169 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 : 20110307
EP1711169 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 : 20091028
EP1711169 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 : 20091027
EP1711169 B1	20241027	PEXP		Calculated Patent Term Expiry	
ES2287813 T3	20071216	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2287813 T3	20241027	PEXP		Calculated Patent Term Expiry	
HK1091137 A1	20070112	LSPB	+	published / reissued	
HK1091137 A1	20110610	LSLE	-PC	PATENT CEASED (I.E. PATENT HAS LAPSED DUE TO THE FAILURE TO PAY THE RENEWAL FEE)	EFFECTIVE DATE : 20101027
HK1091137 A1	20261120	PEXP		Calculated Patent Term Expiry	
HK1091137 B	20070803	LSGT	+	granted / extensions (spc, cpc, pte)	
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KR20070000439 A	20110804	LSRV	-E601	DECISION TO REFUSE APPLICATION	
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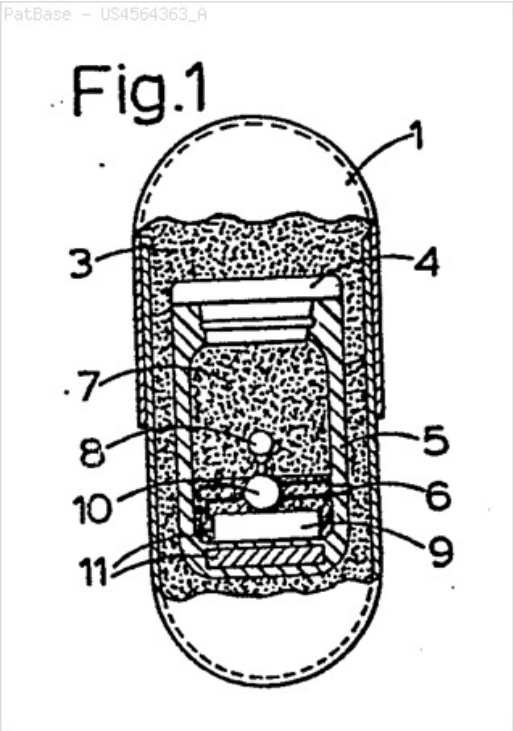
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27) Family number: 23124014 (US4564363A)

Title: DELAYED ACTION ASSEMBLY

Abstract: A device for effecting the delayed release of an active ingredient comprises a container and, within, a dispersible unit of ingredient, a removable closure and a electrical control circuit for removal of said closure at a designated time to release the active ingredient. Several assemblies are combined to control the administration of veterinary medicaments to ruminant animals as a specific application of the invention.

Classifications:
International (IPC 8-9): A61D7/00 A61K9/00 A61K9/22 A61K9/52 A61M31/00 (Advanced/Invention);
A61K9/22 (Advanced/Non-invention);
A61D7/00 A61K9/00 A61K9/22 A61M31/00 (Core/Invention)
International (IPC 1-7): A01K5/02 A01K5/2 A01N A23K A61D7/00 A61J3/07 A61J7/00 A61K9/00 A61K9/22 A61K9/48 A61K9/52 A61M31/00
CPC: A61D7/00 A61K9/0068 A61M31/002
European: A61D7/00 A61K9/00M10 A61K9/00M18G A61M31/00D
US: 222/641 424/438 604/140 604/890 604/891 604/891.1 604/93 604/93.01 D24/104



Family:

Publication number	Publication date	Application number	Application date
AT67683 E	19911015	AT19840304692T	19840710
AU198429992 A1	19850117	AU19840029992	19840628
AU579320 B2	19881124	AU19840029992	19840628
BRPI8403569 A	19850625	BR1984PI03569	19840713
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DK163411 C	19920720	DK19840003407	19840711
DK340784 A	19850114	DK19840003407	19840711
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NO171043 B	19921012	NO19840002862	19840712
NO171043 C	19930120	NO19840002862	19840712
NO842862 A	19850114	NO19840002862	19840712
NO842862 L	19850114	NO19840002862	19840712
NZ208513 A	19870630	NZ19840208513	19840614
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ZA8404617 A	19850327	ZA19840004617	19840619

Priority:

US19830513512 19830713 CA19840457242 19840622 EP19840304692 19840710

Probable Assignee: SMITHKLINE BECKMAN CORP

Assignee(s): (std): SMITH KLINE FRENCH CANADA LTD ; SMITHKLINE BECKMAN CORP ; SMITHKLINE BEECHAM CORP

Assignee(s): SMITHKLINE BECKMAN CORP PHILADELPHIA PA US ; SMITHKLINE BECKMAN CORP US ; SMITHKLINE BECKMAN A CORP OF PA CORP ; BAGNALL BRIAN G ; GYURIK ROBERT J ; SMITH KLINE AND FRENCH CANADA LTD ; SMITH KLINE BECKMAN CORP

Inventor(s): (std): BAGNALL BRIAN GEOFFREY ; GYURIK ROBERT JOHN ; GYURIK ROBERT J ; GYURIK R J ; GYURIK JOHN R ; BAGNALL BRIAN G ; BAGNALL B G ; BAGNAIL BRIAN GEOFFREY ; ROBAATO JIYON JIYUURITSUKU ; BAGNALL GEOFFREY B ; BURAIAN JIYOFURII BAGUNARU

Inventor(s): BAGNALL BRIAN GEOFFREY BERWYN PENNSYLVANIA 19312 U ; BAGNALL BG ; BAGNALL BRIAN GEOFFREY BERWYN PENNSYLVANIA 19312 US ; GYURIK ROBERT JOHN DOWNINGTOWN PENNSYLVANIA 19335 ; GYURIK RJ ; BRIAN GEOFFREY BAGNAIL ; BRIAN G BAGNALL ; GYURIK ROBERT JOHN DOWNINGTOWN PENNSYLVANIA... ; ROBAATO JON JURITSUKU ; ROBERT JOHN GYURIK ; ROBERT J GYURIK ; GYURIK ROBERT JOHN DOWNINGTOWN PENNSYLVANIA 19335 US ; BAGNALL BRIAN GEOFFREY BERWYN PENNSYLVANIA... ; BRIAN GEOFFREY BAGNALL ; BURAIAN JOFURII BAGUNARU

Agent(s): DAVIES COLLISON CAVE PTY LTD; DAVIES COLLISON CAVE; GOWLING LAFLEUR HENDERSON LLP

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
AT67683 E	19911015	LSGT	+	granted / extensions (spc, cpc, pte)	
AT67683 E	20040710	PEXP		Calculated Patent Term Expiry	
AU198429992 A1	19850117	LSPB	+	published / reissued	
AU579320 B2	19881124	LSGT	+	granted / extensions (spc, cpc, pte)	
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EP0132102 A2	19850123	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19840718
EP0132102 A2	19860910	LSRE	RHK1	MAIN CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : A61M 31/00
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ES8604405 A1	20060201	PEXP		Calculated Patent Term Expiry	
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FI82600 C	19910410	LSGT	+	granted / extensions (spc, cpc, pte)	
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HU37882 A2	19860328	LSPB	+	published / reissued	
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IE57707 B	19960501	LSLE	-MM4A	PATENT LAPSED	
IE57707 B	20040710	PEXP		Calculated Patent Term Expiry	
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KR19850000954 A	19850314	LSPB	+	published / reissued	
KR850000954 A	19850314	LSPB	+	published / reissued	
KR850000954 A	19890629	LSES	A201	REQUEST FOR EXAMINATION	
KR850000954 A	19910711	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
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MX169403 B	20030630	PEXP		Calculated Patent Term Expiry	
NO171043 B	19921012	LSPB	+	published / reissued	
NO171043 C	19930120	LSGT	+	granted / extensions (spc, cpc, pte)	
NO171043 C	20040712	PEXP		Calculated Patent Term Expiry	
NO842862 A	19850114	LSPB	+	published / reissued	
NZ208513 A	19870630	LSPB	+	published / reissued	
PH25758 A	19911018	LSGT	+	granted / extensions (spc, cpc, pte)	
PH25758 A	20081018	PEXP		Calculated Patent	

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PT78889 A	19840801	LSPB	+	published / reissued	
PT78889 B	19861023	LSGT	+	granted / extensions (spc, cpc, pte)	
PT78889 B	20000630	LSLE	-MM3A	ANNULMENT OR LAPSE	TEXT : LAPSE DUE TO NON-PAYMENT OF FEES EFFECTIVE DATE : 19921203
PT78889 B	20040711	PEXP		Calculated Patent Term Expiry	
US4564363 A	19860114	LSGT	+	granted / extensions (spc, cpc, pte)	
US4564363 A	19830713	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SMITHKLINE BECKMAN CORPORATION ONE FRANKLIN PLAZA, OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNORS:BAGNALL, BRIAN G.; GYURIK, ROBERT J.; SHEARER, MARCIA C.; AND OTHERS; REEL/FRAME:004155/0512; SIGNING DATES FROM 19830611 TO 19830711
US4564363 A	19830713	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SMITHKLINE BECKMAN CORPORATION ONE FRANKLINPLAZA, OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNORS:BAGNALL, BRIAN G.; GYURIK, ROBERT J.; SHEARER, MARCIA C.; AND OTHERS; REEL/FRAME:004155/0512; SIGNING DATES FROM 19830611 TO 19830711
US4564363 A	19830713	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SMITHKLINE BECKMAN CORPORATION, A CORP. OF PA,PENN OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BAGNALL, BRIAN G.; GYURIK, ROBERT J.; SHEARER, MARCIA C.; AND OTHERS; SIGNING DATES FROM 19830611 TO 19830711; REEL/FRAME:004155/0512
US4564363 A	19830713	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SMITHKLINE BECKMAN CORPORATION, PENNSYLVANIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BAGNALL, BRIAN G.; GYURIK, ROBERT J.; SHEARER, MARCIA C.; AND OTHERS; SIGNING DATES FROM 19830611 TO 19830711; REEL/FRAME:004155/0512
US4564363 A	19851113	LSGT	PAT1	Patented Case	
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US4564363 A	20180123	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US4564363 A	20030713	PEXP		Calculated Patent Term Expiry	
ZA8404617 A	19850327	LSGT	+	granted / extensions (spc,	

			cpc, pte)
ZA8404617 A	20040618	PEXP	Calculated Patent Term Expiry

28) Family number: 51339014 (US2004213849A)

Title: MODIFIED RELEASE DOSAGE FORMS

Abstract: A dosage form comprises: (a) at least one active ingredient: (b) a core having a first surface portion upon which resides a first coating and a second surface portion which is substantially free of the first coating; and (c) a shell which resides upon at least a portion of the second surface portion, wherein the shell comprises a different material from the first coating. In another embodiment, the dosage form comprises: (a) at least one active ingredient; (b)a core comprising a center portion having an exterior surface and an annular portion having an exterior surface and an interior surface, wherein the annular portion interior surface is in contact with at least a portion of the center portion exterior surface, and a coating resides on at least a portion of the annular portion exterior surface; and (c) a shell which resides upon at least a portion of the exterior surface of the center portion, wherein the shell comprises a different material than the impermeable coating. In another embodiment, the dosage form comprises: (a) at least one active ingredient; (b) a core having an outer surface and a cavity which extends at least partially through the core such that the core outer surface has at least a first opening therein; (c) a first coating which resides on at least a portion of the core outer surface, wherein the first shell portion comprises a different material from the first coating; and (d) a first shell portion which is adjacent to the first opening and covers at least the first opening.

Classifications:

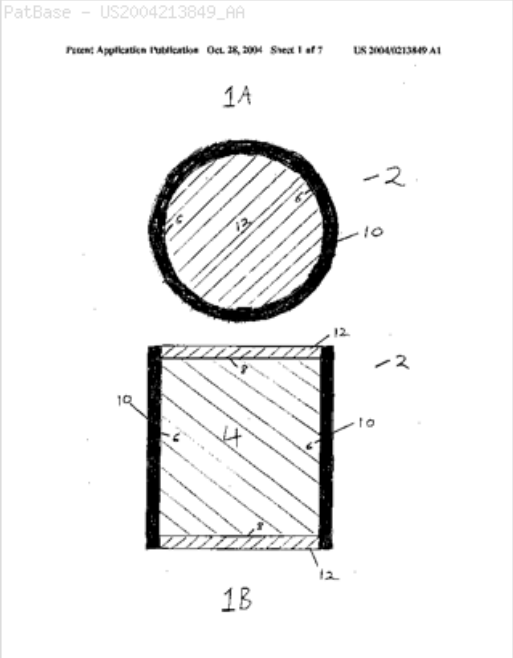
International (IPC 8-9): A23G1/00 A23G1/54 A23G3/00 A23G3/04 A23G3/34 A23G3/36 A23G3/54 A23L1/00 A23L1/09 A23L1/30 A61J3/00 A61J3/06 A61J3/10 A61K31/136 A61K31/137 A61K31/277 A61K47/10 A61K47/14 A61K47/26 A61K47/30 A61K47/32 A61K47/34 A61K47/36 A61K47/38 A61K47/44 A61K47/46 A61K9/00 A61K9/14 A61K9/20 A61K9/22 A61K9/24 A61K9/26 A61K9/28 A61K9/30 A61K9/32 A61K9/34 A61K9/36 A61K9/38 A61K9/48 A61P11/00 B30B11/08 B30B11/34 B30B15/30 G06F17/30 (Advanced/Invention); A61K9/50 (Advanced/Non-invention)

International (IPC 1-7): A61K9/24

CPC: A23L29/30 A23G1/54 A23G3/0029 A23G3/04 A23G3/368 A23G3/54 A61J3/005 A61J3/06 A61J3/10 A61K9/0004 A61K9/0056 A61K9/2013 A61K9/2018 A61K9/2027 A61K9/2031 A61K9/2054 A61K9/2068 A61K9/2072 A61K9/2081 A61K9/209 A61K9/2095 A61K9/282 A61K9/2826 A61K9/284 A61K9/286 A61K9/2873 A61K9/2886 A61K9/2893 A61K9/5084 A61P11/00 B30B11/08 B30B11/34 B30B15/302 Y10T428/1352 A61P43/00

European: A23G1/54 A23G3/00P2M8F A23G3/04 A23G3/36M4 A23G3/54 A23L1/09 A61J3/00C A61J3/06 A61J3/10 A61K9/00L4 A61K9/00M18B A61K9/20H4 A61K9/20H4B A61K9/20H6B A61K9/20H6D A61K9/20K A61K9/20K2B A61K9/20K4B A61K9/20P A61K9/28H4 A61K9/28H4B A61K9/28H6B A61K9/28H6F A61K9/28H6H A61K9/28K A61K9/28P B30B11/08 B30B11/34 B30B15/30B K61K9/20H4 K61K9/20H4B K61K9/20H6F2 K61K9/20H8 K61K9/20K2B K61K9/20P K61K9/50M

US: 424/472 424/472P



Family:

Publication number	Publication date	Application number	Application date
US2004213849 AA	20041028	US20040476530	20040527

Priority:

US20010966450 20010928
US20010966497 20010928
US20010966939 20010928
US20010966509 20010928
US20010967414 20010928
WO2002US31117 20020928
US20040476530 20040527

Probable Assignee: MCNEIL PPC INC

Assignee(s): LEE DER YANG ; LI SHUN POR ; MCNEIL PPC INC ; SOWDEN HARRY S ; THOMAS MARTIN ; WYNN DAVID

Inventor(s): (std): LEE DER YANG ; LI SHUN POR ; SOWDEN HARRY S ; THOMAS MARTIN ; WYNN DAVID

Legal status (INPADOC)

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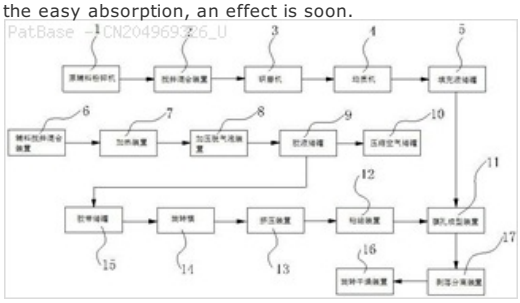
Patent	Date recorded	Event group	Code	Event	Details
US2004213849 AA	20041028	LSPB	+	published / reissued	
US2004213849 AA	20130911	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE

29) Family number: 61477014 (CN204969326U)

Title: PROPOLIS SOFT CAPSULE PREPARES SYSTEM

Abstract: The utility model relates to a propolis soft capsule produces technical field, specific propolis soft capsule prepares system that says so, the supplementary material production system is connected with fenestra forming device, the auxiliary material production system is connected with the sticky tape storage tank, the sticky tape storage tank is connected with the extrusion device through revolving rotary die, the extrusion device passes through the bonding device and is connected with fenestra forming device, fenestra forming device with peel off separator and be connected, it is connected with rotatory drying device to peel off separator, the utility model discloses integrate a system flow water on -line operation with traditional independent production facility, simple structure, convenient operation can the time of having practiced thrift, can guarantee the former quality of expecting the product again, has improved work efficiency, avoids secondary pollution to destroy nutritive value, and the product active ingredient content of producing is high, and the curative effect is good, and it is accurate to contain the dose, and the precision is high, and to contain the medicine error little for every seed lac bag in the **softgel**, and its weight error only be the 1 percent -2 percent scope, the easy absorption, an effect is soon.

Classifications:
International (IPC 8-9): A23L21/20 A23L33/00 A61J3/07 A61K35/644 A61K9/48 A61P1/02 A61P1/04 A61P17/02 A61P29/00 A61P39/00 (Advanced/Invention)



Family:

Publication number	Publication date	Application number	Application date
CN204969326 U	20160120	CN201520389621U	20150609

Priority:
CN201520389621U 20150609

Probable Assignee: JIANGSU RIGAO BEE PRODUCTS CO LTD
Assignee(s): (std): JIANGSU RIGAO BEE PRODUCTS CO LTD
Assignee(s): JIANGSU RIGAO BEE PRODUCTS CO ; JIANGSU HIDAKA BEE PRODUCTS LTD
Inventor(s): (std): JI CHAO ; JI FUBIAO ; JI JIAN

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
CN204969326 U	20160120	LSGT	+	granted / extensions (spc, cpc, pte)	
CN204969326 U	20160120	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN204969326 U	20160120	LSGT	+GR01	授权 (The grant of patent right)	TEXT：授权 (AUTHORIZATION)
CN204969326 U	20200602	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：20190609
CN204969326 U	20200602	LSLE	-CF01	TERMINATION OF PATENT RIGHT DUE TO NON-PAYMENT OF ANNUAL FEE	
CN204969326 U	20250609	PEXP		Calculated Patent Term Expiry	

30) Family number: 15425016 (US5942034A)

Title: APPARATUS FOR THE **GELATIN** COATING OF MEDICAMENTS

Abstract: A process and apparatus for the **gelatin** coating of medicaments which includes a continuous conveyer system to advance a plurality of pallets through a loading station, at least one dipping station, at least one dryer station, a reorientation station and an unloading station. Medicaments to be coated are loaded into pallets at the loading station and advanced to the first dipping station where a vacuum is applied to secure the medicament to the pallet. The pallet is inverted and a first portion of each of the medicaments is dipped into a coating mixture. The pallet is then returned to its upright position, the vacuum is removed and the coating is dried. The medicaments are then transferred from the first pallet to a second pallet by a reorientation mechanism. The second pallet is then advanced to a second dipping station which operates in the same manner as the first dipping station. The second pallet is advanced through the dryer station and the fully coated medicaments are ejected from the pallet into a container. The pallets used to hold the medicaments include a plate-like support member, on which rests a flexible mat having a rectangular array of receptacles including compliant diaphragm portions such that when a vacuum is applied to the pallet, the medicaments are secured thereto. The drying means includes air directing plates having sinusoidal rows of air directing apertures under which the medicaments to be dried are passed.

Classifications:
International (IPC 8-9): A23G3/00 A23G3/24 A23G7/00 A61F13/15 A61J1/00 A61J3/00 A61J3/06 A61K9/28 A61K9/40 B01J13/22 B05B15/12 B05C1/16 B05C13/00 B05C3/00 B05C3/09 B05C3/10 B05D1/00 B05D1/18 B65B1/00 B65D1/36 B65D85/00 B65G47/24 B65G47/248 B65G49/00 F26B11/22 F26B15/00 (Advanced/Invention); A61J3/06 B05B15/12 B05C3/10 (Advanced/Non-invention); B05C13/00 B05C3/09 B05D1/18 B65G47/24 (Core/Invention)
International (IPC 1-7): A23G3/00 A61F13/15 A61J1/00 A61J1/03 A61J3/00 A61J3/06 A61J3/07 A61K9/28 A61K9/40 B01J13/22 B05C1/02 B05C1/16 B05C13/00 B05C3/00 B05C3/09 B05D1/00 B05D1/18 B65B1/00 B65D85/00 B65G47/248 B65G49/00 B65G65/23 F26B11/22 F26B15/00 F26B3/00
CPC: Y10S53/90 B05B16/20 A23G3/24 A23G7/0025 A61J3/005 B05C3/10 B65D1/36
European: A23G3/24 A23G7/00D A61J3/00C B65D1/36 L05B15/12C L05C3/10
US: 118/20 118/26 118/30 118/423 118/500 118/503 118/58 118/66 34/202 34/232 34/236 34/463 34/510 414/405 414/764 414/810 414/816 427/2.14 427/2.22 427/294 53/900

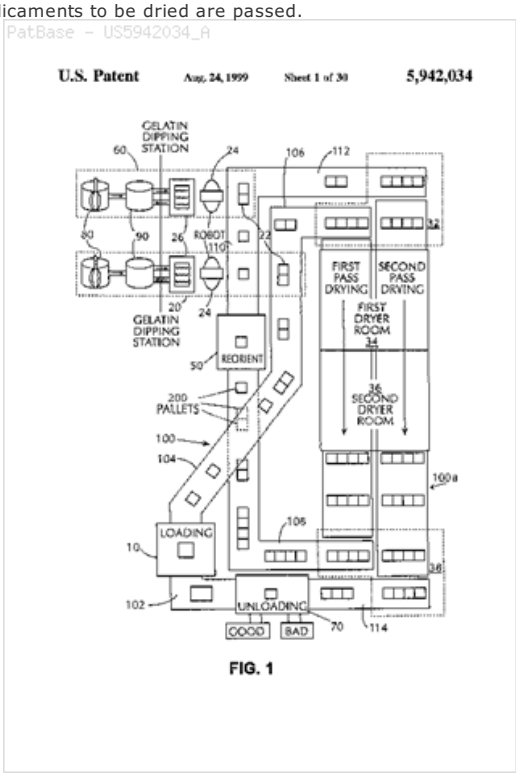


FIG. 1

Family:

Publication number	Publication date	Application number	Application date
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AT407566 E	20080915	AT19980076984T	19980701
AT427041 E	20090415	AT19980076985T	19980701
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CA2266445 C	20050111	CA19982266445	19980701
CA2481830 AA	19990204	CA19982481830	19980701
CA2481830 C	20080422	CA19982481830	19980701
CA2481833 AA	19990204	CA19982481833	19980701
CA2481836 AA	19990204	CA19982481836	19980701
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GT199800098 A	20020903	GT19980000098	19980709
JP2001501858 T2	20010213	JP19990509840T	19980701
PA8456201 A1	20000524	PA19980084562	19980723
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US6126987 A	20001003	US19990274761	19990323
US6132159 A	20001017	US19990275052	19990323
US6195911 BA	20010306	US19990274760	19990323

US6258400 BA	20010710	US19990274759	19990323
WO9904645 A1	19990204	WO1998US13575	19980701

Priority:

US19970900225 19970724
EP19980934208 19980701
WO1998US13575 19980701
US19990274759 19990323
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CA19982481830 19980701
CA19982481836 19980701
US19990274761 19990323

Probable Assignee: BAYER AG

Assignee(s): (std): BREHAUT JEFFREY D ; HOOVER LINN ; KUCHARSKI THOMAS ; REITER THOMAS C ; REVELLE DAVID J ; SLATER DANIEL A ; TORRES LUIS R ; VO PATRICK ; BOYER CORP ; BAYER CORP ; BAYER AG

Assignee(s): BAYER (A OF STATE OF INDIANA) CORP ; BAYER A OF INDIANA CORP ; BAYER A OF STATE OF INDIANA CORP ; BAYER CORPORAITON A CORP ; BAYER CORPORAITON A CORP OF IN ; BAYER HEALTHCARE LLC

Inventor(s): (std): BREHANT JEFFREY D ; BREHAUT JEFFREY ; BREHAUT JEFFREY D ; D BREHAUT JEFFREY ; HOOVER LINN ; HOOVER LINN C ; KUCHARSKI THOMAS ; REITER THOMAS ; REITER THOMAS C ; REVELLE DAVID ; REVELLE DAVID J ; SLATER DANIEL ; SLATER DANIEL A ; SLATER DAVID A ; TORRES LUIS ; TORRES LUIS R ; VO PATRICK ; THOMAS KUCHARSKI ; THOMAS C REITER ; PATRICK VO ; LUIS R TORRES ; LINN HOOVER ; JEFFREY D BREHAUT ; HOOVER LINNE ; DAVID J REVELLE ; DANIEL A SLATER

Inventor(s): DANIEL SLATER ; DAVID REVELLE ; JEFFREY BREHAUT ; LINNE HOOVER ; LUIS TORRES ; THOMAS REITER

Agent(s): BORDEN LADNER GERVAIS LLP; BERESFORD KEITH DENIS LEWIS

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 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
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AT362709 E	20071115	LSLE	-RER	CEASED AS TO PARAGRAPH 5 LIT. 3 LAW INTRODUCING PATENT TREATIES	
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EP0955815 A1	19991117	LSPB	+	published / reissued	
EP0955815 A1	19991117	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19990416
EP0955815 A4	20020724	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	EFFECTIVE DATE : 20020605
EP0955815 B1	20070523	LSGT	+	granted / extensions (spc, cpc, pte)	
EP0955815 B1	20070523	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 : 20070523
EP0955815 B1	20070523	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 : 20070523
EP0955815 B1	20070523	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 : 20070523
EP0955815 B1	20070523	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP0955815 B1	20070615	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP0955815 B1	20070627	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP0955815 B1	20070823	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 : 20070823
EP0955815 B1	20070903	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL	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 : 20070903

				OFFICE TO EPO]	
EP0955815 B1	20071101	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
EP0955815 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 FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20070523
EP0955815 B1	20071130	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP0955815 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 : 20070523
EP0955815 B1	20080131	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 : 20070827
EP0955815 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 FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20070523
EP0955815 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 FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20070523
EP0955815 B1	20080131	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 : 20071023
EP0955815 B1	20080423	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20070823
EP0955815 B1	20080430	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20080226
EP0955815 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 : 20070731
EP0955815 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 : 20070824
EP0955815 B1	20080430	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 : 20070523
EP0955815 B1	20080731	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 : 20080118
EP0955815 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 NON-PAYMENT OF DUE FEES LAPSED DATE : 20070702
EP0955815 B1	20081128	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 : 20070823
EP0955815 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 : 20070523
EP0955815 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 : 20070701
EP0955815 B1	20180701	PEXP		Calculated Patent Term Expiry	
EP1767098 A1	20070328	LSPB	+	published / reissued	
EP1767098 A1	20071017	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20070906
EP1767098 A1	20071107	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20071009
EP1767098 A1	20071205	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
EP1767098 B1	20090401	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1767098 B1	20090401	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP1767098 B1	20090415	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1767098 B1	20090429	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D

EP1767098 B1	20090901	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
EP1767098 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 FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20090401
EP1767098 B1	20091030	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 : 20090712
EP1767098 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 FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20090401
EP1767098 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 : 20090902
EP1767098 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 FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20090401
EP1767098 B1	20091130	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 : 20090701
EP1767098 B1	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 : 20090401
EP1767098 B1	20100226	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 : 20090731
EP1767098 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 FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20090401
EP1767098 B1	20100226	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP1767098 B1	20100310	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20100105
EP1767098 B1	20100324	LSLE	-GBPC	GB: EUROPEAN	REF COUNTRY CODE : EP

				PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	EFFECTIVE DATE : 20090701
EP1767098 B1	20100423	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20100331
EP1767098 B1	20100430	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 : 20090731
EP1767098 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 : 20090731
EP1767098 B1	20100430	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 : 20090731
EP1767098 B1	20100531	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 : 20090701
EP1767098 B1	20100630	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 : 20100202
EP1767098 B1	20100730	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 : 20090701
EP1767098 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 : 20090702
EP1767098 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 : 20090401
EP1767098 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 : 20090701
EP1767098 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 : 20090401

EP1767098 B1	20180701	PEXP		Calculated Patent Term Expiry	
EP1774855 A1	20070418	LSPB	+	published / reissued	
EP1774855 A1	20071017	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20070906
EP1774855 A1	20071226	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
EP1774855 B1	20080910	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1774855 B1	20080910	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP1774855 B1	20080915	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1774855 B1	20081015	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP1774855 B1	20090227	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 : 20080910
EP1774855 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 : 20080910
EP1774855 B1	20090302	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
EP1774855 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 FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20080910
EP1774855 B1	20090430	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 : 20081221
EP1774855 B1	20090529	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 : 20080910

EP1774855 B1	20090529	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 : 20090210
EP1774855 B1	20090731	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 : 20080910
EP1774855 B1	20090819	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20090611
EP1774855 B1	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 FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20080910
EP1774855 B1	20100129	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 : 20081210
EP1774855 B1	20100226	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 : 20090731
EP1774855 B1	20100226	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP1774855 B1	20100324	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20090701
EP1774855 B1	20100423	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20100331
EP1774855 B1	20100430	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 : 20090731
EP1774855 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 : 20090731
EP1774855 B1	20100430	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 : 20090731
EP1774855 B1	20100531	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 : 20090701
EP1774855 B1	20100630	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 : 20100202
EP1774855 B1	20100730	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 : 20090701
EP1774855 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 : 20081211
EP1774855 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 : 20090701
EP1774855 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 : 20080910
EP1774855 B1	20180701	PEXP		Calculated Patent Term Expiry	
GT199800098 A	20020903	LSPB	+	published / reissued	
JP2001501858 T2	20010213	LSPB	+	published / reissued	
JP2001501858 T2	20050721	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20050701
JP2001501858 T2	20070703	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20070703
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JP2001501858 T2	20080325	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20080325
PA8456201 A1	20000524	LSPB	+	published / reissued	
SV1998000095 A	19990525	LSPB	+	published / reissued	
US5942034 A	19990824	LSGT	+	granted / extensions (spc, cpc, pte)	
US5942034 A	19980309	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BAYER CORPORATION, A CORPORATION OF INDIANA, NEW J OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BREHAUT, JEFFREY D.; KUCHARSKI, THOMAS; REVELLE, DAVID J.; AND OTHERS; REEL/FRAME:009028/0789; SIGNING DATES FROM 19980203 TO 19980223
US5942034 A	19980309	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BAYER CORPORATION, NEW JERSEY OLDPARTY : RE-RECORD TO

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US5942034 A	19990813	LSGT	PAT1	Patented Case	
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US5942034 A	20030221	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5942034 A	20070226	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5942034 A	20110224	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5942034 A	20170724	PEXP		Calculated Patent Term Expiry	
US6126987 A	20001003	LSGT	+	granted / extensions (spc, cpc, pte)	
US6126987 A	19990323	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BAYER CORPORAITON, A CORP. OF IN, NEW JERSEY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BREHAUT, JEFFREY D.; KUCHARSKI, THOMAS; REVELLE, DAVID J.; AND OTHERS; REEL/FRAME:009858/0941; SIGNING DATES FROM 19980203 TO 19980223
US6126987 A	20000914	LSGT	PAT1	Patented Case	
US6126987 A	20000914	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
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US6126987 A	20120403	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
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US6132159 A	19990323	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BAYER CORPORATION, A CORPORATION OF INDIANA, NEW J OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BREHAUT, JEFFREY D.; KUCHARSKI, THOMAS; REVELLE, DAVID J.; AND OTHERS; REEL/FRAME:009858/0918; SIGNING DATES FROM 19980203 TO 19980223
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US6132159 A	20120417	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US6132159 A	20190323	PEXP		Calculated Patent Term Expiry	
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US6195911 BA	19990323	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BAYER CORPORATION (A

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US6195911 BA	20010215	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
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US6195911 BA	20190323	PEXP		Calculated Patent Term Expiry	
US6258400 BA	20010710	LSGT	+	granted / extensions (spc, cpc, pte)	
US6258400 BA	19990323	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BAYER CORPORATION (A CORPORATION OF THE STATE OF I OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BREHAUT, JEFFREY D.; KUCHARSKI, THOMAS; REVELLE, DAVID J.; AND OTHERS; REEL/FRAME:009858/0884; SIGNING DATES FROM 19980203 TO 19980223
US6258400 BA	20010625	LSGT	PAT1	Patented Case	
US6258400 BA	20010625	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
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US6258400 BA	20090112	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US6258400 BA	20130110	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US6258400 BA	20190323	PEXP		Calculated Patent Term Expiry	
WO9904645 A1	19990204	LSPB	+	published / reissued	
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WO9904645 A1	19991125	LSWD	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : 8642
WO9904645 A1	20070523	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL	REF DOCUMENT NUMBER : 1998934208 COUNTRY OF REF DOCUMENT : EP

OFFICE

31) Family number: 48532016 (US2012288562A)

Title: ACID RESISTANT CAPSULES

Abstract: The present invention relates to new acid resistant hard pharmaceutical capsules, a process for their manufacture and use of such capsules particularly but not exclusively for oral administration of pharmaceuticals, veterinary products, food and dietary supplements to humans or animals. The capsules of the invention are obtained by aqueous compositions comprising a water soluble film forming polymer and gellan gum in a mutual weight ratio of 4 to 15 weight parts of gellan gum for 100 weight parts of film forming polymer.

Classifications:
International (IPC 8-9): A61J3/07 A61K31/167 A61K47/30 A61K47/32 A61K47/36 A61K47/38 A61K47/42 A61K47/46 A61K9/00 A61K9/48 A61K9/50 A61P29/00 B28B1/38 B29C41/00 B29C41/14 B29D22/00 (Advanced/Invention);
B29K1/00 B29L31/00 (Advanced/Non-invention);
A61J3/07 (Core/Non-invention)
CPC: B29C41/003 B29K2001/12 A61P29/00 A61K9/0053 A61K9/4825 A61K9/4833 A61K9/4866 B29C41/14 B29D22/00 B29K2003/00 B29K2005/00 B29K2089/00 B29L2031/7174 A61K9/4816
European: A61K9/48B
US: 1/1 264/301 264/306 424/451 424/456 424/457 514/630 514/772.2 514/772.4 514/774 514/777 514/778 514/781 514/782

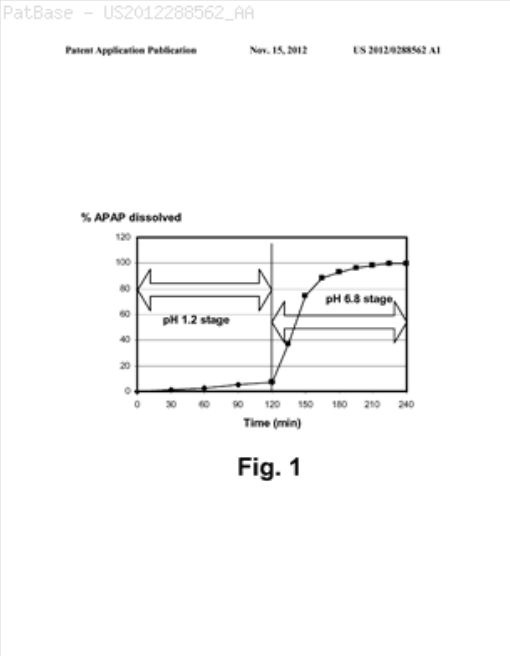


Fig. 1

Family:

Publication number	Publication date	Application number	Application date
AU2010299527 AA	20110331	AU20100299527	20100914
AU2010299527 AA	20120419	AU20100299527	20100914
BR112012006651 A2	20200811	BR20121106651	20100914
CA2775227 AA	20110331	CA20102775227	20100914
CA2775227 C	20171219	CA20102775227	20100914
CN102665697 A	20120912	CN201080042764	20100914
CN102665697 B	20140709	CN201080042764	20100914
CO6531471 A2	20120928	CO20120067580	20120425
EP2480218 A1	20120801	EP20100759732	20100914
EP2480218 B1	20200527	EP20100759732	20100914
IN03595CN2012 A	20130802	IN2012CN03595	20120420
JP2013505928 T2	20130221	JP20120530383T	20100914
JP5777625 B2	20150909	JP20120530383T	20100914
KR101762460 B1	20170727	KR20127010224	20100914
KR20120079836 A	20120713	KR20127010224	20100914
MX2012003540 A1	20120907	MX20120003540	20100914
RU2012116362 A	20131027	RU20120116362	20100914
TW201127370 A	20110816	TW20100132015	20100921
US2012288562 AA	20121115	US20100497974	20100914
US2015050334 AA	20150219	US20140470442	20140827
US2017231918 AA	20170817	US20170587169	20170504
US2019175514 AA	20190613	US20190281817	20190221
US8852631 BB	20141007	US20100497974	20100914
US9700517 BB	20170711	US20140470442	20140827
US10231934 BB	20190319	US20170587169	20170504
WO11036601 A1	20110331	WO2010IB54131	20100914

Priority:

US20090245392P 20090924
WO2010IB54131 20100924
US20170587169 20170504
US20100497974 20100914
US20120497974 20120323
US20190281817 20190221
WO2010IB54131 20100914
US20140470442 20140827

Probable Assignee: CAPSUGEL BELGIUM BVBA

Assignee(s): (std): PFIZER LTD ; PFIZER ; HE XIONGWEI DAVID ; CAPSUGEL BELGIUM NV ; CADE DOMINIQUE NICOLAS ; CAPSUGEL BELGIUM N V ; CAPSUGEL BEGIUM NV

Assignee(s): CAPSUGEL ; PFIZER INC ; CAPSUGEL BELGIUM BVBA

Inventor(s): (std): NICOLAS CADE DOMINIQUE ; HE XIONGWEI DAVID ; HE XIONGWEI DANIEL ; DAVID HE XIONGWEI ; CADE DOMINIQUE NICOLAS

Inventor(s): DOMINIQUE NICOLAS CADE ; XIONGWEI DANIEL HE ; XIONGWEI DAVID HE

Agent(s): ALLENS ARTHUR ROBINSON PATENT AND TRADE MARKS ATTORNEYS; ALLENS PATENT AND TRADE MARK ATTORNEYS; SMART AND BIGGAR; CARLOS R OLARTE GARCIA; KRISHNAN SRI; DE CLERCQ AND PARTNERS; FINNEGAN HENDERSON FARABOW GARRETT AND DUNNER LLP; KLARQUIST SPARKMAN LLP; RUTT JASON E 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
AU2010299527 AA	20110331	LSPB	+	published / reissued	
AU2010299527 AA	20120419	LSPB	+	published / reissued	
AU2010299527 AA	20150409	LSLE	-MK4	APPLICATION LAPSED SECTION 142(2)(D) - NO CONTINUATION FEE PAID FOR THE APPLICATION	
AU2010299527 AA	20150409	LSLE	-MK4	APPLICATION LAPSED SECTION 142(2)(D) - NO CONTINUATION FEE PAID FOR THE APPLICATION	
CA2775227 AA	20110331	LSPB	+	published / reissued	
CA2775227 AA	20150421	LSES	+EEER	EXAMINATION REQUEST	EFFECTIVE DATE : 20150323
CA2775227 C	20171219	LSGT	+	granted / extensions (spc, cpc, pte)	
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CN102665697 A	20120912	LSPB	+	published / reissued	
CN102665697 A	20120912	LSPB	+C06	PUBLICATION	
CN102665697 B	20140709	LSGT	+	granted / extensions (spc, cpc, pte)	
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CN102665697 B	20300914	PEXP		Calculated Patent Term Expiry	
CO6531471 A2	20120928	LSPB	+	published / reissued	
EP2480218 A1	20120801	LSPB	+	published / reissued	
EP2480218 A1	20120801	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20120412
EP2480218 A1	20130220	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20130123
EP2480218 A1	20200129	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20200110
EP2480218 B1	20200527	LSGT	+	granted / extensions (spc, cpc, pte)	
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EP2480218 B1	20200529	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP2480218 B1	20200615	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 1273808 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20200615
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JP2013505928 T2	20130910	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20130909
JP2013505928 T2	20130910	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20130909
JP2013505928 T2	20140416	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20140415
JP2013505928 T2	20140715	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20140714
JP2013505928 T2	20150225	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20150224
JP2013505928 T2	20150520	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20150520
JP2013505928 T2	20150612	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2013505928 T2	20150617	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20150616
JP2013505928 T2	20150716	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20150707
JP2013505928 T2	20150717	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 5777625 COUNTRY OF REF DOCUMENT : JP
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JP5777625 B2	20150618	LSGT	+A01	特許査定書 (Decision of patent grant)	
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JP5777625 B2	20150714	LSFE	R100	特許料納付書 (Patent fee payment form)	TEXT : 51501358124 EFFECTIVE DATE : 20150707
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JP5777625 B2	20180705	LSFE	R20	特許料納付書 (Patent fee payment form)	TEXT : 51801348292 EFFECTIVE DATE : 20180630
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TW201127370 A	20110816	LSPB	+	published / reissued	
US10231934 BB	20190319	LSGT	+	granted / extensions (spc, cpc, pte)	
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US2012288562 AA	20140703	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PFIZER INC., NEW YORK OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:CAPSUGEL; REEL/FRAME:033242/0202

					EFFECTIVE DATE : 20091221
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US2012288562 AA	20140703	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CAPSUGEL, FRANCE OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:CADE, DOMINIQUE NICHOLAS; HE, XIONGWEI DAVID; REEL/FRAME:033242/0160 EFFECTIVE DATE : 20091218
US2012288562 AA	20140917	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2015050334 AA	20150219	LSPB	+	published / reissued	
US2015050334 AA	20150309	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PFIZER INC., NEW YORK OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:CAPSUGEL; REEL/FRAME:035112/0887 EFFECTIVE DATE : 20091221
US2015050334 AA	20150309	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CAPSUGEL BELGIUM BVBA, NEW YORK OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:PFIZER INC.; REEL/FRAME:035145/0770 EFFECTIVE DATE : 20110801
US2015050334 AA	20150309	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CAPSUGEL, FRANCE OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:CADE, DOMINIQUE NICOLAS; HE, XIONGWEI DAVID; REEL/FRAME:035112/0843 EFFECTIVE DATE : 20091218
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US2017231918 AA	20180604	LSES	NFA1	Non Final Action Mailed	
US2017231918 AA	20181220	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2017231918 AA	20190204	LSFE	+PPR1	Publications -- Issue Fee Payment Received	
US2017231918 AA	20190207	LSFE	+PPV1	Publications --	

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US2017231918 AA	20190221	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CAPSUGEL, FRANCE OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:CADE, DOMINIQUE NICOLAS; HE, XIONGWEI DAVID; REEL/FRAME:048397/0836 EFFECTIVE DATE : 20091218
US2017231918 AA	20190221	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PFIZER INC., NEW YORK OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:CAPSUGEL; REEL/FRAME:048399/0332 EFFECTIVE DATE : 20091221
US2017231918 AA	20190221	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CAPSUGEL BELGIUM NV, BELGIUM OLDPARTY : CHANGE OF CLOSED LIMITED LIABILITY COMPANY TO OPEN LIMITED LIABILITY COMPANY; ASSIGNOR:CAPSUGEL BELGIUM BVBA; REEL/FRAME:048451/0112 EFFECTIVE DATE : 20111027
US2017231918 AA	20190221	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CAPSUGEL BELGIUM BVBA, BELGIUM OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:PFIZER INC.; REEL/FRAME:048406/0694 EFFECTIVE DATE : 20110801
US2017231918 AA	20190227	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2019175514 AA	20190613	LSPB	+	published / reissued	
US2019175514 AA	20190313	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CAPSUGEL BELGIUM BVBA, BELGIUM OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:PFIZER INC.; REEL/FRAME:050129/0047 EFFECTIVE DATE : 20110801
US2019175514 AA	20190313	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CAPSUGEL, FRANCE OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:CADE, DOMINIQUE NICOLAS; HE, XIONGWEI DAVID; REEL/FRAME:048590/0516 EFFECTIVE DATE : 20091218
US2019175514 AA	20190313	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PFIZER INC., NEW YORK OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:CAPSUGEL; REEL/FRAME:048590/0529 EFFECTIVE DATE : 20091221
US2019175514 AA	20190313	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CAPSUGEL BELGIUM NV, BELGIUM OLDPARTY : CHANGE OF CLOSED LIMITED LIABILITY COMPANY TO OPEN LIMITED LIABILITY; ASSIGNOR:CAPSUGEL BELGIUM BVBA; REEL/FRAME:048621/0875 EFFECTIVE DATE : 20111027
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US8852631 BB	20141007	LSGT	+	granted / extensions (spc, cpc, pte)	
US8852631 BB	20140917	LSGT	PAT1	Patented Case	
US8852631 BB	20180313	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8852631 BB	20300914	PEXP		Calculated Patent Term Expiry	

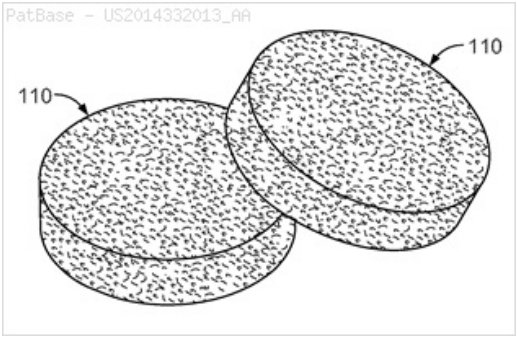
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US9700517 BB	20151102	LSES	NFA1	Non Final Action Mailed	
US9700517 BB	20170621	LSGT	PAT1	Patented Case	
US9700517 BB	20340904	PEXP		Calculated Patent Term Expiry (PTA 8 days and a terminal disclaimer has been filed)	
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WO11036601 A1	20100914	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 201080042764.7 COUNTRY OF REF DOCUMENT : CN
WO11036601 A1	20120321	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2010299527 COUNTRY OF REF DOCUMENT : AU
WO11036601 A1	20120323	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2775227 COUNTRY OF REF DOCUMENT : CA
WO11036601 A1	20120323	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2012530383 COUNTRY OF REF DOCUMENT : JP
WO11036601 A1	20120323	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 13497974 COUNTRY OF REF DOCUMENT : US
WO11036601 A1	20120323	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : MX/A/2012/003540 COUNTRY OF REF DOCUMENT : MX
WO11036601 A1	20120326	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE	REF COUNTRY CODE : DE
WO11036601 A1	20120412	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2010759732 COUNTRY OF REF DOCUMENT : EP
WO11036601 A1	20120419	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2010299527 COUNTRY OF REF DOCUMENT : AU DATE OF REF DOCUMENT : 20100914 KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO11036601 A1	20120420	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 20127010224 COUNTRY OF REF DOCUMENT : KR KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO11036601 A1	20120420	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 3595/CHENP/2012 COUNTRY OF REF DOCUMENT : IN
WO11036601 A1	20120424	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2012116362 COUNTRY OF REF DOCUMENT : RU
WO11036601 A1	20120425	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 12067580 COUNTRY OF REF DOCUMENT : CO

32) Family number: 57789016 (US2014332013A)

Title: ORAL PRODUCT

Abstract: An oral product includes a body that is wholly receivable in an oral cavity. The body includes a mouth-stable polymer matrix, cellulosic fibers embedded in the mouth-stable polymer matrix, and a mouth-soluble binder dispersed in the mouth-stable polymer matrix.

Classifications:
International (IPC 8-9): A24B13/00 A24B15/10 A24B15/14 A24B15/16 A24B15/18 A24B15/30 A61J3/10 A61K31/465 A61K36/81 A61K45/06 A61K9/00 A61K9/20 B29C47/00 B29C48/00 (Advanced/Invention);
B29K401/00 B29K407/00 B29K75/00 B29L31/00 (Advanced/Non-invention)
CPC: A61K31/465 A61K9/0053 A61K9/2031 A61K36/81 A61K9/2054 A61K9/2013 A61K9/205 A61K45/06 A61K9/2095 A61J3/10 B29K2401/00 B29K2075/00 B29K2407/00 B29L2031/753 B29C48/0011 B29C48/0022 B29C48/022 A24B15/14 A24B15/16 A24B15/30 A24B15/308
US: 1/1 131/111 131/352 264/210.2



Family:

Publication number	Publication date	Application number	Application date
EP2996501 A1	20160323	EP20140730029	20140512
US2014332013 AA	20141113	US20140274916	20140512
US2016303106 AA	20161020	US20150940698	20151113
US2019175582 AA	20190613	US20180214490	20181210
US9185931 BB	20151117	US20140274916	20140512
US10183016 BB	20190122	US20150940698	20151113
WO14186288 A1	20141120	WO2014US37698	20140512

Priority:

US20130822596P 20130513 US20140274916 20140512 WO2014US37698 20140512
US20150940698 20151113 US20180214490 20181210

Probable Assignee: ALTRIA CLIENT SERVICES INC

Assignee(s): (std): ALTRA CLIENT SERVICES LLC ; ALTRIA CLIENT SERVICES INC ; ALTRIA CLIENT SERVICES LLC

Inventor(s): (std): ATCHLEY FRANK SCOTT ; DINOVI CHRISTOPHER JOSEPH ; FLORA JASON ; GAO FENG ; GEE DIANE L ; GRISCIK GREGORY JAMES ; HULAN PHILLIP M ; ZHUANG SHUZHONG

Agent(s): WICHMANN HENDRIK; FISH AND RICHARDSON PC; HARNESS DICKEY AND PIERCE PLC; SHIPSIDES GEOFFREY P 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 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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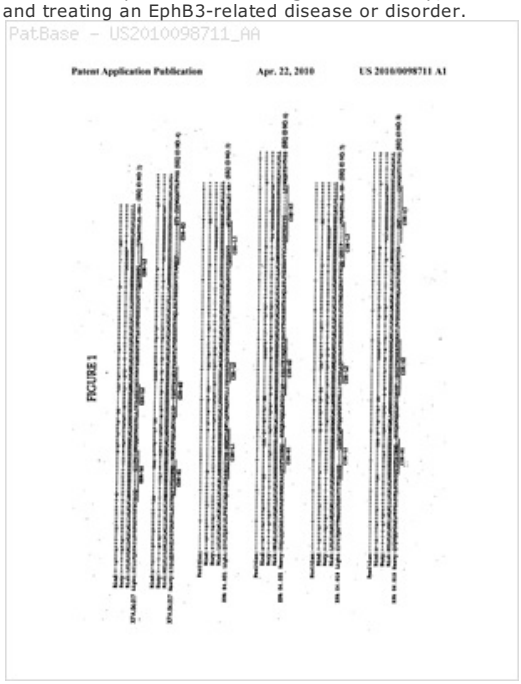
Patent	Date recorded	Event group	Code	Event	Details
EP2996501 A1	20160323	LSPB	+	published / reissued	
EP2996501 A1	20160323	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20151210
EP2996501 A1	20180502	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20180329
US10183016 BB	20190122	LSGT	+	granted / extensions (spc, cpc, pte)	
US10183016 BB	20151201	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ALTRIA CLIENT SERVICES INC., VIRGINIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:GAO, FENG; ATCHLEY, FRANK SCOTT; GRISCIK, GREGORY JAMES; AND OTHERS; SIGNING DATES FROM 20140527 TO 20140821; REEL/FRAME:037183/0661
US10183016 BB	20151201	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ALTRIA CLIENT SERVICES LLC, VIRGINIA OLDPARTY : MERGER AND CHANGE OF NAME; ASSIGNORS:ALTRIA CLIENT SERVICES INC.; ALTRIA CLIENT SERVICES LLC; REEL/FRAME:037183/0680 EFFECTIVE DATE : 20150623

US10183016 BB	20190101	LSGT	PAT1	Patented Case	
US10183016 BB	20360409	PEXP		Calculated Patent Term Expiry (PTA 148 days and a terminal disclaimer has been filed)	
US2014332013 AA	20141113	LSPB	+	published / reissued	
US2014332013 AA	20151020	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ALTRIA CLIENT SERVICES LLC, VIRGINIA OLDPARTY : MERGER AND CHANGE OF NAME; ASSIGNORS:ALTRIA CLIENT SERVICES INC.; ALTRIA CLIENT SERVICES LLC; REEL/FRAME:036828/0689 EFFECTIVE DATE : 20150623
US2014332013 AA	20151028	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2016303106 AA	20161020	LSPB	+	published / reissued	
US2016303106 AA	20171023	LSES	NFA1	Non Final Action Mailed	
US2016303106 AA	20190101	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2019175582 AA	20190613	LSPB	+	published / reissued	
US2019175582 AA	20200114	LSES	NFA1	Non Final Action Mailed	
US2019175582 AA	20200422	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2019175582 AA	20200718	LSFE	+PPV1	Publications -- Issue Fee Payment Verified	
US9185931 BB	20151117	LSGT	+	granted / extensions (spc, cpc, pte)	
US9185931 BB	20140826	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ALTRIA CLIENT SERVICES INC., VIRGINIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:GAO, FENG; ATCHLEY, FRANK SCOTT; GRISCIK, GREGORY JAMES; AND OTHERS; SIGNING DATES FROM 20140527 TO 20140821; REEL/FRAME:033608/0609
US9185931 BB	20151028	LSGT	PAT1	Patented Case	
US9185931 BB	20160315	LSRE	CC	CERTIFICATE OF CORRECTION	
US9185931 BB	20190517	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US9185931 BB	20340512	PEXP		Calculated Patent Term Expiry	
WO14186288 A1	20141120	LSPB	+	published / reissued	
WO14186288 A1	20151113	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE	REF COUNTRY CODE : DE
WO14186288 A1	20151210	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2014730029 COUNTRY OF REF DOCUMENT : EP

33) Family number: 41912017 (US2010098711A)

Title: ANTAGONIST ANTIBODIES AGAINST EPHB3

Abstract: EphB 3-specific antibodies are provided, along with pharmaceutical compositions containing such antibody, kits containing a pharmaceutical composition, and methods of preventing and treating an EphB3-related disease or disorder.



Classifications:
International (IPC 8-9): A61K39/395 A61K45/00 A61K47/48 A61P1/00 A61P15/00 A61P17/02 A61P17/06 A61P19/02 A61P21/04 A61P25/00 A61P25/02 A61P25/14 A61P25/16 A61P25/28 A61P27/02 A61P29/00 A61P31/04 A61P31/10 A61P31/12 A61P35/00 A61P37/06 A61P43/00 A61P9/00 A61P9/10 C07H21/00 C07K16/00 C07K16/18 C07K16/28 C07K16/46 C12N1/15 C12N1/19 C12N1/21 C12N15/02 C12N15/09 C12N15/63 C12N5/00 C12N5/10 C12P21/00 C12P21/08 C12Q1/02 F01D25/16 F02C7/00 F02C7/06 F02C7/20 F02K1/80 F02K3/10 F16B33/00 F16B35/04 F16B39/28 F16B43/00 G01N33/15 G01N33/50 G01N33/53 (Advanced/Invention);
A61J1/05 C12P21/08 F16B33/00 F16B43/00 (Advanced/Non-invention);
A61K39/395 A61K45/00 A61P1/00 A61P15/00 A61P17/00 A61P19/00 A61P21/00 A61P25/00 A61P27/00 A61P29/00 A61P31/00 A61P35/00 A61P37/00 A61P9/00 C07H21/00 C07K16/00 C07K16/18 C07K16/46 C12N1/15 C12N1/19 C12N1/21 C12N15/02 C12N15/09 C12N15/63 C12N5/00 C12N5/10 C12P21/00 C12P21/08 C12Q1/02 G01N33/15 G01N33/50 G01N33/53 (Core/Invention)
International (IPC 1-7): A61K39/395
CPC: C07K16/2866 C07K2317/622 C07K2317/76 C07K2317/92 C12N2799/026 F01D25/162 A61K39/395 A61K39/3955 C07K16/18 C07K16/28 F05D2260/30 A61P1/00 A61P15/00 A61P17/02 A61P17/06 A61P19/02 A61P21/04 A61P25/00 A61P25/02 A61P25/14 A61P25/16 A61P25/28 A61P27/02 A61P29/00 A61P31/04 A61P31/10 A61P31/12 A61P35/00 A61P9/00 A61P9/10 A61P37/06 A61P43/00 F16B33/002 F16B35/048 F16B43/001 Y02T50/672
European: C07K16/28H M07K317/622 M07K317/760 M07K317/920 M12N799/02A66
US: 1/1 29/889.2 411/120 424/130.1 424/133.1 424/135.1 424/141.1 424/143.1 424/158.1 424/172.1 424/172.100P 424/178.1 424/178.100S 435/29 435/29S 435/320.1 435/320.100S 435/325 435/325S 435/328 435/69.6 435/69.600S 435/7.1 435/7.92 436/501 436/501S 530/387.1 530/387.100S 530/387.3 530/387.300S 530/388.1 530/388.22 530/389.1 530/389.100S 530/391.3 530/391.300S 530/391.7 530/391.700S 536/23.53 536/23.530S 60/722

Family:

Publication number	Publication date	Application number	Application date
AU2007329307 AA	20080612	AU20070329307	20071206
AU2007329307 BB	20120802	AU20070329307	20071206
BRPI0720437 A2	20140107	BR2007PI20437	20071206
CA2672120 AA	20090605	CA20072672120	20071206
CN101687032 A	20100331	CN200780051071	20071206
DE602007032314 D1	20131010	DE200760032314T	20071206
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EA200900767 A1	20091230	EA20090000767	20071206
EP2101816 A1	20090923	EP20070865309	20071206
EP2101816 B1	20130814	EP20070865309	20071206
EP2494988 A1	20120905	EP20120167762	20071206
EP2494988 B1	20150930	EP20120167762	20071206
ES2435437 T3	20131219	ES20070865309T	20071206
IN03732DN2009 A	20100326	IN2009DN03732	20090608
JP2010512152 T2	20100422	JP20090540477T	20071206
JP2014159422 A2	20140904	JP20140030192	20140220
JP5485696 B2	20140507	JP20090540477T	20071206
KR101519672 B1	20150529	KR20097014083	20071206
KR20090114360 A	20091103	KR20097014083	20071206
KR20140119831 A	20141010	KR20147026191	20071206
MX2009006034 A1	20091012	MX20090006034	20071206
US2010098711 AA	20100422	US20070312837	20071206
US2013108638 AA	20130502	US20120724312	20121221
US2014174088 AA	20140626	US20120725312	20121221
US2015183872 AA	20150702	US20150592115	20150108
US2017226964 AA	20170810	US20160265205	20160914
US8377439 BB	20130219	US20070312837	20071206
US8961969 BB	20150224	US20120724312	20121221
US9470151 BB	20161018	US20120725312	20121221
US9541004 BB	20170110	US20150592115	20150108
US10570944 BB	20200225	US20160265205	20160914
WO08070780 A1	20080612	WO2007US86649	20071206
WO08070780 A9	20100527	WO2007US86649	20071206

Priority:

US20060873386P 20061207 EP20070865309 20071206 EP20120167762 20071206
JP20090540477 20071206 US20070312837 20071206 JP20090540477T 20071206
WO2007US86649 20071206 US20090312837 20091105 US20120724312 20121221
US20120725312 20121221 US20150592115 20150108 US20160265205 20160914

Probable Assignee: UNITED TECHNOLOGIES CORP

Assignee(s): (std): HSU JEFF SSUCHENG ; NOVARTIS INT AG ; XOMA TECHNOLOGY LTD ; XOMA TECH LTD ; XOMA LTD ; UNITED TECHNOLOGIES CORP ; NOVARTIS AG ; MASAT LINDA ; HSU SSUCHENG JEFF

Assignee(s): SILICON VALLEY BANK ; NOVARTIS AG ; XOMA TECHNOLOGY LTD

Inventor(s): (std): HANSON RUSSELL B ; HSU JEFF SSUCHENG ; JEFF SSUCHENG HSU ; RICCIARDO MARK J ; RUBERTE SANCHEZ JOSE E ; WONG JOEY ; MASAT LINDA ; LINDA MASAT ; JEFF HSU SSUCHENG ; HSU SSUCHENG JEFF ; HSU JEFF

Inventor(s): SSUCHENG JEFF HSU ; MASAT LINDA WALNUT CREEK ; HSU SSUCHENG JEFF PINOLE

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; FETHERSTONHAUGH AND CO; MUELLER BORE AND PARTNER PATENTANWAELTE PARTG MBB; VOEGELI LANGE REGINA; MARSHALL CAMERON JOHN; IZQUIERDO JOSE; TANAKA MITSUO; YAMADA TAKUJI; IWASAKI MITSUTAKA; AOYAMA TAMOTSU; TOMITA KENJI; YAMAZAKI HIROSHI; NOVARTIS INSTITUTES FOR BIOMEDICAL RESEARCH INC; MARSHALL GERSTEIN AND BORUN LLP; OSHEA GETZ PC; GETZ BALICH LLC; ALEXANDER LISA ET AL

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)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
AU2007329307 AA	20080612	LSPB	+	published / reissued	
AU2007329307 BB	20120802	LSGT	+	granted / extensions (spc, cpc, pte)	
AU2007329307 BB	20121129	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU2007329307 BB	20190704	LSLE	-MK14	PATENT CEASED SECTION 143(A) (ANNUAL FEES NOT PAID) OR EXPIRED	
AU2007329307 BB	20271206	PEXP		Calculated Patent Term Expiry	
BRPI0720437 A2	20140826	LSFE	-B08F	APPLICATION FEES: DISMISSAL - ARTICLE 86 OF INDUSTRIAL PROPERTY LAW	TEXT : REFERENTE A 6A ANUIDADE.
BRPI0720437 A2	20141216	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 2277 DE 26/08/2014.
CA2672120 AA	20090605	LSPB	+	published / reissued	
CA2672120 AA	20121129	LSES	+EEER	EXAMINATION REQUEST	
CA2672120 AA	20160727	LSLE	-FZDE	DEAD	EFFECTIVE DATE : 20160615
CN101687032 A	20100331	LSPB	+	published / reissued	
CN101687032 A	20100331	LSPB	+C06	PUBLICATION	
CN101687032 A	20130508	LSDW	-C02	DEEMED WITHDRAWAL OF PATENT APPLICATION AFTER PUBLICATION (PATENT LAW 2001)	
EA200900767 A1	20091230	LSPB	+	published / reissued	
EP2101816 A1	20090923	LSPB	+	published / reissued	
EP2101816 A1	20090923	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20090707
EP2101816 A1	20100602	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20100504
EP2101816 A1	20130515	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20130425
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EP2101816 A1	20160229	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20151111 YEAR OF FEE PAYMENT : 9
EP2101816 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 : 9
EP2101816 B1	20130814	LSGT	+	granted / extensions (spc, cpc, pte)	
EP2101816 B1	20130814	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP2101816 B1	20130815	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP2101816 B1	20130815	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 626805 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20130815
EP2101816 B1	20130925	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP2101816 B1	20131010	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602007032314 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20131010
EP2101816 B1	20131219	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2435437 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) : EFFECTIVE DATE : 20131219
EP2101816 B1	20140115	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MK05 REF DOCUMENT NUMBER : 626805 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20130814
EP2101816 B1	20140115	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : VDEP EFFECTIVE DATE : 20130814
EP2101816 B1	20140127	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : LT REF LEGAL EVENT CODE : MG4D
EP2101816 B1	20140131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL	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

				OFFICE TO EPO]	LAPSED DATE : 20130814
EP2101816 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 FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20130814
EP2101816 B1	20140131	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 : 20130814
EP2101816 B1	20140131	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 : 20131216
EP2101816 B1	20140131	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 : 20131214
EP2101816 B1	20140131	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 : 20130807
EP2101816 B1	20140228	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 : 20130814
EP2101816 B1	20140228	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 : 20130814
EP2101816 B1	20140228	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 : 20130814
EP2101816 B1	20140228	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 : 20130814
EP2101816 B1	20140228	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 : 20130814
EP2101816 B1	20140228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE

				INFORMATION FROM NATIONAL OFFICE TO EPO]	WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20131115
EP2101816 B1	20140331	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 : 20130814
EP2101816 B1	20140430	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 : 20130814
EP2101816 B1	20140430	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 : 20130814
EP2101816 B1	20140430	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 : 20130814
EP2101816 B1	20140430	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 : 20130814
EP2101816 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 FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20130814
EP2101816 B1	20140430	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 : 20130814
EP2101816 B1	20140723	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20140515
EP2101816 B1	20140828	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 602007032314 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20140515
EP2101816 B1	20140829	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 : 20131206
EP2101816 B1	20140829	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 : 20130814
EP2101816 B1	20150630	LSLE	-PG25	LAPSED IN A CONTRACTING STATE	COUNTRY OF REF DOCUMENT : TR 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 : 20130814
EP2101816 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 : 20071206
EP2101816 B1	20150731	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 : 20130814
EP2101816 B1	20150831	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 : 20130814
EP2101816 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 : 9
EP2101816 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 : 10
EP2101816 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 : 10
EP2101816 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 : 10
EP2101816 B1	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20161130 YEAR OF FEE PAYMENT : 10
EP2101816 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 : 10
EP2101816 B1	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20161129 YEAR OF FEE PAYMENT : 10
EP2101816 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 : 10
EP2101816 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 : 10
EP2101816 B1	20171113	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 11
EP2101816 B1	20180131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20171113 YEAR OF FEE PAYMENT : 11

				OFFICE TO EPO]	
EP2101816 B1	20180131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20171129 YEAR OF FEE PAYMENT : 11
EP2101816 B1	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20171211 YEAR OF FEE PAYMENT : 11
EP2101816 B1	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20171206 YEAR OF FEE PAYMENT : 11
EP2101816 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 : 11
EP2101816 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 : 11
EP2101816 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 : 11
EP2101816 B1	20190702	LSDW	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R119 REF DOCUMENT NUMBER : 602007032314 COUNTRY OF REF DOCUMENT : DE
EP2101816 B1	20190731	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP2101816 B1	20190828	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20181206
EP2101816 B1	20190918	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP2101816 B1	20191031	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 : 20181206
EP2101816 B1	20191031	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 : 20190702
EP2101816 B1	20191031	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 : 20181231
EP2101816 B1	20191031	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 : 20181206
EP2101816 B1	20191231	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 : 20181206

EP2101816 B1	20191231	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 : 20181231
EP2101816 B1	20191231	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 : 20181231
EP2101816 B1	20200131	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20200131
EP2101816 B1	20200501	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 : 20181207
EP2101816 B1	20271206	PEXP		Calculated Patent Term Expiry	
EP2494988 A1	20120905	LSPB	+	published / reissued	
EP2494988 A1	20130515	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20130305
EP2494988 A1	20130529	LSES	+R17P	REQUEST FOR EXAMINATION FILED (CORRECTED)	EFFECTIVE DATE : 20130305
EP2494988 A1	20131120	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20131018
EP2494988 A1	20150520	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20150422
EP2494988 A1	20160129	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20151201 YEAR OF FEE PAYMENT : 9
EP2494988 A1	20160129	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20151202 YEAR OF FEE PAYMENT : 9
EP2494988 A1	20160229	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20151110 YEAR OF FEE PAYMENT : 9
EP2494988 B1	20150930	LSGT	+	granted / extensions (spc, cpc, pte)	
EP2494988 B1	20150930	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP2494988 B1	20150930	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP2494988 B1	20151015	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 751995 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20151015
EP2494988 B1	20151021	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP2494988 B1	20151105	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602007043363

					COUNTRY OF REF DOCUMENT : DE
EP2494988 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 : 9
EP2494988 B1	20160129	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 : 20151231
EP2494988 B1	20160129	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 : 20150930
EP2494988 B1	20160129	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 : 20150930
EP2494988 B1	20160129	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 : 20150930
EP2494988 B1	20160210	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : LT REF LEGAL EVENT CODE : MG4D
EP2494988 B1	20160215	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MK05 REF DOCUMENT NUMBER : 751995 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20150930
EP2494988 B1	20160229	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 : 20150930
EP2494988 B1	20160429	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 : 20150930
EP2494988 B1	20160429	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 : 20150930
EP2494988 B1	20160429	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 : 20160130
EP2494988 B1	20160429	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL	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

				OFFICE TO EPO]	LAPSED DATE : 20150930
EP2494988 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 FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20150930
EP2494988 B1	20160429	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 : 20150930
EP2494988 B1	20160429	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 : 20150930
EP2494988 B1	20160531	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 : 20150930
EP2494988 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 NON-PAYMENT OF DUE FEES LAPSED DATE : 20151231
EP2494988 B1	20160531	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 : 20160201
EP2494988 B1	20160531	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 : 20150930
EP2494988 B1	20160531	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 : 20150930
EP2494988 B1	20160701	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 602007043363 COUNTRY OF REF DOCUMENT : DE
EP2494988 B1	20160729	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 : 20150930
EP2494988 B1	20160729	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 : 20151206

EP2494988 B1	20160729	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP2494988 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 FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20150930
EP2494988 B1	20160907	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20160701
EP2494988 B1	20160921	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP2494988 B1	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
EP2494988 B1	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
EP2494988 B1	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 : 20151206
EP2494988 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 : 10
EP2494988 B1	20161130	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 : 20150930
EP2494988 B1	20161230	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 : 20150930
EP2494988 B1	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20161129 YEAR OF FEE PAYMENT : 10
EP2494988 B1	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20161130 YEAR OF FEE PAYMENT : 10
EP2494988 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 : 10
EP2494988 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 : 20150930
EP2494988 B1	20170531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE	COUNTRY OF REF DOCUMENT : HU 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; INVALID AB INITIO LAPSED DATE : 20071206
EP2494988 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 : 20150930
EP2494988 B1	20170831	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 : 20150930
EP2494988 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 : 20150930
EP2494988 B1	20171113	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 11
EP2494988 B1	20180131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20171129 YEAR OF FEE PAYMENT : 11
EP2494988 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 : 11
EP2494988 B1	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20171206 YEAR OF FEE PAYMENT : 11
EP2494988 B1	20190702	LSDW	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R119 REF DOCUMENT NUMBER : 602007043363 COUNTRY OF REF DOCUMENT : DE
EP2494988 B1	20190828	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20181206
EP2494988 B1	20191031	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 : 20181231
EP2494988 B1	20191031	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 : 20190702
EP2494988 B1	20191231	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 : 20181206
EP2494988 B1	20271206	PEXP		Calculated Patent Term Expiry	
ES2435437 T3	20131219	LSGT	+	granted / extensions (spc,	

				cpc, pte)	
ES2435437 T3	20200131	LSLE	-FD2A	ANNOUNCEMENT OF LAPSE IN SPAIN	LAPSED DATE : 20200131 EFFECTIVE DATE : 20200131
ES2435437 T3	20271206	PEXP		Calculated Patent Term Expiry	
IN03732DN2009 A	20100326	LSPB	+	published / reissued	
JP2010512152 T2	20100422	LSPB	+	published / reissued	
JP2010512152 T2	20120516	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20120515
JP2010512152 T2	20120801	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20120731
JP2010512152 T2	20121107	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20121106
JP2010512152 T2	20130201	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20130131
JP2010512152 T2	20130424	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20130423
JP2010512152 T2	20130718	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20130717
JP2010512152 T2	20140123	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2010512152 T2	20140129	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20140128
JP2010512152 T2	20140227	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20140220
JP2010512152 T2	20140228	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 5485696 COUNTRY OF REF DOCUMENT : JP
JP2014159422 A2	20140904	LSPB	+	published / reissued	
JP2014159422 A2	20150320	LSWD	-A761	WRITTEN WITHDRAWAL OF APPLICATION	TEXT : JAPANESE INTERMEDIATE CODE: A761 EFFECTIVE DATE : 20150320
JP5485696 B2	20140507	LSGT	+	granted / extensions (spc, cpc, pte)	
JP5485696 B2	20140130	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP5485696 B2	20140225	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP5485696 B2	20140228	LSGT	+R150	特許証 (Patent certificate)	
JP5485696 B2	20170202	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5485696 B2	20170207	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5485696 B2	20180201	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5485696 B2	20180206	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250

JP5485696 B2	20190228	LSLE	-LAPS	CANCELLATION BECAUSE OF NO PAYMENT OF ANNUAL FEES	
JP5485696 B2	20271206	PEXP		Calculated Patent Term Expiry	
KR101519672 B1	20150529	LSGT	+	granted / extensions (spc, cpc, pte)	
KR101519672 B1	20180507	LSLE	-LAPS	LAPSE DUE TO UNPAID ANNUAL FEE	
KR101519672 B1	20271206	PEXP		Calculated Patent Term Expiry	
KR20090114360 A	20091103	LSPB	+	published / reissued	
KR20090114360 A	20121204	LSES	A201	REQUEST FOR EXAMINATION	
KR20090114360 A	20140619	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR20090114360 A	20141219	LSRV	-E90F	NOTIFICATION OF REASON FOR FINAL REFUSAL	
KR20090114360 A	20150330	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
KR20090114360 A	20150506	LSGT	+GRNT	WRITTEN DECISION TO GRANT	
KR20140119831 A	20141010	LSPB	+	published / reissued	
KR20140119831 A	20141222	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR20140119831 A	20150331	LSRV	-E601	DECISION TO REFUSE APPLICATION	
MX2009006034 A1	20091012	LSPB	+	published / reissued	
MX2009006034 A1	20100831	LSRE	HH	CORRECTION OR CHANGE IN GENERAL	
MX2009006034 A1	20111209	LSGT	+FG	GRANT OR REGISTRATION	
US10570944 BB	20200225	LSGT	+	granted / extensions (spc, cpc, pte)	
US10570944 BB	20160914	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : UNITED TECHNOLOGIES CORPORATION, CONNECTICUT OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:RUBERTE SANCHEZ, JOSE E.; WONG, JOEY; RICCIARDO, MARK J.; AND OTHERS; SIGNING DATES FROM 20121217 TO 20130205; REEL/FRAME:039740/0424
US10570944 BB	20370405	PEXP		Calculated Patent Term Expiry (PTA 203 days)	
US2010098711 AA	20100422	LSPB	+	published / reissued	
US2010098711 AA	20100625	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : XOMA TECHNOLOGY LTD,BERMUDA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:HSU, SSUCHENG JEFF; MASAT, LINDA; SIGNING DATES FROM 20090714 TO 20090720; REEL/FRAME:024593/0552
US2010098711 AA	20100625	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : XOMA TECHNOLOGY LTD, BERMUDA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:HSU, SSUCHENG JEFF;

					MASAT, LINDA; SIGNING DATES FROM 20090714 TO 20090720; REEL/FRAME:024593/0552
US2010098711 AA	20100625	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : NOVARTIS AG,SWITZERLAND OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:XOMA TECHNOLOGY LTD; REEL/FRAME:024593/0167 EFFECTIVE DATE : 20090714
US2010098711 AA	20100625	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : NOVARTIS AG, SWITZERLAND OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:XOMA TECHNOLOGY LTD; REEL/FRAME:024593/0167 EFFECTIVE DATE : 20090714
US2010098711 AA	20130130	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2013108638 AA	20130502	LSPB	+	published / reissued	
US2013108638 AA	20150204	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2014174088 AA	20140626	LSPB	+	published / reissued	
US2014174088 AA	20160928	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2015183872 AA	20150702	LSPB	+	published / reissued	
US2015183872 AA	20161221	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2017226964 AA	20170810	LSPB	+	published / reissued	
US2017226964 AA	20180511	LSES	NFA1	Non Final Action Mailed	
US2017226964 AA	20190315	LSES	ADV1	Advisory Action Mailed	
US2017226964 AA	20190621	LSES	NFA1	Non Final Action Mailed	
US2017226964 AA	20191011	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2017226964 AA	20200123	LSFE	+PPV1	Publications -- Issue Fee Payment Verified	
US2017226964 AA	20200205	LSGT	PAT1	Patented Case	
US2017226964 AA	20200205	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US8377439 BB	20130219	LSGT	+	granted / extensions (spc, cpc, pte)	
US8377439 BB	20130130	LSGT	PAT1	Patented Case	
US8377439 BB	20160804	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8377439 BB	20180509	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, CALIFORNIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:XOMA TECHNOLOGY LTD.; REEL/FRAME:046115/0459 EFFECTIVE DATE : 20180507
US8377439 BB	20290201	PEXP		Calculated Patent Term Expiry (PTA 423 days)	
US8961969 BB	20150224	LSGT	+	granted / extensions (spc, cpc, pte)	
US8961969 BB	20150204	LSGT	PAT1	Patented Case	

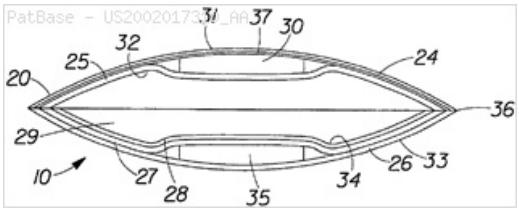
US8961969 BB	20180509	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, CALIFORNIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:XOMA TECHNOLOGY LTD.; REEL/FRAME:046115/0459 EFFECTIVE DATE : 20180507
US8961969 BB	20180809	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8961969 BB	20330809	PEXP		Calculated Patent Term Expiry (PTA 231 days)	
US9470151 BB	20161018	LSGT	+	granted / extensions (spc, cpc, pte)	
US9470151 BB	20130607	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : UNITED TECHNOLOGIES CORPORATION, CONNECTICUT OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:RUBERTE SANCHEZ, JOSE E.; WONG, JOEY; RICCIARDO, MARK J.; AND OTHERS; SIGNING DATES FROM 20121217 TO 20130205; REEL/FRAME:030568/0539
US9470151 BB	20151218	LSES	-NFA2	Non Final Action Counted, Not Yet Mailed	
US9470151 BB	20160928	LSGT	PAT1	Patented Case	
US9470151 BB	20200318	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US9470151 BB	20350326	PEXP		Calculated Patent Term Expiry (PTA 825 days)	
US9541004 BB	20170110	LSGT	+	granted / extensions (spc, cpc, pte)	
US9541004 BB	20161221	LSGT	PAT1	Patented Case	
US9541004 BB	20170808	LSRE	CC	CERTIFICATE OF CORRECTION	
US9541004 BB	20180509	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, CALIFORNIA OLDPARTY : SECURITY INTEREST; ASSIGNOR:XOMA TECHNOLOGY LTD.; REEL/FRAME:046115/0459 EFFECTIVE DATE : 20180507
US9541004 BB	20200625	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US9541004 BB	20350108	PEXP		Calculated Patent Term Expiry	
WO08070780 A1	20080612	LSPB	+	published / reissued	
WO08070780 A1	20071206	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 200780051071.2 COUNTRY OF REF DOCUMENT : CN
WO08070780 A1	20090526	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2007865309 COUNTRY OF REF DOCUMENT : EP
WO08070780 A1	20090605	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : MX/A/2009/006034 COUNTRY OF REF DOCUMENT : MX
WO08070780 A1	20090605	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2672120 COUNTRY OF REF DOCUMENT : CA
WO08070780 A1	20090608	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2009540477 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO08070780 A1	20090608	LSNP	+WWE	WIPO	REF DOCUMENT NUMBER :

				INFORMATION: ENTRY INTO NATIONAL PHASE	3732/DELNP/2009 COUNTRY OF REF DOCUMENT : IN
WO08070780 A1	20090609	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE	REF COUNTRY CODE : DE
WO08070780 A1	20090624	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2007329307 COUNTRY OF REF DOCUMENT : AU
WO08070780 A1	20090701	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 200900767 COUNTRY OF REF DOCUMENT : EA
WO08070780 A1	20090706	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1020097014083 COUNTRY OF REF DOCUMENT : KR
WO08070780 A1	20090716	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2007329307 COUNTRY OF REF DOCUMENT : AU DATE OF REF DOCUMENT : 20071206 KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO08070780 A1	20091105	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 12312837 COUNTRY OF REF DOCUMENT : US
WO08070780 A9	20140107	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : PI0720437 COUNTRY OF REF DOCUMENT : BR KIND CODE OF REF DOCUMENT : A2 DESIGNATED STATE(S) : EFFECTIVE DATE : 20090608

34) Family number: 30083018 (US2002017310A)

Title: SEMI-ENCLOSED APPLICATOR FOR DISTRIBUTING A SUBTANCE ONTO A TARGET SURFACE

Abstract: A semi-enclosed applicator for distributing a substance onto a target surface including a first side having a first internal surface and a first external surface, a second side having a second internal surface and a second external surface, an internal cavity between said first and second sides, at least one externally accessible opening, and a flexible film reservoir containing a product. At least a portion of the flexible film reservoir of said flexible film reservoir is disposed between said external surfaces of said first side and said second side.



Classifications:
International (IPC 8-9): A01N25/34 A41D19/00 A45D33/36 A45D34/04 A45D37/00 A45D40/00 A46B11/00 A46B11/02 A46B5/04 A47K7/03 A47L1/08 A47L1/15 A47L13/16 A47L13/17 A47L13/18 A47L13/19 A61C17/00 A61F13/40 A61J1/05 A61K8/00 A61K8/02 A61K8/34 A61K8/36 A61K8/365 A61K8/41 A61K8/46 A61M35/00 A61Q1/00 A61Q1/02 A61Q1/14 A61Q11/00 A61Q19/00 A61Q19/10 A61Q3/04 A61Q5/02 B05C1/02 B05C17/00 B05C17/10 B32B33/00 B32B5/18 B43K5/14 B60S3/04 B65B1/04 B65D30/22 B65D33/38 B65D75/58 B65D77/08 B65D81/32 B65D81/34 B65D83/00 C11D17/04 (Advanced/Invention);
A45D34/04 A45D37/00 A45D40/26 A47L13/16 A47L13/17 A61K8/00 A61Q1/00 A61Q1/02 A61Q1/14 A61Q19/10 A61Q3/04 A61Q5/02 B05C1/02 B60S3/04 B65D30/22 B65D75/30 B65D81/34 (Advanced/Non-invention);
A01N25/34 A45D33/00 A45D34/04 A45D37/00 A45D40/00 A46B11/00 A46B5/00 A47K7/02 A47L1/00 A47L13/16 A61F13/40 A61J1/05 A61K8/00 A61K8/02 A61K8/30 A61M35/00 A61Q1/00 A61Q1/02 A61Q1/14 A61Q11/00 A61Q19/00 A61Q19/10 A61Q3/04 A61Q5/02 B05C1/02 B05C17/00 B43K5/00 B60S3/04 B65B1/04 B65D30/22 B65D33/36 B65D75/52 B65D77/00 B65D81/32 B65D81/34 C11D17/04 (Core/Invention)
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Publication number	Publication date	Application number	Application date
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Agent(s): PHILLIPS ORMONDE FITZPATRICK; KIRBY EADES GALE BAKER; GOWLING LAFLEUR HENDERSON LLP; DIMOCK STRATTON LLP; WILSON LUE LLP; MBM INTELLECTUAL PROPERTY LAW LLP; HARNECKER; SOGA MICHITERU; SOGA MICHIHARU; NAGAI HIROSHI; TANI YOSHIKAZU; ABE KAZUO; PROCTER AND GAMBLE CO INTELLECTUAL PROPERTY DIVISION; THE PROCTER AND GAMBLE COMPANY, INTELLECTUAL PROPERTY DIVISION; PROCTER AND GAMBLE CO INTELLECTUAL PROPERTY DIVISION WEST BLDG; PETER D MEYER; LARRY L HUSTON; THIBAULT FAYETTE; KIM WILLIAM ZERBY; STEVEN W MILLER; BRIDGET; PETER D; STEVEN W; THIBAULT; MARK A; KIM W; LARRY L

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Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT292401 E	20050415	LSGT	+	granted / extensions (spc, cpc, pte)	
AT292401 E	20051015	LSLE	-RER	CEASED AS TO PARAGRAPH 5 LIT. 3 LAW INTRODUCING PATENT TREATIES	
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CA2386603 C	20081209	LSGT	+	granted / extensions (spc, cpc, pte)
CA2386603 C	20101012	LSLE	-MKLA	LAPSED
CA2386603 C	20201010	PEXP		Calculated Patent Term Expiry
CA2387052 AA	20020402	LSPB	+	published / reissued
CA2387052 AA	20020402	LSES	+EEER	EXAMINATION REQUEST
CA2387052 C	20070116	LSGT	+	granted / extensions (spc, cpc, pte)
CA2387052 C	20091013	LSLE	-MKLA	LAPSED
CA2387052 C	20201010	PEXP		Calculated Patent Term Expiry
CA2387255 AA	20020319	LSPB	+	published / reissued
CA2387255 AA	20020319	LSES	+EEER	EXAMINATION REQUEST
CA2387255 C	20050607	LSGT	+	granted / extensions (spc, cpc, pte)
CA2387255 C	20101012	LSLE	-MKLA	LAPSED
CA2387255 C	20201010	PEXP		Calculated Patent Term Expiry
CA2388017 AA	20020327	LSPB	+	published / reissued
CA2388017 AA	20020327	LSES	+EEER	EXAMINATION REQUEST
CA2388017 AA	20060323	LSLE	-FZDE	DEAD
CA2448216 AA	20031124	LSPB	+	published / reissued
CA2448216 AA	20031124	LSES	+EEER	EXAMINATION REQUEST
CA2448216 AA	20101004	LSLE	-FZDE	DEAD
CA2449232 AA	20031126	LSPB	+	published / reissued
CA2449232 AA	20031126	LSES	+EEER	EXAMINATION REQUEST
CA2449232 AA	20100316	LSLE	-FZDE	DEAD
CL2000002745 A1	20011108	LSPB	+	published / reissued
CL2000002747 A1	20011108	LSPB	+	published / reissued
CN1177553 C	20041201	LSGT	+	granted / extensions (spc, cpc, pte)
CN1177553 C	20041201	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL
CN1177553 C	20110323	LSLE	-C17	CESSATION OF PATENT RIGHT
CN1177553 C	20201010	PEXP		Calculated Patent Term Expiry
CN1191974 C	20050309	LSGT	+	granted / extensions (spc, cpc, pte)
CN1191974 C	20050309	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL
CN1191974 C	20061206	LSLE	-C19	LAPSE OF PATENT RIGHT DUE TO NON-PAYMENT OF THE ANNUAL FEE
CN1191974 C	20201010	PEXP		Calculated Patent Term Expiry
CN1378433 A	20021106	LSPB	+	published / reissued
CN1378433 A	20021106	LSPB	+C06	PUBLICATION
CN1378433 A	20040714	LSDW	-C02	DEEMED WITHDRAWAL OF PATENT

				APPLICATION AFTER PUBLICATION (PATENT LAW 2001)
CN1387409 A	20021225	LSPB	+	published / reissued
CN1387409 A	20021225	LSPB	+C06	PUBLICATION
CN1391525 A	20030115	LSPB	+	published / reissued
CN1391525 A	20030115	LSPB	+C06	PUBLICATION
CZ20021233 A3	20020814	LSPB	+	published / reissued
DE60019316 D1	20060518	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION
DE60019316 D1	20060518	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION
DE60019316 D1	20100819	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE
DE60019316 D1	20100819	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE
DE60019316 T2	20060309	LSGT	+	granted / extensions (spc, cpc, pte)
DE60019316 T2	20060518	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION
DE60019316 T2	20100819	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE
DE60019316 T2	20201010	PEXP		Calculated Patent Term Expiry
DE60028797 D1	20070705	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION
DE60028797 D1	20070705	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION
DE60028797 T2	20070524	LSGT	+	granted / extensions (spc, cpc, pte)
DE60028797 T2	20070705	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION
DE60028797 T2	20201010	PEXP		Calculated Patent Term Expiry
DE60031995 D1	20071213	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION
DE60031995 D1	20071213	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION
DE60031995 D1	20100819	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE
DE60031995 D1	20100819	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE
DE60031995 T2	20070913	LSGT	+	granted / extensions (spc, cpc, pte)
DE60031995 T2	20071213	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION
DE60031995 T2	20100819	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE
DE60031995 T2	20201010	PEXP		Calculated Patent Term Expiry
DE60037259 D1	20081218	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION
DE60037259 D1	20081218	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION

DE60037259 D1	20100819	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
DE60037259 D1	20100819	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
DE60037259 T2	20081009	LSGT	+	granted / extensions (spc, cpc, pte)	
DE60037259 T2	20081218	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE60037259 T2	20100819	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
DE60037259 T2	20201010	PEXP		Calculated Patent Term Expiry	
EG22378 A	20021231	LSGT	+	granted / extensions (spc, cpc, pte)	
EG22378 A	20201008	PEXP		Calculated Patent Term Expiry	
EP1217914 A1	20020703	LSPB	+	published / reissued	
EP1217914 A1	20020703	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20020419
EP1217914 A1	20030723	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20030604
EP1217914 B1	20050406	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1217914 B1	20050406	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 : 20050406
EP1217914 B1	20050406	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 : 20050406
EP1217914 B1	20050406	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 : 20050406
EP1217914 B1	20050406	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 : 20050406
EP1217914 B1	20050406	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 : 20050406
EP1217914 B1	20050406	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 : 20050406
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EP1217914 B1	20050406	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP1217914 B1	20050415	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1217914 B1	20050504	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP1217914 B1	20050706	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 : 20050706
EP1217914 B1	20050706	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 : 20050706
EP1217914 B1	20050706	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 : 20050706
EP1217914 B1	20050717	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 : 20050717
EP1217914 B1	20050908	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 : 20050908
EP1217914 B1	20051003	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
EP1217914 B1	20051006	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20051006 YEAR OF FEE PAYMENT : 6
EP1217914 B1	20051010	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 : 20051010
EP1217914 B1	20051010	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 : 20051010
EP1217914 B1	20051014	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP1217914 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
EP1217914 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
EP1217914 B1	20060329	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20060110
EP1217914 B1	20060809	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP1217914 B1	20070727	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20070629
EP1217914 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 NON-PAYMENT OF DUE FEES LAPSED DATE : 20061031
EP1217914 B1	20090130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20081031 YEAR OF FEE PAYMENT : 9
EP1217914 B1	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 : 20100501
EP1217914 B1	20121031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20120925 YEAR OF FEE PAYMENT : 13
EP1217914 B1	20140625	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20131010
EP1217914 B1	20140731	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 : 20131010
EP1217914 B1	20201010	PEXP		Calculated Patent Term Expiry	
EP1217931 A1	20020703	LSPB	+	published / reissued	
EP1217931 A1	20020703	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20020419
EP1217931 A1	20040825	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20040614
EP1217931 B1	20071128	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1217931 B1	20071221	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP1217931 B1	20071231	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP

EP1217931 B1	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 FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20071128
EP1217931 B1	20080430	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 : 20080311
EP1217931 B1	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 FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20071128
EP1217931 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 : 20071128
EP1217931 B1	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 FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20080228
EP1217931 B1	20080501	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
EP1217931 B1	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 FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20071128
EP1217931 B1	20080530	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP1217931 B1	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 FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20071128
EP1217931 B1	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 FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20071128
EP1217931 B1	20080829	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE

				FROM NATIONAL OFFICE TO EPO]	DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20071128
EP1217931 B1	20080930	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 : 20080428
EP1217931 B1	20081105	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20080829
EP1217931 B1	20081231	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20080915 YEAR OF FEE PAYMENT : 9
EP1217931 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 : 20080229
EP1217931 B1	20090130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20081031 YEAR OF FEE PAYMENT : 9
EP1217931 B1	20090430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20081006 YEAR OF FEE PAYMENT : 9
EP1217931 B1	20090529	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 : 20081031
EP1217931 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 : 20071128
EP1217931 B1	20091030	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 : 20081010
EP1217931 B1	20100723	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20100630
EP1217931 B1	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 : 20100501
EP1217931 B1	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
EP1217931 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 : 20081010
EP1217931 B1	20101130	LSLE	-PG25	LAPSED IN A	COUNTRY OF REF DOCUMENT :

				CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	GB NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20091010
EP1217931 B1	20110228	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 : 20081031
EP1217931 B1	20201010	PEXP		Calculated Patent Term Expiry	
EP1217932 A1	20020703	LSPB	+	published / reissued	
EP1217932 A1	20020703	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20020419
EP1217932 A1	20040825	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20040714
EP1217932 A1	20050810	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20050125
EP1217933 A1	20020703	LSPB	+	published / reissued	
EP1217933 A1	20020703	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20020419
EP1217933 A1	20040825	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20040714
EP1217933 B1	20060614	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1217933 B1	20060614	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 : 20060614
EP1217933 B1	20060614	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 : 20060614
EP1217933 B1	20060614	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 : 20060614
EP1217933 B1	20060614	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 : 20060614
EP1217933 B1	20060614	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 : 20060614
EP1217933 B1	20060614	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED	COUNTRY OF REF DOCUMENT : LI NOTIFICATIONOFLAPSE : LAPSE

				VIA 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 : 20060614
EP1217933 B1	20060614	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 : 20060614
EP1217933 B1	20060614	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP1217933 B1	20060615	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1217933 B1	20060712	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP1217933 B1	20060914	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 : 20060914
EP1217933 B1	20060914	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 : 20060914
EP1217933 B1	20061010	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 : 20061010
EP1217933 B1	20061031	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 : 20061031
EP1217933 B1	20061114	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 : 20061114
EP1217933 B1	20061201	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
EP1217933 B1	20061229	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP1217933 B1	20070301	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2266000 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP1217933 B1	20070523	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20070315
EP1217933 B1	20080430	LSLE	-PG25	LAPSED IN A CONTRACTING	COUNTRY OF REF DOCUMENT : GR

				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 : 20060915
EP1217933 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 : 20061010
EP1217933 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 : 20060614
EP1217933 B1	20110228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20101029 YEAR OF FEE PAYMENT : 11
EP1217933 B1	20110331	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20101021 YEAR OF FEE PAYMENT : 11
EP1217933 B1	20111130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20110930 YEAR OF FEE PAYMENT : 12
EP1217933 B1	20111130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20111005 YEAR OF FEE PAYMENT : 12
EP1217933 B1	20120131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20111020 YEAR OF FEE PAYMENT : 12
EP1217933 B1	20130626	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20121010
EP1217933 B1	20130726	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20130628
EP1217933 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 : 20121010
EP1217933 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 : 20130501
EP1217933 B1	20130822	LSDW	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R119 REF DOCUMENT NUMBER : 60028797 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20130501
EP1217933 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 : 20121010
EP1217933 B1	20130830	LSLE	-PG25	LAPSED IN A	COUNTRY OF REF DOCUMENT :

				CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	FR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20121031
EP1217933 B1	20140116	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20140116
EP1217933 B1	20140530	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 : 20121011
EP1217933 B1	20201010	PEXP		Calculated Patent Term Expiry	
EP1217934 A1	20020703	LSPB	+	published / reissued	
EP1217934 A1	20020703	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20020419
EP1217934 A1	20040825	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20040714
EP1217934 B1	20061122	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1217934 B1	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
EP1217934 B1	20061122	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 : 20061122
EP1217934 B1	20061122	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 : 20061122
EP1217934 B1	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
EP1217934 B1	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
EP1217934 B1	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
EP1217934 B1	20061122	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D

EP1217934 B1	20061215	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1217934 B1	20061229	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP1217934 B1	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
EP1217934 B1	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
EP1217934 B1	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
EP1217934 B1	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
EP1217934 B1	20070615	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP1217934 B1	20070701	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2276700 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP1217934 B1	20071031	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20070823
EP1217934 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 : 20070223
EP1217934 B1	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
EP1217934 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 NON-PAYMENT OF DUE FEES LAPSED DATE : 20071010
EP1217934 B1	20081231	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20080915 YEAR OF FEE PAYMENT : 9
EP1217934 B1	20090130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20081031 YEAR OF FEE PAYMENT : 9

EP1217934 B1	20090227	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20081023 YEAR OF FEE PAYMENT : 9
EP1217934 B1	20090331	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20081018 YEAR OF FEE PAYMENT : 9
EP1217934 B1	20090430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20081006 YEAR OF FEE PAYMENT : 9
EP1217934 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 : 20071010
EP1217934 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 : 20061122
EP1217934 B1	20100723	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20100630
EP1217934 B1	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 : 20100501
EP1217934 B1	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
EP1217934 B1	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 : 20091010
EP1217934 B1	20110311	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20110301
EP1217934 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 : 20091010
EP1217934 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 : 20110228
EP1217934 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 : 20091011
EP1217934 B1	20201010	PEXP		Calculated Patent Term Expiry	
EP1218261 A1	20020703	LSPB	+	published / reissued	
EP1218261 A1	20020703	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20020419

EP1218261 A1	20040825	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20040714
EP1218261 A1	20050803	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20050125
EP1218261 A1	20090529	LSWD	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HK REF LEGAL EVENT CODE : WD REF DOCUMENT NUMBER : 1048794 COUNTRY OF REF DOCUMENT : HK
EP1218485 A1	20020703	LSPB	+	published / reissued	
EP1218485 A1	20020703	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20020419
EP1218485 A1	20090916	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20090321
EP1397060 A1	20040317	LSPB	+	published / reissued	
EP1397060 A1	20040317	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20031219
EP1397060 A1	20070110	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20061205
EP1397060 A1	20110810	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20110104
EP1397066 A1	20040317	LSPB	+	published / reissued	
EP1397066 A1	20040317	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20031219
EP1397066 A1	20080409	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20080306
EP1397066 A1	20090107	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20080717
ES2266000 T3	20070301	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2266000 T3	20201010	PEXP		Calculated Patent Term Expiry	
ES2276700 T3	20070701	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2276700 T3	20201010	PEXP		Calculated Patent Term Expiry	
JP2003511127 T2	20030325	LSPB	+	published / reissued	
JP2003511127 T2	20060215	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20060214
JP2003511127 T2	20060513	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20060512
JP2003511127 T2	20061206	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20061205
JP2003511127 T2	20070425	LSWD	-A045	WRITTEN MEASURE OF DISMISSAL OF APPLICATION	TEXT : JAPANESE INTERMEDIATE CODE: A045 EFFECTIVE DATE : 20070424
JP2003511136 T2	20030325	LSPB	+	published / reissued	
JP2003511136 T2	20070911	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20070910
JP2003511136 T2	20090418	LSWD	-A761	WRITTEN	TEXT : JAPANESE INTERMEDIATE

				WITHDRAWAL OF APPLICATION	CODE: A761 EFFECTIVE DATE : 20090417
JP2003511137 T2	20030325	LSPB	+	published / reissued	
JP2003511137 T2	20060215	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20060214
JP2003511137 T2	20060719	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20060718
JP2003511138 T2	20030325	LSPB	+	published / reissued	
JP2003511138 T2	20070911	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20070910
JP2003511138 T2	20090418	LSWD	-A761	WRITTEN WITHDRAWAL OF APPLICATION	TEXT : JAPANESE INTERMEDIATE CODE: A761 EFFECTIVE DATE : 20090417
JP2003511234 T2	20030325	LSPB	+	published / reissued	
JP2003511234 T2	20041201	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20041130
JP2003511234 T2	20050531	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20050530
JP2003511234 T2	20050914	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20050913
JP2003511234 T2	20060311	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20060310
JP2003511234 T2	20060510	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20060509
JP2003511234 T2	20060824	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20060823
JP2003511234 T2	20060913	LSAL	A911	TRANSFER OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A911 EFFECTIVE DATE : 20060912
JP2003511234 T2	20061024	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2003511234 T2	20061108	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20061107
JP2003511234 T2	20061116	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20061109
JP2003511234 T2	20061117	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP2003511315 T2	20030325	LSPB	+	published / reissued	
JP2003511315 T2	20040811	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20040810
JP2003511315 T2	20050209	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20050208
JP2003511315 T2	20050615	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20050614

				(UTILITY MODEL)	
JP2003511315 T2	20051026	LSWD	-A045	WRITTEN MEASURE OF DISMISSAL OF APPLICATION	TEXT : JAPANESE INTERMEDIATE CODE: A045 EFFECTIVE DATE : 20051025
JP2004531322 T2	20041014	LSPB	+	published / reissued	
JP2004531322 T2	20050427	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20050426
JP2004531322 T2	20080115	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20080111
JP2004531322 T2	20080702	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20080701
JP2004531325 T2	20041014	LSPB	+	published / reissued	
JP2004531325 T2	20070110	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20070109
JP2004531325 T2	20070706	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20070705
JP2004531325 T2	20070727	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2004531325 T2	20070808	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20070807
JP2004531325 T2	20070823	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20070814
JP2004531325 T2	20070824	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP2004531325 T2	20070824	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP3881239 B2	20070214	LSGT	+	granted / extensions (spc, cpc, pte)	
JP3881239 B2	20091117	LSLE	-LAPS	CANCELLATION BECAUSE OF NO PAYMENT OF ANNUAL FEES	
JP3881239 B2	20201010	PEXP		Calculated Patent Term Expiry	
JP4001577 B2	20071031	LSGT	+	granted / extensions (spc, cpc, pte)	
JP4001577 B2	20100824	LSLE	-LAPS	CANCELLATION BECAUSE OF NO PAYMENT OF ANNUAL FEES	
JP4001577 B2	20220621	PEXP		Calculated Patent Term Expiry	
KR20020043619 A	20020610	LSPB	+	published / reissued	
KR20020043619 A	20020408	LSES	A201	REQUEST FOR EXAMINATION	
KR20020043619 A	20040806	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR20020043619 A	20050319	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR20020043619 A	20050610	LSRV	-E601	DECISION TO REFUSE APPLICATION	
KR20020076230 A	20021009	LSPB	+	published /	

				reissued	
KR20020076230 A	20020408	LSES	A201	REQUEST FOR EXAMINATION	
KR20020076230 A	20040821	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR20020076230 A	20050304	LSRV	-E601	DECISION TO REFUSE APPLICATION	
KR20020076231 A	20021009	LSPB	+	published / reissued	
KR20020076231 A	20020410	LSES	A201	REQUEST FOR EXAMINATION	
KR20020076231 A	20040821	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR20020076231 A	20050310	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR20020076231 A	20050819	LSRV	-E601	DECISION TO REFUSE APPLICATION	
MXPA02003567 A1	20050419	LSPB	+	published / reissued	
MXPA02003567 A1	20131031	LSWD	-FA	ABANDONMENT OR WITHDRAWAL	
MXPA02003602 A1	20020918	LSPB	+	published / reissued	
MXPA02003602 A1	20140630	LSWD	-FA	ABANDONMENT OR WITHDRAWAL	
MXPA02003603 A1	20020918	LSPB	+	published / reissued	
MXPA02003604 A1	20020918	LSPB	+	published / reissued	
MXPA02003605 A1	20020918	LSPB	+	published / reissued	
MXPA02003605 A1	20130831	LSWD	-FA	ABANDONMENT OR WITHDRAWAL	
MXPA02003606 A1	20020918	LSPB	+	published / reissued	
MXPA02003606 A1	20080328	LSGT	+FG	GRANT OR REGISTRATION	
TH49288 A	20020207	LSPB	+	published / reissued	
TH49289 A	20020207	LSPB	+	published / reissued	
TH49895 A	20020308	LSPB	+	published / reissued	
TR200200923 T2	20020821	LSPB	+	published / reissued	
TR200201692 T2	20021121	LSPB	+	published / reissued	
TW499365 B	20020821	LSGT	+	granted / extensions (spc, cpc, pte)	
TW499365 B	20201227	PEXP		Calculated Patent Term Expiry	
US2002017310 AA	20020214	LSPB	+	published / reissued	
US2002197094 AA	20021226	LSPB	+	published / reissued	
US2003086743 AA	20030508	LSPB	+	published / reissued	
US2003086743 AA	20031211	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2005201812 AA	20050915	LSPB	+	published / reissued	
US2005201812 AA	20060804	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROCTER & GAMBLE COMPANY, THE, OHIO OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:WONG, ARTHUR; PUNG, DAVID JOHN; CEDENO, ALEJANDRO; AND OTHERS; REEL/FRAME:018062/0124;

					SIGNING DATES FROM 20020823 TO 20020829
US2007223988 AA	20070927	LSPB	+	published / reissued	
US2007223988 AA	20070511	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROCTER & GAMBLE COMPANY, THE, OHIO OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:GRUENBACHER, DANA PAUL; DAVIS, JAMES HERBERT; FIELDS, KEVIN JOE; AND OTHERS; REEL/FRAME:019367/0468 EFFECTIVE DATE : 20001110
US2007223988 AA	20091105	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US6508602 BA	20030121	LSGT	+	granted / extensions (spc, cpc, pte)	
US6508602 BA	20000313	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROCTER & GAMBLE COMPANY, THE, OHIO OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:GRUENBACHER, DANA P.; DAVIS, JAMES H.; FIELDS, KEVIN J.; REEL/FRAME:010678/0972 EFFECTIVE DATE : 19991201
US6508602 BA	20060622	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6508602 BA	20110121	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US6508602 BA	20110221	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US6508602 BA	20110221	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US6508602 BA	20110315	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20110121
US6508602 BA	20191201	PEXP		Calculated Patent Term Expiry	
US6547468 BB	20030415	LSGT	+	granted / extensions (spc, cpc, pte)	
US6547468 BB	20011009	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROCTER & GAMBLE COMPANY, THE, OHIO OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:GRUENBACHER, DANA PAUL; FIELDS, KEVIN JOE; REEL/FRAME:012242/0946; SIGNING DATES FROM 20010926 TO 20011002
US6547468 BB	20020401	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROCTER & GAMBLE COMPANY, THE, OHIO OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ZIMMERMAN, DEAN ARTHUR; REEL/FRAME:012782/0423 EFFECTIVE DATE : 20020312
US6547468 BB	20040914	LSRE	CC	CERTIFICATE OF CORRECTION	
US6547468 BB	20060926	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6547468 BB	20110415	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US6547468 BB	20110516	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	

US6547468 BB	20110516	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US6547468 BB	20110607	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20110415
US6547468 BB	20210622	PEXP		Calculated Patent Term Expiry	
US6669387 BB	20031230	LSGT	+	granted / extensions (spc, cpc, pte)	
US6669387 BB	20030224	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROCTER & GAMBLE COMPANY, THE, OHIO OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:GRUENBACHER, DANA PAUL; DAVIS, JAMES HERBERT; FIELDS, KEVIN JOE; AND OTHERS; REEL/FRAME:013442/0075 EFFECTIVE DATE : 20021210
US6669387 BB	20031211	LSGT	PAT1	Patented Case	
US6669387 BB	20040921	LSRE	CC	CERTIFICATE OF CORRECTION	
US6669387 BB	20070517	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6669387 BB	20110523	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US6669387 BB	20150526	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US6669387 BB	20221210	PEXP		Calculated Patent Term Expiry	
US6726386 BA	20040427	LSGT	+	granted / extensions (spc, cpc, pte)	
US6726386 BA	20030916	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROCTOR & GAMBLE COMPANY, THE, OHIO OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:GRUENBACHER, DANA PAUL; DAVIS, JAMES HERBERT; FIELDS, KEVIN JOE; AND OTHERS; REEL/FRAME:013985/0217; SIGNING DATES FROM 20001110 TO 20001215
US6726386 BA	20070914	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6726386 BA	20120427	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US6726386 BA	20120528	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US6726386 BA	20120528	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US6726386 BA	20120619	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20120427
US6726386 BA	20220327	PEXP		Calculated Patent Term Expiry	
US6811338 BA	20041102	LSGT	+	granted / extensions (spc, cpc, pte)	
US6811338 BA	20050411	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROCTER & GAMBLE COMPANY, THE, OHIO OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:MANSKE JR., THOMAS JAMES; GRUENBACHER, DANA PAUL; DAVIS, JAMES HERBERT; AND OTHERS; REEL/FRAME:016050/0122 EFFECTIVE DATE : 20001110
US6811338 BA	20050607	LSRE	CC	CERTIFICATE OF CORRECTION	

US6811338 BA	20080417	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6811338 BA	20121102	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US6811338 BA	20121203	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US6811338 BA	20121203	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US6811338 BA	20121225	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20121102
US6811338 BA	20220917	PEXP		Calculated Patent Term Expiry (PTA 174 days)	
US7021848 BA	20060404	LSGT	+	granted / extensions (spc, cpc, pte)	
US7021848 BA	20051114	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROCTER & GAMBLE COMPANY, THE, OHIO OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:GRUENBACHER, DANA PAUL; DAVIS, JAMES HERBERT; FIELDS, KEVIN JOE; AND OTHERS; REEL/FRAME:017011/0707 EFFECTIVE DATE : 20001110
US7021848 BA	20060801	LSRE	CC	CERTIFICATE OF CORRECTION	
US7021848 BA	20090922	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US7021848 BA	20140404	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US7021848 BA	20140505	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US7021848 BA	20140505	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US7021848 BA	20140527	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20140404
US7021848 BA	20201010	PEXP		Calculated Patent Term Expiry	
US7108440 BA	20060919	LSGT	+	granted / extensions (spc, cpc, pte)	
US7108440 BA	20051111	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROCTER & GAMBLE COMPANY, THE, OHIO OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:GRUENBACHER, DANA PAUL; DAVIS, JAMES HERBERT; MANSKE, JR., THOMAS JAMES; AND OTHERS; REEL/FRAME:017004/0004; SIGNING DATES FROM 20001110 TO 20001115
US7108440 BA	20061226	LSRE	CC	CERTIFICATE OF CORRECTION	
US7108440 BA	20100919	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US7108440 BA	20101018	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US7108440 BA	20101018	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US7108440 BA	20101109	LSLE	-FP	EXPIRED DUE TO	EFFECTIVE DATE : 20100919

				FAILURE TO PAY MAINTENANCE FEE	
US7108440 BA	20201229	PEXP		Calculated Patent Term Expiry (PTA 80 days)	
US7179007 BB	20070220	LSGT	+	granted / extensions (spc, cpc, pte)	
US7179007 BB	20110220	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US7179007 BB	20110321	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US7179007 BB	20110321	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US7179007 BB	20110412	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20110220
US7179007 BB	20240529	PEXP		Calculated Patent Term Expiry (PTA 771 days)	
US7255506 BB	20070814	LSGT	+	granted / extensions (spc, cpc, pte)	
US7255506 BB	20110814	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US7255506 BB	20110912	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US7255506 BB	20110912	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US7255506 BB	20111004	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20110814
US7255506 BB	20241206	PEXP		Calculated Patent Term Expiry (PTA 1161 days and a terminal disclaimer has been filed)	
WO0126499 A1	20010419	LSPB	+	published / reissued	
WO0126499 A1	20020327	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 10089351 COUNTRY OF REF DOCUMENT : US
WO0126499 A1	20020405	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2001 529297 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO0126499 A1	20020405	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 80061/00 COUNTRY OF REF DOCUMENT : AU
WO0126499 A1	20020405	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2386140 COUNTRY OF REF DOCUMENT : CA
WO0126499 A1	20020408	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1020027004512 COUNTRY OF REF DOCUMENT : KR
WO0126499 A1	20020408	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : PV2002-1233 COUNTRY OF REF DOCUMENT : CZ
WO0126499 A1	20020408	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : PA/A/2002/003602 COUNTRY OF REF DOCUMENT : MX

WO0126499 A1	20020419	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2000970726 COUNTRY OF REF DOCUMENT : EP
WO0126499 A1	20020508	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 008153485 COUNTRY OF REF DOCUMENT : CN
WO0126499 C2	20020703	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2000970726 COUNTRY OF REF DOCUMENT : EP
WO0126499 C2	20020814	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : PV2002-1233 COUNTRY OF REF DOCUMENT : CZ
WO0126499 C2	20021009	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1020027004512 COUNTRY OF REF DOCUMENT : KR
WO0126499 C2	20050406	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2000970726 COUNTRY OF REF DOCUMENT : EP
WO0126499 C2	20050819	LSRV	-WWR	WIPO INFORMATION: REFUSED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1020027004512 COUNTRY OF REF DOCUMENT : KR
WO0126527 A1	20010419	LSPB	+	published / reissued	
WO0126527 A1	20020319	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2385626 COUNTRY OF REF DOCUMENT : CA
WO0126527 A1	20020327	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 10089331 COUNTRY OF REF DOCUMENT : US
WO0126527 A1	20020408	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2001 529324 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO0126527 A1	20020408	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : PA/A/2002/003568 COUNTRY OF REF DOCUMENT : MX
WO0126527 A1	20020419	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2000968930 COUNTRY OF REF DOCUMENT : EP
WO0126527 A1	20020703	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2000968930 COUNTRY OF REF DOCUMENT : EP
WO0126527 A1	20071128	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2000968930 COUNTRY OF REF DOCUMENT : EP
WO0126528 A1	20010419	LSPB	+	published / reissued	
WO0126528 A1	20020408	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 008140030 COUNTRY OF REF DOCUMENT : CN
WO0126528 A1	20020408	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1020027004488 COUNTRY OF REF DOCUMENT : KR
WO0126528 A1	20020408	LSNP	+WWE	WIPO	REF DOCUMENT NUMBER :

				INFORMATION: ENTRY INTO NATIONAL PHASE	PA/A/2002/003603 COUNTRY OF REF DOCUMENT : MX
WO0126528 A1	20020419	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2000970727 COUNTRY OF REF DOCUMENT : EP
WO0126528 C2	20020703	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2000970727 COUNTRY OF REF DOCUMENT : EP
WO0126528 C2	20021009	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1020027004488 COUNTRY OF REF DOCUMENT : KR
WO0126528 C2	20040714	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE	REF COUNTRY CODE : JP
WO0126528 C2	20050125	LSWD	-WWW	WIPO INFORMATION: WITHDRAWN IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2000970727 COUNTRY OF REF DOCUMENT : EP
WO0126528 C2	20050304	LSRV	-WWR	WIPO INFORMATION: REFUSED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1020027004488 COUNTRY OF REF DOCUMENT : KR
WO0126529 A1	20010419	LSPB	+	published / reissued	
WO0126529 A1	20020327	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 10089350 COUNTRY OF REF DOCUMENT : US
WO0126529 A1	20020402	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2387052 COUNTRY OF REF DOCUMENT : CA
WO0126529 A1	20020405	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2001 529326 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO0126529 A1	20020405	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2002/00923 COUNTRY OF REF DOCUMENT : TR
WO0126529 A1	20020408	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : PA/A/2002/003604 COUNTRY OF REF DOCUMENT : MX
WO0126529 A1	20020419	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2000975231 COUNTRY OF REF DOCUMENT : EP
WO0126529 A1	20020703	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2000975231 COUNTRY OF REF DOCUMENT : EP
WO0126529 A1	20060614	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2000975231 COUNTRY OF REF DOCUMENT : EP
WO0126530 A1	20010419	LSPB	+	published / reissued	
WO0126530 A1	20011002	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 09969074 COUNTRY OF REF DOCUMENT : US
WO0126530 A1	20020319	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2387255 COUNTRY OF REF DOCUMENT : CA

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WO0126530 A1	20020408	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : PA/A/2002/003567 COUNTRY OF REF DOCUMENT : MX
WO0126530 A1	20020419	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2000972052 COUNTRY OF REF DOCUMENT : EP
WO0126530 C2	20020703	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2000972052 COUNTRY OF REF DOCUMENT : EP
WO0126530 C2	20061122	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2000972052 COUNTRY OF REF DOCUMENT : EP
WO0126994 A1	20010419	LSPB	+	published / reissued	
WO0126994 A1	20020327	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2388017 COUNTRY OF REF DOCUMENT : CA
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WO0126994 A1	20020408	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 008159912 COUNTRY OF REF DOCUMENT : CN
WO0126994 A1	20020408	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1020027004489 COUNTRY OF REF DOCUMENT : KR
WO0126994 A1	20020408	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : PA/A/2002/003605 COUNTRY OF REF DOCUMENT : MX
WO0126994 A1	20020419	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2000972053 COUNTRY OF REF DOCUMENT : EP
WO0126994 A1	20020610	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1020027004489 COUNTRY OF REF DOCUMENT : KR
WO0126994 A1	20020703	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2000972053 COUNTRY OF REF DOCUMENT : EP
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WO0126994 C2	20050610	LSRV	-WWR	WIPO INFORMATION: REFUSED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1020027004489 COUNTRY OF REF DOCUMENT : KR
WO0127239 A1	20010419	LSPB	+	published / reissued	
WO0127239 A1	20020327	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 10089355 COUNTRY OF REF DOCUMENT : US
WO0127239 A1	20020402	LSNP	+WWE	WIPO	REF DOCUMENT NUMBER :

				INFORMATION: ENTRY INTO NATIONAL PHASE	2386603 COUNTRY OF REF DOCUMENT : CA
WO0127239 A1	20020405	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2001 530444 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO0127239 A1	20020408	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : PA/A/2002/003606 COUNTRY OF REF DOCUMENT : MX
WO0127239 A1	20020419	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2000970728 COUNTRY OF REF DOCUMENT : EP
WO0127239 A1	20020701	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2002/01692 COUNTRY OF REF DOCUMENT : TR
WO0127239 A1	20020703	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2000970728 COUNTRY OF REF DOCUMENT : EP
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WO03000088 A1	20031124	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2448216 COUNTRY OF REF DOCUMENT : CA
WO03000088 A1	20031219	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2003506542 COUNTRY OF REF DOCUMENT : JP
WO03000088 A1	20031219	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2002744240 COUNTRY OF REF DOCUMENT : EP
WO03000088 A1	20040317	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2002744240 COUNTRY OF REF DOCUMENT : EP
WO03000088 A1	20040429	LSWD	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : 8642
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WO03000106 A1	20031126	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2449232 COUNTRY OF REF DOCUMENT : CA
WO03000106 A1	20031218	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2003506560 COUNTRY OF REF DOCUMENT : JP
WO03000106 A1	20031219	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2002734818 COUNTRY OF REF DOCUMENT : EP
WO03000106 A1	20040317	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2002734818 COUNTRY OF REF DOCUMENT : EP
WO03000106 A1	20040429	LSWD	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : 8642
WO04052556 A1	20040624	LSPB	+	published / reissued	
WO04052556 A1	20060118	LSNE	-122	EP: PCT APPLICATION NON-ENTRY IN EUROPEAN PHASE	REF COUNTRY CODE : WO

WO04052556 A1	20061108	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE	REF COUNTRY CODE : JP
WO04052556 A1	20061108	LSWD	-WWW	WIPO INFORMATION: WITHDRAWN IN NATIONAL OFFICE	TEXT : JP
ZA200202473 A	20030627	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA200202473 A	20220326	PEXP		Calculated Patent Term Expiry	
ZA200202474 A	20030722	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA200202474 A	20220326	PEXP		Calculated Patent Term Expiry	

35) Family number: 1261019 (EP0001788A1)

Title: USE OF THERMOPLASTIC MASSES BASED ON CHLORINATED POLYOLEFINS FOR THE MANUFACTURE OF MEDICAL DEVICES AND MEDICAL DEVICES OBTAINED THEREBY.

Abstract: 1. Method of using a thermoplastic composition for the manufacture of medical apparatuses and instruments, which come into contact with parenteral liquids, characterized by said thermoplastic composition consisting of from 50 to 99.5 parts by weight of chlorinated polyolefin having a chlorine content of from 15 to 45 percent by weight and an average molecular weight of from 30,000 to 300,000 and of from 0.5 to 50 parts by weight of polymers of acrylic and/or methacrylic acid esters.

Classifications:
International (IPC 8-9): A61J1/00 A61M5/14 C08F255/02 C08L1/00 C08L101/00 C08L23/00 C08L23/26 C08L23/28 C08L27/00 C08L33/00 C08L33/02 C08L33/04 C08L33/06 C08L51/06 (Advanced/Invention);
C08F220/12 (Advanced/Non-invention);
A61J1/00 C08F255/00 C08L1/00 C08L101/00 C08L23/00 C08L27/00 C08L33/00 C08L51/00 (Core/Invention);
C08F220/00 (Core/Non-invention)
International (IPC 1-7): A61B5/14 A61J1/00 A61M5/14 C08F220/12 C08F255/02 C08L23/02 C08L23/24 C08L23/28 C08L33/06 C08L33/08 C08L33/10 C08L51/06
CPC: C08F255/023 C08L23/28
European: C08F255/02B C08L23/28

Family:

Publication number	Publication date	Application number	Application date
AT367085 B	19820525	AT19780007662	19781025
AT766278 A	19811015	AT19780007662	19781025
CA1114982 A1	19811222	CA19780314310	19781026
DE2748198 A1	19790503	DE19772748198	19771027
DE2748198 B2	19800207	DE19772748198	19771027
DE2748198 C3	19800925	DE19772748198	19771027
DE2756451 A1	19790628	DE19772756451	19771217
DE2860849 D1	19811022	DE19782860849	19781020
DE2860849 D1	19811022	DE19782860849T	19781020
DK476878 A	19790428	DK19780004768	19781026
EP0001788 A1	19790516	EP19780101183	19781020
EP0001788 B1	19810715	EP19780101183	19781020
IT1099806 A	19850928	IT19780029119	19781025
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JP54071151 A2	19790607	JP19780131088	19781026

Priority:

DE19772748198 19771027 DE19772756451 19771217 DE19782860849T 19781020 CA19780314310 19781026

Probable Assignee: HOECHST AG

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Inventor(s): (std): BRANDRUP J ; BRANDRUP JOHANNES ; BRANDRUP JOHANNES DR ; FLEISCHER D ; FLEISCHER DIETRICH ; FLEISCHER DIETRICH DR ; SOMMER W ; SOMMER WERNER ; YOHANESU BURANDORUTSUPU ; UERUNERU ZOMERU ; DEIITORITSUHI FURAISHIERU

Inventor(s): SOMMER WERNER 6232 BAD SODEN

Agent(s): BERESKIN AND PARR

Designated states: BE CH DE FR GB NL SE

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
AT367085 B	19820525	LSGT	+	granted / extensions (spc, cpc, pte)	
AT367085 B	19981025	PEXP		Calculated Patent Term Expiry	
AT766278 A	19811015	LSPB	+	published / reissued	
DE2748198 A1	19790503	LSPB	+	published / reissued	
DE2748198 A1	19790503	LSES	+OAP	REQUEST FOR EXAMINATION FILED	
DE2748198 A1	19790607	LSES	+OD	REQUEST FOR EXAMINATION	
DE2748198 B2	19800207	LSPB	+	published / reissued	
DE2748198 C3	19800925	LSGT	+	granted / extensions (spc, cpc, pte)	
DE2748198 C3	19800925	LSGT	+C3	GRANT AFTER TWO PUBLICATION STEPS (3RD PUBLICATION)	
DE2748198 C3	19831110	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
DE2756451 A1	19790628	LSPB	+	published / reissued	
DE2756451 A1	19820422	LSWD	-8130	WITHDRAWAL	

DE2860849 D1	19851003	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
DE2860849 D1	19851003	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
DE2860849 D1	19851003	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
DE2860849 D1	19851003	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
DK476878 A	19790428	LSPB	+	published / reissued	
DK476878 A	19850325	LSWD	-ATS	APPLICATION WITHDRAWN	
EP0001788 A1	19790516	LSPB	+	published / reissued	
EP0001788 A1	19790905	LSES	+17P	REQUEST FOR EXAMINATION FILED	
EP0001788 B1	19810715	LSGT	+	granted / extensions (spc, cpc, pte)	
EP0001788 B1	19830914	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 19830914 YEAR OF FEE PAYMENT : 6
EP0001788 B1	19830914	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 19830914 YEAR OF FEE PAYMENT : 6
EP0001788 B1	19830916	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 19830916 YEAR OF FEE PAYMENT : 6
EP0001788 B1	19830930	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 19830930 YEAR OF FEE PAYMENT : 6
EP0001788 B1	19830930	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 19830930 YEAR OF FEE PAYMENT : 6
EP0001788 B1	19831110	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 19831110 YEAR OF FEE PAYMENT : 6
EP0001788 B1	19841021	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE LAPSED DATE : 19841021
EP0001788 B1	19841031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE LAPSED DATE : 19841031
EP0001788 B1	19841031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH LAPSED DATE : 19841031
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EP0001788 B1	19850501	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL LAPSED DATE : 19850501
EP0001788 B1	19850612	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP

EP0001788 B1	19850617	LSLE	-NLV4	NL: LAPSED OR ANULLED DUE TO NON-PAYMENT OF THE ANNUAL FEE	REF COUNTRY CODE : EP
EP0001788 B1	19850628	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 : 19850628
EP0001788 B1	19850628	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP0001788 B1	19850702	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE LAPSED DATE : 19850702
EP0001788 B1	19850823	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST
EP0001788 B1	19881117	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB LAPSED DATE : 19881117
EP0001788 B1	19950131	LSLE	-EUG	SE: EUROPEAN PATENT HAS LAPSED	REF COUNTRY CODE : EP TEXT : 78101183.8 EFFECTIVE DATE : 19851007
IT1099806 A	19850928	LSGT	+	granted / extensions (spc, cpc, pte)	
IT1099806 A	19981025	PEXP		Calculated Patent Term Expiry	
JP54071151 A2	19790607	LSPB	+	published / reissued	

36) Family number: 42536019 (US2002182251A)

Title: ANTIBIOTIC(S) PREPARATION WITH RETARDING ACTIVE INGREDIENT RELEASE

Abstract: The present invention concerns an antibiotic/antibiotics preparation for resorbable and non-resorbable implants for human and veterinary medicine, for the treatment of local microbial infections in hard and soft tissue. The invented antibiotic/antibiotics preparation is a mixture consisting of at least one amphiphilic component of a representative of the alkyl sulfates, aryl sulfates, alkylaryl sulfates, cycloalkyl sulfates, alkylcycloalkyl sulfates, alkyl sulfamates, cycloalkyl sulfamates, alkylcycloalkyl sulfamates, aryl sulfamates, alkylaryl sulfamates, alkyl sulfonates, fatty acid-2-sulfonates, aryl sulfonates, alkylaryl sulfonates, cycloalkyl sulfonates, alkylcycloalkyl sulfonates, alkyl disulfates, cycloalkyl disulfates, alkyl disulfonates, cycloalkyl disulfonates, aryl disulfonates, alkylaryl disulfonates, aryl trisulfonates and alkylaryl trisulfonates as well as at least one antibiotic component from the group of aminoglycoside antibiotics, lincosamide antibiotics, 4-quinolone antibiotics and tetracycline antibiotics, and if need be at least one anhydrous organic auxiliary component and if need be at least one inorganic auxiliary component and if need be at least one biologically active component. The antibiotic/antibiotics preparation of the invention has a retarding active ingredient release.

Classifications:

International (IPC 8-9): A61J9/00 A61K31/00 A61K31/43 A61K31/4704 A61K31/545 A61K31/63 A61K31/65 A61K31/66 A61K31/70 A61K31/7028 A61K31/7036 A61K31/7048 A61K31/726 A61K45/00 A61K45/06 A61K45/08 A61K47/02 A61K47/14 A61K47/16 A61K47/20 A61K47/24 A61K9/00 A61K9/10 A61K9/14 A61K9/20 A61K9/22 A61K9/70 A61L27/00 A61L27/28 A61L27/54 A61L31/08 A61L31/14 A61L31/16 A61P31/00 A61P31/04 (Advanced/Invention);
A61K31/726 A61K47/02 A61K47/14 A61K47/16 A61K47/20 A61K47/24 A61K9/10 A61K9/14 A61K9/20 A61K9/22 A61K9/70 (Advanced/Non-invention);
A61J9/00 A61K31/00 A61K31/429 A61K31/4704 A61K31/545 A61K31/63 A61K31/65 A61K31/66 A61K31/70 A61K31/7042 A61K31/726 A61K45/00 A61K47/00 A61K47/02 A61K47/14 A61K47/16 A61K47/20 A61K47/24 A61K9/00 A61K9/10 A61K9/14 A61K9/70 A61L31/00 A61L31/08 A61P31/00 (Core/Invention);
A61K9/20 (Core/Non-invention)

International (IPC 1-7): A61F2/28 A61J3/00 A61K2/02 A61K31/43 A61K31/47 A61K31/4704 A61K31/496 A61K31/545 A61K31/63 A61K31/65 A61K31/66 A61K31/67 A61K31/70 A61K31/7008 A61K31/7036 A61K31/7048 A61K31/726 A61K33/14 A61K33/42 A61K45/06 A61K45/08 A61K47/02 A61K47/08 A61K47/14 A61K47/16 A61K47/20 A61K47/24 A61K9/00 A61K9/10 A61K9/14 A61K9/16 A61K9/20 A61K9/22 A61K9/70 A61L27/28 A61L27/54 A61L31/16 A61P31/00 A61P31/04 A62J3/06

CPC: A61K9/0024 A61K9/2013 A61K31/00 A61K31/7036 A61L27/54 A61L2300/406 A61L2300/602 A61L2300/802 A61P31/00 A61P31/04

European: A61K31/00 A61K31/7036 A61K9/00M5D A61L27/54 K61K9/20H4 K61L300/406 K61L300/602 K61L300/802

US: 424/423 424/426 424/464 424/464P 514/152 514/152S 514/253.08 514/253.080S 514/29 514/29S 514/312 514/312S 523/114 523/115



Family:

Publication number	Publication date	Application number	Application date
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MD2550 B2	20040930	MD20020000075	20020213
MD2550 C2	20050430	MD20020000075	20020213
MXPA02003007 A1	20030820	MX2002PA03007	20020320
NO20021390 A	20020923	NO20020001390	20020320
NO20021390 A0	20020320	NO20020001390	20020320
NO20021390 L	20020923	NO20020001390	20020320
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TR200400244 T4	20040421	TR20040000244T	20020306
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YU11802 A	20041231	YU20020000118	20020220
ZA200202254 A	20021010	ZA20020002254	20020320

Priority:

CA20022378490 20020322

Probable Assignee: HERAEUS KULZER GMBH AND CO KG

Assignee(s): (std): HERAUES KULZER GMBH AND CO KG ; HERAUS KULZER GMBH AND CO KG ; HELLICH GUESA KG ; HERAEUS KULZER GMBH ; HERAEUS KULZER GMBH AND CO ; HERAEUS KULZER GMBH AND CO GERMANY KG ; HERAEUS KULZER GMBH AND CO KG ; HERAEUS KULZER CMBH AND CO KG ; HERAEUS KULZER GMBH AND CO KG GERMANY

Assignee(s): HERAEUS KULZER GMBH AND COKG ; VOGT SEBASTIAN ; SCHNABELRAUCH MATTHIAS ; KULZER GMBH ; KUHN KLAUS DIETER ; HERAUES KULZER GMBH AND COKG ; HERAEUS MEDICAL GMBH

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Inventor(s): KLAUS DIETER K³HN ; KJUN KLAUS-DITER ; FOGT SEBAST'JAN ; SHNABEL'RAUKH MATTIAS ; M SNAPOLAU ; F SEBASTIAN VOGT ; DR SEBASTIAN VOGT ; DR MATTHIAS SCHNABELRAUCH ; DR KLAUS DIETER KUEHN ; S VOGT ; KLAUS DIETER KUEHN ; KL D KORN ; SEBASTIAN F VOGT

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

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT258431 E	20040215	LSGT	+	granted / extensions (spc, cpc, pte)	
AT258431 E	20220306	PEXP		Calculated Patent Term Expiry	
AU200227554 A1	20020926	LSPB	+	published / reissued	
AU768962 B2	20040108	LSGT	+	granted / extensions (spc, cpc, pte)	
AU768962 B2	20040513	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU768962 B2	20220321	PEXP		Calculated Patent Term Expiry	
BG106454 A	20021031	LSPB	+	published / reissued	
BG65467 B1	20080930	LSGT	+	granted / extensions (spc, cpc, pte)	
BG65467 B1	20220227	PEXP		Calculated Patent Term Expiry	
BRPI0200876 A	20030311	LSPB	+	published / reissued	
BRPI0200876 A	20110426	LSFE	-B08F	APPLICATION FEES: DISMISSAL - ARTICLE 86 OF INDUSTRIAL PROPERTY LAW	TEXT : REFERENTE A 9A ANUIDADE.
BRPI0200876 A	20111101	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 2103 DE 26/04/2011.
CA2378490 AA	20020922	LSPB	+	published / reissued	
CA2378490 AA	20020614	LSES	+EEER	EXAMINATION	

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CA2378490 C	20080513	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2378490 C	20140505	LSLE	-MKLA	LAPSED	EFFECTIVE DATE : 20140324
CA2378490 C	20220322	PEXP		Calculated Patent Term Expiry	
CN100486589 C	20090513	LSGT	+	granted / extensions (spc, cpc, pte)	
CN100486589 C	20090513	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN100486589 C	20140514	LSLE	-C17	CESSATION OF PATENT RIGHT	
CN100486589 C	20220322	PEXP		Calculated Patent Term Expiry	
CN1376469 A	20021030	LSPB	+	published / reissued	
CN1376469 A	20021030	LSPB	+C06	PUBLICATION	
CZ20020871 A3	20021113	LSPB	+	published / reissued	
CZ2002871 A3	20021113	LSPB	+	published / reissued	
CZ302690 B6	20110907	LSGT	+	granted / extensions (spc, cpc, pte)	
CZ302690 B6	20131016	LSLE	-MM4A	PATENT LAPSED DUE TO NON-PAYMENT OF FEE	EFFECTIVE DATE : 20130308
CZ302690 B6	20220308	PEXP		Calculated Patent Term Expiry	
DE10114244 A1	20021002	LSPB	+	published / reissued	
DE10114244 A1	20021002	LSES	+OP8	REQUEST FOR EXAMINATION AS TO PARAGRAPH 44 PATENT LAW	
DE10114244 A1	20050210	LSAS	8127	NEW PERSON/NAME/ADDRESS OF THE APPLICANT	PARTYTYPE : OWNER OWNER : HERAEUS KULZER GMBH, 63450 HANAU, DE
DE10114244 A1	20051208	LSRV	-8131	REJECTION	
DE50200223 D1	20050210	LSAS	8327	CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER	PARTYTYPE : OWNER OWNER : HERAEUS KULZER GMBH, 63450 HANAU, DE
DE50200223 D1	20050210	LSAS	8327	CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER	PARTYTYPE : OWNER OWNER : HERAEUS KULZER GMBH, 63450 HANAU, DE
DE50200223 D1	20050224	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
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DE50200223 D1	20140127	LSAS	R081	CHANGE OF APPLICANT/PATENTEE	PARTYTYPE : OWNER OWNER : HERAEUS MEDICAL GMBH, 61273 WEHRHEIM, DE OLDPARTY : HERAEUS KULZER GMBH, 63450 HANAU, DE
DK1243257 T3	20040510	LSGT	+	granted / extensions (spc, cpc, pte)	
DK1243257 T3	20220306	PEXP		Calculated Patent Term Expiry	
EE200200153 A	20021216	LSPB	+	published / reissued	
EP1243257 A1	20020925	LSPB	+	published / reissued	
EP1243257 A1	20020925	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20020311
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EP1243257 A1	20030611	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 COUNTRY OF REF DOCUMENT : TR
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EP1243257 B1	20040130	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1243257 B1	20040225	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D TEXT : GERMAN
EP1243257 B1	20040422	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : EP REF DOCUMENT NUMBER : 20040400824 COUNTRY OF REF DOCUMENT : GR
EP1243257 B1	20040901	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2213717 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
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EP1243257 B1	20120430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20120403 YEAR OF FEE PAYMENT : 11
EP1243257 B1	20120430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20120326 YEAR OF FEE PAYMENT : 11
EP1243257 B1	20120430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20120328 YEAR OF FEE PAYMENT : 11
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				NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	DOCUMENT : MC PAYMENT DATE : 20120313 YEAR OF FEE PAYMENT : 11
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EP1243257 B1	20120531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20120305 YEAR OF FEE PAYMENT : 11
EP1243257 B1	20120629	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20120329 YEAR OF FEE PAYMENT : 11
EP1243257 B1	20120629	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20120329 YEAR OF FEE PAYMENT : 11
EP1243257 B1	20120629	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20120322 YEAR OF FEE PAYMENT : 11
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EP1243257 B1	20130628	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20120327 YEAR OF FEE PAYMENT : 11
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EP1243257 B1	20131016	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : V1 EFFECTIVE DATE : 20131001
EP1243257 B1	20131028	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DK REF LEGAL EVENT CODE : EBP
EP1243257 B1	20131028	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DK REF LEGAL EVENT CODE : EBP EFFECTIVE DATE : 20130331

EP1243257 B1	20131029	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SE REF LEGAL EVENT CODE : EUG
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EP1243257 B1	20131031	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP1243257 B1	20131120	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : ML REF DOCUMENT NUMBER : 20040400824 COUNTRY OF REF DOCUMENT : GR EFFECTIVE DATE : 20131002
EP1243257 B1	20131127	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20130306
EP1243257 B1	20131227	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20131129
EP1243257 B1	20140101	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP1243257 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 : 20130306
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EP1243257 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 : 20130306
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EP1243257 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 : 20131001
EP1243257 B1	20140306	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : DE OWNER : HERAEUS MEDICAL GMBH, DE REF LEGAL EVENT CODE : R081 REF DOCUMENT NUMBER : 50200223 COUNTRY OF REF DOCUMENT : DE OLDPARTY : FORMER OWNER: HERAEUS KULZER GMBH, 63450 HANAU, DE EFFECTIVE DATE : 20140127
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EP1243257 B1	20140915	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : AT OWNER : HERAEUS MEDICAL GMBH, DE REF LEGAL EVENT CODE : PC REF DOCUMENT NUMBER : 258431 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20140716
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EP1243257 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 : 20130306
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ES2213717 T3	20220306	PEXP		Calculated Patent Term Expiry	
GE20053447 B	20050225	LSGT	+	granted / extensions (spc, cpc, pte)	
GE20053447 B	20220219	PEXP		Calculated Patent Term Expiry	
HR20020240 A1	20021231	LSPB	+	published / reissued	
HR20020240 A2	20021231	LSPB	+	published / reissued	
HR20020240 A2	20021231	LSPB	+A1OB	PUBLICATION OF A PATENT APPLICATION	
HR20020240 B1	20050430	LSGT	+	granted / extensions (spc, cpc, pte)	
HR20020240 B1	20050430	LSGT	+B1PR	PATENT GRANTED	
HR20020240 B1	20090320	LSFE	+ODRP	RENEWAL FEE FOR THE MAINTENANCE OF A PATENT	PAYMENT DATE : 20090320 YEAR OF FEE PAYMENT : 8
HR20020240 B1	20100922	LSLE	-PBON	LAPSE DUE TO NON-PAYMENT OF RENEWAL FEE	EFFECTIVE DATE : 20100322
HR20020240 B1	20220321	PEXP		Calculated Patent Term Expiry	
HU0201045 AB	20030228	LSPB	+	published / reissued	
HU0201045 AB	20101228	LSLE	-FD9A	LAPSE OF PROVISIONAL PROTECTION DUE TO NON-PAYMENT OF FEES	
IL148703 A1	20060705	LSPB	+	published / reissued	
IL148703 A1	20061227	LSGT	+FF	PATENT GRANTED	
IL148703 A1	20061227	LSFE	+KB	PATENT RENEWED	
IL148703 A1	20080413	LSFE	+KB	PATENT RENEWED	
IL148703 A1	20120329	LSFE	+KB	PATENT RENEWED	
IL148703 A1	20160331	LSFE	+KB	PATENT RENEWED	
IS2501 B	20090315	LSGT	+	granted / extensions (spc, cpc, pte)	
IS2501 B	20220215	PEXP		Calculated Patent Term Expiry	
IS6269 A	20020922	LSPB	+	published / reissued	
IS6270 A	20020922	LSPB	+	published / reissued	
JP2002322097 A2	20021108	LSPB	+	published / reissued	
JP2002322097 A2	20060623	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20060622
JP2002322097 A2	20061223	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20061222

JP2002322097 A2	20070524	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20070523
JP2002322097 A2	20070822	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20070821
JP2002322097 A2	20070927	LSAL	A911	TRANSFER OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A911 EFFECTIVE DATE : 20070926
JP2002322097 A2	20080204	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20080201
JP2002322097 A2	20080322	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20080321
JP2002322097 A2	20080723	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2002322097 A2	20080731	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20080730
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JP2002322097 A2	20080904	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20080829
JP2002322097 A2	20080905	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
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JP4181331 B2	20110906	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 4
JP4181331 B2	20120904	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 5
JP4181331 B2	20130905	LSLE	-LAPS	CANCELLATION BECAUSE OF NO PAYMENT OF ANNUAL FEES	
JP4181331 B2	20220322	PEXP		Calculated Patent Term Expiry	
MD20020075 A	20021130	LSPB	+	published / reissued	
MD2550 B2	20040930	LSPB	+	published / reissued	
MD2550 B2	20100930	LSLE	-KA4A	PATENT FOR INVENTION LAPSED DUE TO NON-PAYMENT OF FEES (WITH RIGHT OF RESTORATION)	
MD2550 B2	20110930	LSLE	-MM4A	PATENT FOR INVENTION DEFINITELY LAPSED DUE TO NON-PAYMENT OF FEES	
MD2550 C2	20050430	LSGT	+	granted / extensions (spc, cpc, pte)	
MD2550 C2	20220213	PEXP		Calculated Patent Term Expiry	
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MXPA02003007 A1	20060209	LSGT	+FG	GRANT OR REGISTRATION	
MXPA02003007 A1	20090203	LSAS	HC	CHANGE OF COMPANY NAME OR JURIDICAL STATUS	

NO20021390 A	20020923	LSPB	+	published / reissued	
NO331876 B1	20120423	LSGT	+	granted / extensions (spc, cpc, pte)	
NO331876 B1	20131028	LSLE	-MM1K	LAPSED BY NOT PAYING THE ANNUAL FEES	
NO331876 B1	20220320	PEXP		Calculated Patent Term Expiry	
NZ517922 A	20030829	LSPB	+	published / reissued	
NZ517922 A	20040130	LSGT	+PSEA	PATENT SEALED	
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NZ517922 A	20150227	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	TEXT : PATENT RENEWED FOR 1 YEAR UNTIL 21 MAR 2016 BY DENNEMEYER + CO EFFECTIVE DATE : 20150217
NZ517922 A	20160226	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	TEXT : PATENT RENEWED FOR 1 YEAR UNTIL 21 MAR 2017 BY DENNEMEYER + CO EFFECTIVE DATE : 20160222
NZ517922 A	20170224	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	TEXT : PATENT RENEWED FOR 1 YEAR UNTIL 21 MAR 2018 BY DENNEMEYER + CO. EFFECTIVE DATE : 20170217
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PL204986 B1	20140430	LSLE	-LAPS	DECISIONS ON THE LAPSE OF THE PROTECTION RIGHTS	EFFECTIVE DATE : 20130321
PL352920 A1	20020923	LSPB	+	published / reissued	
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PT1243257 T	20220306	PEXP		Calculated Patent Term Expiry	
RU2002107208 A	20031110	LSPB	+	published / reissued	
RU2264230 C2	20051120	LSGT	+	granted / extensions (spc, cpc, pte)	
RU2264230 C2	20220321	PEXP		Calculated Patent Term Expiry	
SA1776 B1	20070415	LSGT	+	granted / extensions (spc, cpc, pte)	
SK200200389 A5	20021008	LSPB	+	published / reissued	
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SK286493 B6	20101207	LSLE	-MM4A	PATENT LAPSED DUE TO NON-PAYMENT OF MAINTENANCE FEES	EFFECTIVE DATE : 20100318
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TR200400244 T4	20220306	PEXP		Calculated Patent Term Expiry	
US2002182251 AA	20021205	LSPB	+	published / reissued	
US2002182251 AA	20130805	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	

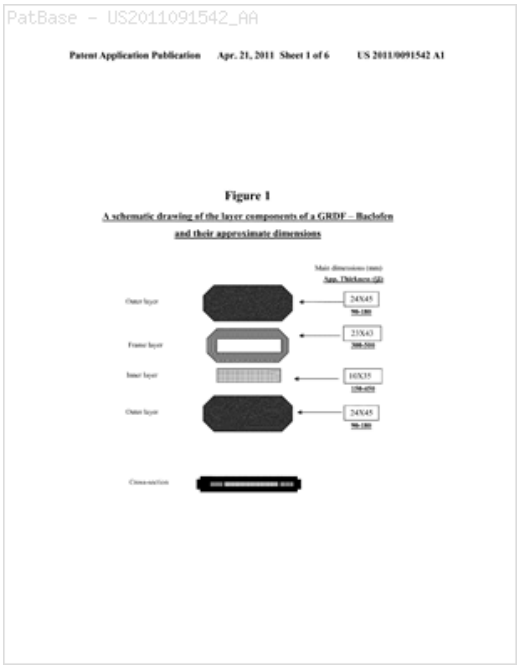
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US6913764 BB	20090102	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6913764 BB	20130705	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US6913764 BB	20130805	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
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US6913764 BB	20230217	PEXP		Calculated Patent Term Expiry (PTA 335 days and a terminal disclaimer has been filed)	
YU11802 A	20041231	LSPB	+	published / reissued	
ZA200202254 A	20021010	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA200202254 A	20220319	PEXP		Calculated Patent Term Expiry	

37) Family number: 44073019 (US2011091542A)

Title: BACLOFEN AND R-BACLOFEN GASTRORETENTIVE DRUG DELIVERY SYSTEMS

Abstract: A biodegradable, multi-layered controlled release gastroretentive baclofen or R-baclofen dosage form which is optionally divided into a first dosage of baclofen or R-baclofen for immediate release and a second dosage of baclofen or R-baclofen for controlled release in the stomach and gastrointestinal tract of a patient, folded into a capsule which disintegrates upon contact with gastric juice and the dosage form unfolds rapidly upon contact with gastric juice. The biodegradable, multi-layered gastroretentive dosage forms of the invention provide fast onset of baclofen or R-baclofen activity with prolonged absorption and minimal undesirable side effects.

Classifications:
International (IPC 8-9): A01N A01N43/90 A61J3/07 A61K A61K31/137 A61K31/195 A61K31/198 A61K31/519 A61K45/00 A61K45/06 A61K47/10 A61K47/30 A61K47/32 A61K47/34 A61K47/36 A61K47/38 A61K47/42 A61K9/00 A61K9/20 A61K9/22 A61K9/24 A61K9/28 A61K9/30 A61K9/48 A61K9/52 A61K9/54 A61K9/56 A61K9/58 A61K9/70 A61M37/00 A61P1/00 A61P25/00 A61P25/06 A61P25/16 A61P25/20 A61P25/24 A61P25/30 A61P25/32 A61P29/00 A61P3/00 A61P3/04 A61P31/02 A61P35/00 A61P7/00 (Advanced/Invention);
A61K31/198 A61K31/519 A61K45/06 A61K9/00 A61K9/28 A61K9/48 A61K9/52 (Advanced/Non-invention);
A01N43/90 A61K31/00 A61K31/185 A61K31/519 A61K45/00 A61K9/00 A61K9/22 A61K9/52 (Core/Invention);
A01N A61K (Subclass/Invention)
CPC: A61K47/38 A61K47/34 A61K47/32 A61K2300/00 A61K9/48 A61K45/06 A61K9/282 A61K9/2846 A61K9/2866 A61K9/2873 A61K9/2886 A61K9/4875 A61K9/4891 A61K9/4808 A61K9/7007 A61K31/195 A61K9/0002 A61K9/0065 A61K9/4866 A61K31/198 A61K45/00 A61P1/00 A61P3/00 A61P3/04 A61P25/16 A61P31/02 A61P25/00 A61P25/06 A61P25/20 A61P25/24 A61P25/30 A61P25/32 A61P29/00 A61P35/00 A61P7/00
European: A61K31/195 A61K31/198 A61K45/06 A61K9/00M18F A61K9/28K A61K9/48A A61K9/70
US: 1/1 424/400 424/400S 424/443 424/451 424/452 424/452P 424/457 424/457S 424/458 424/458P 424/459 424/459S 424/464 424/468 424/472 514/259.3 514/259.300S 514/565 514/567 514/567S 604/288



Family:

Publication number	Publication date	Application number	Application date
CA2721493 AA	20101014	CA20092721493	20090417
CA2721493 C	20171128	CA20092721493	20090417
CA2745741 AA	20100610	CA20092745741	20091019
CN102149369 A	20110810	CN200980120103	20090417
CN102149369 B	20160810	CN200980120103	20090417
CN102300463 A	20111228	CN200980153943	20091019
CN102300463 B	20150325	CN200980153943	20091019
CN106176678 A	20161207	CN201610524573	20090417
CY1118296 T1	20170628	CY20161101253T	20161206
DE602009035458 D1	20160211	DE200960035458T	20091019
DK2276473 T3	20170109	DK20090754186T	20090417
EP2276473 A1	20110126	EP20090754186	20090417
EP2276473 A4	20131106	EP20090754186	20090417
EP2276473 B1	20160914	EP20090754186	20090417
EP2378883 A2	20111026	EP20090830077	20091019
EP2378883 A4	20140305	EP20090830077	20091019
EP2378883 B1	20151223	EP20090830077	20091019
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IL208708 A0	20101230	IL20090208708	20090417
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IL213376 A0	20110731	IL20090213376	20091019
IL213376 A1	20150630	IL20090213376	20091019
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JP2011518148 T2	20110623	JP20110504573T	20090417
JP2012510987 T2	20120517	JP20110539117T	20091019
JP2015028094 A2	20150212	JP20140231788	20141114
JP2015154934 A2	20150827	JP20150036404	20150226
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JP6104873 B2	20170329	JP20140231788	20141114
KR101601649 B1	20160309	KR20107025481	20090417
KR20110015549 A	20110216	KR20107025481	20090417
KR20110116004 A	20111024	KR20117014376	20091019
LT2276473 T	20170227	LT20090754186T	20090417

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PL2276473 T3	20170331	PL20090754186T	20090417
PL2378883 T3	20160630	PL20090830077T	20091019
PT2276473 T	20161215	PT20090754186T	20090417
SI2276473 T1	20170228	SI20090031553T	20090417
TR201618437 T4	20170123	TR20160018437T	20090417
US2011091542 AA	20110421	US20100797441	20100609
US2011117192 AA	20110519	US20090937955	20090417
US2012021051 AA	20120126	US20090132899	20091019
US2014314842 AA	20141023	US20140322436	20140702
US2015010624 AA	20150108	US20140322460	20140702
US2015366832 AA	20151224	US20150715077	20150518
US2016199300 AA	20160714	US20160995611	20160114
US2017119664 AA	20170504	US20170403784	20170111
US8771730 BB	20140708	US20090937955	20090417
US9072663 BB	20150707	US20140322436	20140702
US9259387 BB	20160216	US20150715077	20150518
US9554991 BB	20170131	US20160995611	20160114
US9693981 BB	20170704	US20090132899	20091019
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WO10064139 A2	20100610	WO2009IB07731	20091019
WO10064139 A3	20100910	WO2009IB07731	20091019
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Priority:

US20080046261P	20080418	US20080046261	20080418	US20080120051P	20081204
US20080120051	20081204	CN200980120103	20090417	EP20090754186	20090417
JP20110504573	20090417	JP20110504573T	20090417	US20090937955	20090417
WO2009IB05691	20090417	JP20110539117	20091019	EP20090830077	20091019
US20090132899	20091019	JP20110539117T	20091019	WO2009IB07419	20091019
WO2009IB07731	20091019	US20100797441	20100609	US20110937955	20110131
US20140322436	20140702	US20140322460	20140702	JP20150036404	20150226
US20150715077	20150518	US20160995611	20160114	US20170403784	20170111

Probable Assignee: INTEC PHARMA LTD

Assignee(s): (std): CARNI GIORA ; INTEC PHARM LTD ; INTEC PHARMA LTD ; KIRMAYER DAVID ; KLUEV ELENA ; MASRI SUHER ; MOOR EYTAN ; NAVON NADAV ; SHVETZ JULIA ; INTECPHARMA LTD

Inventor(s): (std): CARNI GIORA ; KIRMAYER DAVID ; KLUEV ELENA ; MASRI SUHER ; MOOR EYTAN ; NAVON NADAV ; SHVETZ JULIA ; SUHER MASRI ; WEISS ZEEV ; NADAV NAVON ; MASRI SHUHER ; GIORA CARNI ; EYTAN MOOR ; ELENA KLUEV ; DAVID KIRMAYER ; NAVON NADA

Agent(s): BERESKIN AND PARR LLP SENCRL SRL; GOUDREAU GAGE DUBUC; KILBURN AND STRODE LLP; LAWRENCE JOHN; GRUENECKER PATENT U RECHTSANWAELTE PARTG MBB; VOSSIUS AND PARTNER; VOSSIUS AND PARTNER PATENTANWAELTE RECHTSANWAELTE MBB; ISERN JORGE; CARPINTERO MARIO; REINHOLD COHN AND PARTNERS; WOLFF BREGMAN AND GOLLER; MIYOSHI HIDEKAZU; TOLGA CAYLAK; BROWDY AND NEIMARK PLLC

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 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
CA2721493 AA	20101014	LSPB	+	published / reissued	
CA2721493 AA	20140416	LSES	+EEER	EXAMINATION REQUEST	EFFECTIVE DATE : 20140409
CA2721493 C	20171128	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2721493 C	20290417	PEXP		Calculated Patent Term Expiry	
CA2745741 AA	20100610	LSPB	+	published / reissued	
CA2745741 AA	20151208	LSLE	-FZDE	DEAD	EFFECTIVE DATE : 20151020
CN102149369 A	20110810	LSPB	+	published / reissued	
CN102149369 A	20110810	LSPB	+C06	PUBLICATION	
CN102149369 A	20160810	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN102149369 B	20160810	LSGT	+	granted / extensions (spc, cpc, pte)	
CN102149369 B	20290417	PEXP		Calculated Patent Term	

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CN102300463 A	20111228	LSPB	+	published / reissued	
CN102300463 A	20111228	LSPB	+C06	PUBLICATION	
CN102300463 A	20111228	LSPB	PB01	公开 (The publication of application)	TEXT : 公开 (DISCLOSURE)
CN102300463 B	20150325	LSGT	+	granted / extensions (spc, cpc, pte)	
CN102300463 B	20150325	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN102300463 B	20150325	LSGT	+GR01	授权 (The grant of patent right)	TEXT : 授权 (AUTHORIZATION)
CN102300463 B	20191018	LSLE	-CF01	TERMINATION OF PATENT RIGHT DUE TO NON-PAYMENT OF ANNUAL FEE	
CN102300463 B	20191018	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 : 20181019
CN102300463 B	20291019	PEXP		Calculated Patent Term Expiry	
CN106176678 A	20161207	LSPB	+	published / reissued	
CN106176678 A	20161207	LSPB	+C06	PUBLICATION	
CN106176678 A	20161207	LSPB	PB01	公开 (The publication of application)	TEXT : 公开 (DISCLOSURE)
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DE602009035458 D1	20190501	LSDW	-R119	APPLICATION DEEMED WITHDRAWN, OR IP RIGHT LAPSED, DUE TO NON-PAYMENT OF RENEWAL FEE	
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EP2276473 A1	20110126	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20101109
EP2276473 A4	20131106	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	EFFECTIVE DATE : 20131004
EP2276473 A4	20150318	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20150211
EP2276473 A4	20160427	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20160330
EP2276473 B1	20160914	LSGT	+	granted / extensions (spc, cpc, pte)	
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EP2276473 B1	20160915	LSNP	REG	REFERENCE TO A	REF COUNTRY CODE : CH

				NATIONAL CODE	REF LEGAL EVENT CODE : EP
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EP2276473 B1	20170130	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NO REF LEGAL EVENT CODE : T2 EFFECTIVE DATE : 20160914
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EP2276473 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LT PAYMENT DATE : 20170502 YEAR OF FEE PAYMENT : 9
EP2276473 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20170427 YEAR OF FEE PAYMENT : 9
EP2276473 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20170503 YEAR OF FEE PAYMENT : 9
EP2276473 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20170427 YEAR OF FEE PAYMENT : 9
EP2276473 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20170510 YEAR OF FEE PAYMENT : 9

EP2276473 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HR PAYMENT DATE : 20170427 YEAR OF FEE PAYMENT : 9
EP2276473 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20170427 YEAR OF FEE PAYMENT : 9
EP2276473 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IS PAYMENT DATE : 20170426 YEAR OF FEE PAYMENT : 9
EP2276473 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20170427 YEAR OF FEE PAYMENT : 9
EP2276473 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NO PAYMENT DATE : 20170502 YEAR OF FEE PAYMENT : 9
EP2276473 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20170427 YEAR OF FEE PAYMENT : 9
EP2276473 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170427 YEAR OF FEE PAYMENT : 9
EP2276473 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20170502 YEAR OF FEE PAYMENT : 9
EP2276473 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE PAYMENT DATE : 20170426 YEAR OF FEE PAYMENT : 9
EP2276473 B1	20170823	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20170615
EP2276473 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20170427 YEAR OF FEE PAYMENT : 9
EP2276473 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20170428 YEAR OF FEE PAYMENT : 9
EP2276473 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20170427 YEAR OF FEE PAYMENT : 9
EP2276473 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LV PAYMENT DATE : 20170428 YEAR OF FEE PAYMENT : 9
EP2276473 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20170504 YEAR OF FEE PAYMENT : 9
EP2276473 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG PAYMENT DATE : 20170427 YEAR OF FEE PAYMENT : 9
EP2276473 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID	COUNTRY OF REF DOCUMENT :

				TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	ES PAYMENT DATE : 20170503 YEAR OF FEE PAYMENT : 9
EP2276473 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 : 9
EP2276473 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20170427 YEAR OF FEE PAYMENT : 9
EP2276473 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 : 9
EP2276473 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20170427 YEAR OF FEE PAYMENT : 9
EP2276473 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20170428 YEAR OF FEE PAYMENT : 9
EP2276473 B1	20170929	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20170523 YEAR OF FEE PAYMENT : 9
EP2276473 B1	20170929	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20170502 YEAR OF FEE PAYMENT : 9
EP2276473 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 : 9
EP2276473 B1	20180131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK PAYMENT DATE : 20171013 YEAR OF FEE PAYMENT : 9
EP2276473 B1	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY PAYMENT DATE : 20170907 YEAR OF FEE PAYMENT : 9
EP2276473 B1	20180426	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 10
EP2276473 B1	20180629	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MK PAYMENT DATE : 20170426 YEAR OF FEE PAYMENT : 9
EP2276473 B1	20180629	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20180423 YEAR OF FEE PAYMENT : 10
EP2276473 B1	20180629	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20180424 YEAR OF FEE PAYMENT : 10
EP2276473 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE PAYMENT DATE : 20180425 YEAR OF FEE PAYMENT : 10

EP2276473 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HR PAYMENT DATE : 20180412 YEAR OF FEE PAYMENT : 10
EP2276473 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20180427 YEAR OF FEE PAYMENT : 10
EP2276473 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LT PAYMENT DATE : 20180416 YEAR OF FEE PAYMENT : 10
EP2276473 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20180423 YEAR OF FEE PAYMENT : 10
EP2276473 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20180416 YEAR OF FEE PAYMENT : 10
EP2276473 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20180420 YEAR OF FEE PAYMENT : 10
EP2276473 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20180426 YEAR OF FEE PAYMENT : 10
EP2276473 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NO PAYMENT DATE : 20180424 YEAR OF FEE PAYMENT : 10
EP2276473 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20180522 YEAR OF FEE PAYMENT : 10
EP2276473 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK PAYMENT DATE : 20180413 YEAR OF FEE PAYMENT : 10
EP2276473 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20180411 YEAR OF FEE PAYMENT : 10
EP2276473 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20180420 YEAR OF FEE PAYMENT : 10
EP2276473 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20180416 YEAR OF FEE PAYMENT : 10
EP2276473 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20180413 YEAR OF FEE PAYMENT : 10
EP2276473 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IS PAYMENT DATE : 20180423 YEAR OF FEE PAYMENT : 10
EP2276473 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20180412 YEAR OF FEE PAYMENT : 10

				FROM NATIONAL OFFICE TO EPO]	
EP2276473 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20180426 YEAR OF FEE PAYMENT : 10
EP2276473 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20180425 YEAR OF FEE PAYMENT : 10
EP2276473 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG PAYMENT DATE : 20180420 YEAR OF FEE PAYMENT : 10
EP2276473 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20180420 YEAR OF FEE PAYMENT : 10
EP2276473 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20180426 YEAR OF FEE PAYMENT : 10
EP2276473 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20180412 YEAR OF FEE PAYMENT : 10
EP2276473 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20180420 YEAR OF FEE PAYMENT : 10
EP2276473 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LV PAYMENT DATE : 20180425 YEAR OF FEE PAYMENT : 10
EP2276473 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 : 20170417
EP2276473 B1	20180928	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20180427 YEAR OF FEE PAYMENT : 10
EP2276473 B1	20180928	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20180604 YEAR OF FEE PAYMENT : 10
EP2276473 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180629 YEAR OF FEE PAYMENT : 10
EP2276473 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20180427 YEAR OF FEE PAYMENT : 10
EP2276473 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY PAYMENT DATE : 20180416 YEAR OF FEE PAYMENT : 10
EP2276473 B1	20190228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL	COUNTRY OF REF DOCUMENT : MK PAYMENT DATE : 20180413 YEAR OF FEE PAYMENT : 10

				OFFICE TO EPO]	
EP2276473 B1	20190415	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : UEP REF DOCUMENT NUMBER : 828143 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20160914
EP2276473 B1	20190628	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20190426 YEAR OF FEE PAYMENT : 11
EP2276473 B1	20190628	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20190425 YEAR OF FEE PAYMENT : 11
EP2276473 B1	20190731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20190429 YEAR OF FEE PAYMENT : 11
EP2276473 B1	20190731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20190524 YEAR OF FEE PAYMENT : 11
EP2276473 B1	20190731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20190418 YEAR OF FEE PAYMENT : 11
EP2276473 B1	20190731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20190419 YEAR OF FEE PAYMENT : 11
EP2276473 B1	20190731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LT PAYMENT DATE : 20190416 YEAR OF FEE PAYMENT : 11
EP2276473 B1	20190731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20190426 YEAR OF FEE PAYMENT : 11
EP2276473 B1	20190731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20190415 YEAR OF FEE PAYMENT : 11
EP2276473 B1	20190731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NO PAYMENT DATE : 20190424 YEAR OF FEE PAYMENT : 11
EP2276473 B1	20190731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20190404 YEAR OF FEE PAYMENT : 11
EP2276473 B1	20190731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20190423 YEAR OF FEE PAYMENT : 11
EP2276473 B1	20190731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20190405 YEAR OF FEE PAYMENT : 11
EP2276473 B1	20190830	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20190508 YEAR OF FEE PAYMENT : 11

				FROM NATIONAL OFFICE TO EPO]	
EP2276473 B1	20190830	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20190412 YEAR OF FEE PAYMENT : 11
EP2276473 B1	20190830	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HR PAYMENT DATE : 20190410 YEAR OF FEE PAYMENT : 11
EP2276473 B1	20190830	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LV PAYMENT DATE : 20190430 YEAR OF FEE PAYMENT : 11
EP2276473 B1	20190830	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE PAYMENT DATE : 20190426 YEAR OF FEE PAYMENT : 11
EP2276473 B1	20190830	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20190409 YEAR OF FEE PAYMENT : 11
EP2276473 B1	20190830	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20190416 YEAR OF FEE PAYMENT : 11
EP2276473 B1	20190830	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20190425 YEAR OF FEE PAYMENT : 11
EP2276473 B1	20190830	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20190426 YEAR OF FEE PAYMENT : 11
EP2276473 B1	20190830	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20190429 YEAR OF FEE PAYMENT : 11
EP2276473 B1	20190830	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG PAYMENT DATE : 20190419 YEAR OF FEE PAYMENT : 11
EP2276473 B1	20190830	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20190423 YEAR OF FEE PAYMENT : 11
EP2276473 B1	20190930	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK PAYMENT DATE : 20190415 YEAR OF FEE PAYMENT : 11
EP2276473 B1	20190930	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IS PAYMENT DATE : 20190426 YEAR OF FEE PAYMENT : 11
EP2276473 B1	20190930	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20190426 YEAR OF FEE PAYMENT : 11
EP2276473 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20190425 YEAR OF FEE PAYMENT : 11
EP2276473 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID	COUNTRY OF REF DOCUMENT :

				TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	DE PAYMENT DATE : 20190628 YEAR OF FEE PAYMENT : 11
EP2276473 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY PAYMENT DATE : 20190408 YEAR OF FEE PAYMENT : 11
EP2276473 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20190429 YEAR OF FEE PAYMENT : 11
EP2276473 B1	20191129	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MK PAYMENT DATE : 20190405 YEAR OF FEE PAYMENT : 11
EP2276473 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20200331 YEAR OF FEE PAYMENT : 12
EP2276473 B1	20290417	PEXP		Calculated Patent Term Expiry	
EP2378883 A2	20111026	LSPB	+	published / reissued	
EP2378883 A2	20111026	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20110624
EP2378883 A4	20140305	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	EFFECTIVE DATE : 20140204
EP2378883 A4	20150114	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20141216
EP2378883 A4	20150715	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20150618
EP2378883 B1	20151223	LSGT	+	granted / extensions (spc, cpc, pte)	
EP2378883 B1	20151223	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP2378883 B1	20151231	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP2378883 B1	20160113	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP2378883 B1	20160115	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 766218 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20160115
EP2378883 B1	20160211	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602009035458 COUNTRY OF REF DOCUMENT : DE
EP2378883 B1	20160309	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2562925 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) : EFFECTIVE DATE : 20160309
EP2378883 B1	20160425	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : LT REF LEGAL EVENT CODE : MG4D

EP2378883 B1	20160429	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 : 20151223
EP2378883 B1	20160429	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 : 20160323
EP2378883 B1	20160429	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 : 20151223
EP2378883 B1	20160515	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MK05 REF DOCUMENT NUMBER : 766218 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20151223
EP2378883 B1	20160531	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 : 20151223
EP2378883 B1	20160531	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 : 20160324
EP2378883 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 FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20151223
EP2378883 B1	20160531	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 : 20151223
EP2378883 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 FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20151223
EP2378883 B1	20160729	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 : 20151223
EP2378883 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 : 20151223
EP2378883 B1	20160831	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 : 20151223
EP2378883 B1	20160831	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 : 20151223
EP2378883 B1	20160831	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 : 20151223
EP2378883 B1	20160831	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 : 20151223
EP2378883 B1	20160831	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 : 20160426
EP2378883 B1	20160831	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 : 20160423
EP2378883 B1	20160926	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 602009035458 COUNTRY OF REF DOCUMENT : DE
EP2378883 B1	20161014	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
EP2378883 B1	20161031	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 : 20151223
EP2378883 B1	20161130	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20160926

EP2378883 B1	20161230	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 : 20151223
EP2378883 B1	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20161013 YEAR OF FEE PAYMENT : 8
EP2378883 B1	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20161019 YEAR OF FEE PAYMENT : 8
EP2378883 B1	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20161011 YEAR OF FEE PAYMENT : 8
EP2378883 B1	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20161014 YEAR OF FEE PAYMENT : 8
EP2378883 B1	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 : 8
EP2378883 B1	20170228	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 : 20151223
EP2378883 B1	20170228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20161011 YEAR OF FEE PAYMENT : 8
EP2378883 B1	20170228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20161017 YEAR OF FEE PAYMENT : 8
EP2378883 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 : 8
EP2378883 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20161018 YEAR OF FEE PAYMENT : 8
EP2378883 B1	20170831	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 : 20161019
EP2378883 B1	20171026	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 9
EP2378883 B1	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 : 9
EP2378883 B1	20180131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL	COUNTRY OF REF DOCUMENT : DE

				OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	PAYMENT DATE : 20171025 YEAR OF FEE PAYMENT : 9
EP2378883 B1	20180131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20171018 YEAR OF FEE PAYMENT : 9
EP2378883 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 : 9
EP2378883 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 : 9
EP2378883 B1	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20171018 YEAR OF FEE PAYMENT : 9
EP2378883 B1	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20171023 YEAR OF FEE PAYMENT : 9
EP2378883 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 : 9
EP2378883 B1	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20171025 YEAR OF FEE PAYMENT : 9
EP2378883 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 : 20151223
EP2378883 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 : 20091019
EP2378883 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 : 20161031
EP2378883 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 : 20151223
EP2378883 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 : 20151223
EP2378883 B1	20180731	LSLE	-PG25	LAPSED IN A CONTRACTING	COUNTRY OF REF DOCUMENT : BG

				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 : 20151223
EP2378883 B1	20190501	LSDW	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R119 REF DOCUMENT NUMBER : 602009035458 COUNTRY OF REF DOCUMENT : DE
EP2378883 B1	20190531	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP2378883 B1	20190626	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20181019
EP2378883 B1	20190724	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP2378883 B1	20190731	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 : 20190501
EP2378883 B1	20190830	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 : 20181031
EP2378883 B1	20190830	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 : 20181031
EP2378883 B1	20190830	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 : 20181031
EP2378883 B1	20191031	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 : 20181019
EP2378883 B1	20191031	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 : 20181019
EP2378883 B1	20191031	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 : 20181019
EP2378883 B1	20191202	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20191202
EP2378883 B1	20200228	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 : 20181020
EP2378883 B1	20200501	LSLE	-PG25	LAPSED IN A	COUNTRY OF REF DOCUMENT :

				CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	PL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20181019
EP2378883 B1	20291019	PEXP		Calculated Patent Term Expiry	
EP3115043 A1	20170111	LSPB	+	published / reissued	
EP3115043 A1	20170816	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20170703
EP3115043 A1	20180815	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20180717
EP3115043 A1	20200708	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20200612
ES2562925 T3	20160309	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2562925 T3	20291019	PEXP		Calculated Patent Term Expiry	
ES2606395 T3	20170323	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2606395 T3	20290417	PEXP		Calculated Patent Term Expiry	
HK1158545 A1	20120720	LSPB	+	published / reissued	
HK1158545 A1	20311207	PEXP		Calculated Patent Term Expiry	
HK1158545 A3	20120720	LSPB	+	published / reissued	
HK1158545 B	20170602	LSGT	+	granted / extensions (spc, cpc, pte)	
HK1158545 B	20311207	PEXP		Calculated Patent Term Expiry	
HR20161433 T1	20170127	LSPB	+	published / reissued	
HU030958 T2	20170628	LSPB	+	published / reissued	
IL208708 A0	20160929	LSGT	+FF	PATENT GRANTED	
IL208708 A0	20161130	LSFE	+KB	PATENT RENEWED	
IL208708 A1	20160531	LSPB	+	published / reissued	
IL208708 A1	20160929	LSGT	+FF	PATENT GRANTED	
IL208708 A1	20161130	LSFE	+KB	PATENT RENEWED	
IL208708 A1	20190430	LSFE	+KB	PATENT RENEWED	
IL213376 A0	20151029	LSGT	+FF	PATENT GRANTED	
IL213376 A0	20160131	LSFE	+KB	PATENT RENEWED	
IL213376 A1	20150630	LSPB	+	published / reissued	
IL213376 A1	20151029	LSGT	+FF	PATENT GRANTED	
IL213376 A1	20160131	LSFE	+KB	PATENT RENEWED	
IL213376 A1	20200531	LSLE	-MM9K	PATENT NOT IN FORCE DUE TO NON-PAYMENT OF RENEWAL FEES	
IN07638DN2010 A	20110909	LSPB	+	published / reissued	

JP2011518148 T2	20110623	LSPB	+	published / reissued	
JP2011518148 T2	20120417	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20120416
JP2011518148 T2	20131023	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20131022
JP2011518148 T2	20140422	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20140421
JP2011518148 T2	20141029	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20141028
JP2012510987 T2	20120517	LSPB	+	published / reissued	
JP2012510987 T2	20121018	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20121017
JP2012510987 T2	20121018	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20121017
JP2012510987 T2	20140109	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20140108
JP2012510987 T2	20140520	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20140519
JP2012510987 T2	20140717	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20140716
JP2015028094 A2	20150212	LSPB	+	published / reissued	
JP2015028094 A2	20141212	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20141211
JP2015028094 A2	20141212	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20141211
JP2015028094 A2	20151022	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20151022
JP2015028094 A2	20151112	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20151111
JP2015028094 A2	20151225	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20151225
JP2015028094 A2	20160608	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20160608
JP2015028094 A2	20160825	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20160825
JP2015028094 A2	20170112	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2015028094 A2	20170201	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20170201
JP2015028094 A2	20170309	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20170301
JP2015028094 A2	20170310	LSGT	+R150	CERTIFICATE OF	TEXT : JAPANESE INTERMEDIATE

				PATENT OR REGISTRATION OF UTILITY MODEL	CODE: R150 REF DOCUMENT NUMBER : 6104873 COUNTRY OF REF DOCUMENT : JP
JP2015154934 A2	20150827	LSPB	+	published / reissued	
JP2015154934 A2	20160127	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20160126
JP2015154934 A2	20160607	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20160607
JP2015154934 A2	20161108	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2015154934 A2	20161115	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20161115
JP2015154934 A2	20161222	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20161214
JP2015154934 A2	20161222	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 6062465 COUNTRY OF REF DOCUMENT : JP
JP6062465 B2	20170118	LSGT	+	granted / extensions (spc, cpc, pte)	
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JP6062465 B2	20161220	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP6062465 B2	20161222	LSGT	+R150	特許証 (Patent certificate)	
JP6062465 B2	20191205	LSFE	R20	特許料納付書 (Patent fee payment form)	EFFECTIVE DATE : 20191202
JP6062465 B2	20191210	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
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JP6104873 B2	20170329	LSGT	+	granted / extensions (spc, cpc, pte)	
JP6104873 B2	20170209	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP6104873 B2	20170307	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP6104873 B2	20170310	LSGT	+R150	特許証 (Patent certificate)	
JP6104873 B2	20341114	PEXP		Calculated Patent Term Expiry	
KR101601649 B1	20160309	LSGT	+	granted / extensions (spc, cpc, pte)	
KR101601649 B1	20190129	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20190129 YEAR OF FEE PAYMENT : 4
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KR20110015549 A	20110216	LSPB	+	published / reissued	
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KR20110015549 A	20160113	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
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KR20110116004 A	20111024	LSPB	+	published / reissued	
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MK7174 T1	20170831	LSPB	+	published / reissued	
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PL2378883 T3	20160630	LSGT	+	granted / extensions (spc, cpc, pte)	
PT2276473 T	20161215	LSGT	+	granted / extensions (spc, cpc, pte)	
PT2276473 T	20290417	PEXP		Calculated Patent Term Expiry	
SI2276473 T1	20170228	LSGT	+	granted / extensions (spc, cpc, pte)	
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US2011091542 AA	20110104	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INTEC PHARMA LTD., ISRAEL OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:NAVON, NADAV; SHVETZ, JULIA; MOOR, EYTAN; AND OTHERS; SIGNING DATES FROM 20101220 TO 20101222; REEL/FRAME:025581/0786
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US2012021051 AA	20120126	LSPB	+	published / reissued	
US2012021051 AA	20170321	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2012021051 AA	20170530	LSFE	+PPR1	Publications -- Issue Fee Payment Received	
US2012021051 AA	20170531	LSFE	+PPV1	Publications --	

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US2014314842 AA	20141023	LSPB	+	published / reissued	
US2014314842 AA	20150617	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2015010624 AA	20150108	LSPB	+	published / reissued	
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US9259387 BB	20160127	LSGT	PAT1	Patented Case	
US9259387 BB	20190816	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
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US9554991 BB	20170131	LSGT	+	granted / extensions (spc, cpc, pte)	

US9554991 BB	20170111	LSGT	PAT1	Patented Case	
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US9693981 BB	20110920	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INTEC PHARMA LTD., ISRAEL OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:MASRI, SUHER; MOOR, EYTAN; KIRMAYER, DAVID; AND OTHERS; SIGNING DATES FROM 20110915 TO 20110919; REEL/FRAME:026934/0871
US9693981 BB	20170614	LSGT	PAT1	Patented Case	
US9693981 BB	20300331	PEXP		Calculated Patent Term Expiry (PTA 163 days)	
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WO09144558 A1	20101109	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2009754186 COUNTRY OF REF DOCUMENT : EP
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WO10064100 A1	20110606	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE	REF COUNTRY CODE : DE
WO10064100 A1	20111228	LSNE	-122	EP: PCT APPLICATION NON-ENTRY IN EUROPEAN PHASE	REF DOCUMENT NUMBER : 09830067 COUNTRY OF REF DOCUMENT : EP KIND CODE OF REF DOCUMENT : A1 DESIGNATED STATE(S) :
WO10064139 A2	20100610	LSPB	+	published /	

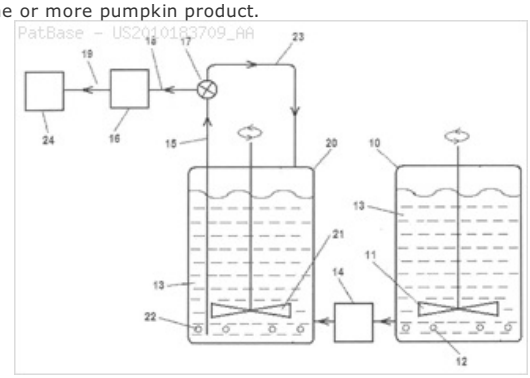
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WO10064139 A3	20110622	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 20117014376 COUNTRY OF REF DOCUMENT : KR KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO10064139 A3	20110624	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2009830077 COUNTRY OF REF DOCUMENT : EP
WO10064139 A3	20110701	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 5067/DELNP/2011 COUNTRY OF REF DOCUMENT : IN
WO10064139 A3	20110920	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 13132899 COUNTRY OF REF DOCUMENT : US
ZA201007797 A	20110727	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA201007797 A	20301031	PEXP		Calculated Patent Term Expiry	
ZA201104620 A	20120328	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA201104620 A	20310621	PEXP		Calculated Patent Term Expiry	

38) Family number: 36060019 (US2010183709A)

Title: FORMULATION

Abstract: The present invention relates to therapeutic formulations based on pumpkin products, in particular to encapsulated formulations for oral administration. A product of the invention comprises a hard **gelatin** capsule which encloses a unit dose of a formulation which comprises at least 50 percent by weight of one or more pumpkin product.

Classifications:
International (IPC 8-9): A61J3/07 A61K36/185 A61K36/22 A61K36/42 A61K36/48 A61K36/57 A61K9/48 A61K9/64 A61P13/08 A61P13/10 (Advanced/Invention);
A61J3/07 A61K36/185 A61K9/48 A61K9/52 A61P13/00 (Core/Invention)
CPC: A61K2300/00 A61K9/4858 A61K36/185 A61K36/22 A61K36/42 A61K36/48 A61P13/08 A61P13/10
European: A61K36/185 A61K36/22 A61K36/42 A61K36/48 A61K9/48H4
US: 1/1 424/452 424/452P 424/456 424/456S 424/758 424/758S



Family:

Publication number	Publication date	Application number	Application date
EP2170298 A2	20100407	EP20080774664	20080702
EP2170298 B1	20190904	EP20080774664	20080702
GB200712972 A0	20070815	GB20070012972	20070704
HU046530 T2	20200330	HU20080774664T	20080702
US2010183709 AA	20100722	US20080666609	20080702
US9107846 BB	20150818	US20080666609	20080702
WO09004039 A2	20090108	WO2008EP58530	20080702
WO09004039 A3	20100204	WO2008EP58530	20080702

Priority:
GB20070012972 20070704 WO2008EP58530 20080702

Probable Assignee: OMEGA PHARMA INNOVATION AND DEVELOPMENT NV

Assignee(s): (std): RUSTENBECK PETER ; SCHMID MARTINA ; THEURER CHRISTOPH ; WURTZ STEPHAN ; OMEGA PHARMA INNOVATION AND DEV NV ; GLAXOSMITHKLINE CONSUMER HEALT

Assignee(s): GLAXOSMITHKLINE CONSUMER HEALTHCARE GMBH AND COKG ; OMEGA PHARMA INNOVATION AND DEVELOPMENT NV ; OMEGA PHARMA NV ; GLAXOSMITHKLINE CONSUMER HEALTHCARE GMBH AND CO KG

Inventor(s): (std): RUSTENBECK PETER ; SCHMID MARTINA ; THEURER CHRISTOPH ; WURTZ STEPHAN

Agent(s): SEWELL RICHARD CHARLES; BRANTS JOHAN PE; GLAXOSMITHKLINE GLOBAL PATENTS US UW2220; CROWELL AND MORING LLP; SARDHARWALA FATEMA 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 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
EP2170298 A2	20100407	LSPB	+	published / reissued	
EP2170298 A2	20100407	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20100129
EP2170298 A2	20101229	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20101125
EP2170298 A2	20121114	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : OMEGA PHARMA NV
EP2170298 A2	20121226	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : OMEGA PHARMA INNOVATION AND DEVELOPMENT NV
EP2170298 A2	20190327	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20190228
EP2170298 B1	20190904	LSGT	+	granted / extensions (spc, cpc, pte)	
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EP2170298 B1	20190913	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP

EP2170298 B1	20190915	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 1174353 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20190915
EP2170298 B1	20190926	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602008061107 COUNTRY OF REF DOCUMENT : DE
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EP2170298 B1	20200127	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : LT REF LEGAL EVENT CODE : MG4D
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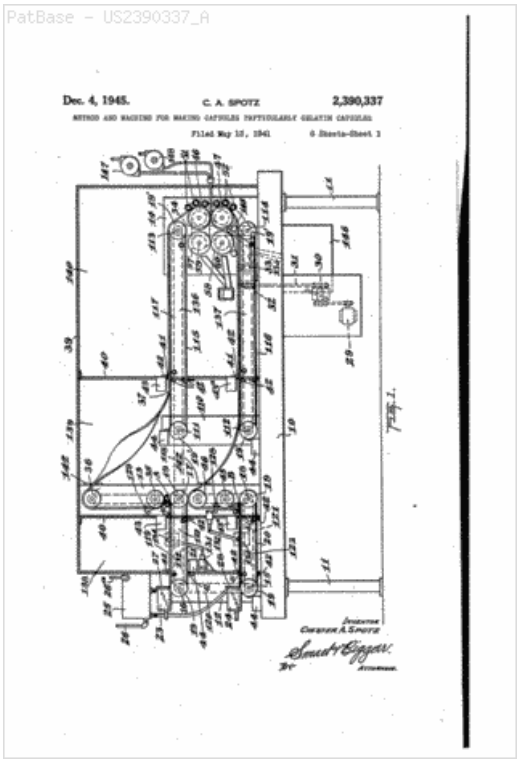
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US2010183709 AA	20100722	LSPB	+	published / reissued	
US2010183709 AA	20130219	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OMEGA PHARMA NV, BELGIUM OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:GLAXOSMITHKLINE CONSUMER HEALTHCARE GMBH & CO. KG; REEL/FRAME:029828/0443 EFFECTIVE DATE : 20130109
US2010183709 AA	20130501	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OMEGA PHARMA INNOVATION AND DEVELOPMENT NV, BELGIU OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:OMEGA PHARMA NV; REEL/FRAME:030325/0568 EFFECTIVE DATE : 20130423
US2010183709 AA	20150729	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US9107846 BB	20150818	LSGT	+	granted / extensions (spc, cpc, pte)	
US9107846 BB	20150729	LSGT	PAT1	Patented Case	
US9107846 BB	20190211	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US9107846 BB	20311229	PEXP		Calculated Patent Term Expiry (PTA 1275 days)	
WO09004039 A2	20090108	LSPB	+	published / reissued	
WO09004039 A2	20091223	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 12666609 COUNTRY OF REF DOCUMENT : US
WO09004039 A2	20100105	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE	REF COUNTRY CODE : DE
WO09004039 A2	20100129	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2008774664 COUNTRY OF REF DOCUMENT : EP

39) Family number: 21853019 (US2390337A)

Title: METHOD AND MACHINE FOR MAKING CAPSULES, PARTICULARLY **GELATIN** CAPSULES

Abstract: 1. Apparatus for forming 1i11ed capsules comprising a. pipe formed with a swaged wedge-like end having outlet duets on opposite sides and partitioned longitudinally to form separated sections, means for feeding capsule covering material to the pipe, means for extending said material around the pipe to form a tube surrounding the latter, means for separately delivering capsule filling material through separate sections of the pipe to the outlet ducts, to expand opposite sides of the tube to a uniform extent and means cooperating with the pipe for engaging, shearing and sealing the ends of the tube on each side of the expanded portion to form s. capsule. ,

Classifications:
International (IPC 8-9): A61J3/07 (Advanced/Invention); A61J3/07 (Core/Invention)
CPC: A61J3/07 Y10S264/37
European: A61J3/07
US: 264/DIG.37 425/237 425/5 53/454 53/560



Family:

Publication number	Publication date	Application number	Application date
US2390337 A	19451204	US19410393222	19410513

Priority:
US19410393222 19410513

Probable Assignee: SPOTZ CHESTER A
Assignee(s): (std): SPOTZ CHESTER A
Inventor(s): (std): SPOTZ CHESTER A

Legal status (INPADOC)

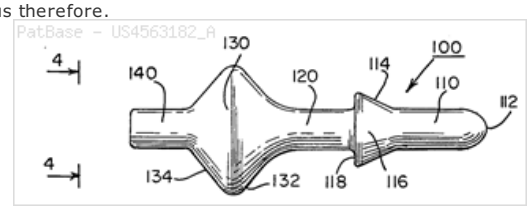
View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
US2390337 A	19451204	LSGT	+	granted / extensions (spc, cpc, pte)	
US2390337 A	19621204	PEXP		Calculated Patent Term Expiry	

40) Family number: 3611019 (US4563182A)

Title: RECTAL INSERT

Abstract: PCT No. PCT/US83/00300 Sec. 371 Date Nov. 1, 1984 Sec. 102(e) Date Nov. 1, 1984 PCT Filed Mar. 4, 1983 PCT Pub. No. WO84/03434 PCT Pub. Date Sep. 13, 1984.A method of treating hemorrhoids which comprises inserting into the rectum of a subject afflicted therewith a substantially cylindrical shaped insert, comprising a water swellable polymer having a water content of at least 35 percent by weight, said insert having previously been frozen by being subjected to a temperature below 0 DEG C. for a sufficient amount of time to freeze the free water therein and maintaining said insert with at least a portion thereof outside the sphincter muscle, and apparatus therefore.



Classifications:
International (IPC 8-9): A61F5/00 A61F7/02 A61F7/12 A61K9/02 (Advanced/Invention); A61F7/00 A61F7/02 (Advanced/Non-invention); A61F5/00 A61F7/12 A61K9/02 (Core/Invention); A61F7/00 A61F7/02 (Core/Non-invention); A61F A61J (Subclass/Invention)
International (IPC 1-7): A61F5/00 A61F7/12 A61K9/02 A61M31/00 H01B7/28 H02G9/02 H04L9/06 H04L9/14
CPC: Y10S424/15 A61K9/02 A61F5/0093 A61F2007/0214 A61F7/12 A61F2007/0028 A61F2007/009
European: A61F5/00D A61F7/12 A61K9/02 A61K9/02D K61F7/00A3N K61F7/00M K61F7/02F4S6
US: 128/401 424/436 424/DIG.15 604/285 607/113

Family:

Publication number	Publication date	Application number	Application date
AT37483 E	19881015	AT19830901157T	19830304
AU198313760 A1	19840928	AU19830013760	19830304
CA1233716 A1	19880308	CA19840448512	19840229
DE3378103 D1	19881103	DE19833378103	19830304
DE3378103 D1	19881103	DE19833378103T	19830304
EP0137774 A1	19850424	EP19830901157	19830304
EP0137774 B1	19880928	EP19830901157	19830304
IL71095 A0	19840531	IL19840071095	19840228
IL71095 A1	19871030	IL19840071095	19840228
IT1196687 A	19881125	IT19840067201	19840302
IT8467201 A0	19840302	IT19840067201	19840302
JP60500844 T2	19850606	JP19830501189T	19830304
KR19840008295 A	19841214	KR19840001090	19840303
KR840008295 A	19841214	KR19840001090	19840303
US4563182 A	19860107	US19840667265	19841101
WO8403434 A1	19840913	WO1983US00300	19830304
ZA8401577 A	19841128	ZA19840001577	19840302

Priority:

EP19830901157 19830304 WO1983US00300 19830304 US19830472297 19830304
CA19840448512 19840229 US19840667265 19841101

Probable Assignee: HEALTH PROD RES
Assignee(s): (std): AT AND T TECHNOLOGIES INC ; HEALTH PROD RES
Assignee(s): HEALTH PRODUCTS RESEARCH INC ; STOY GEORGE P ; STOY VLADIMIR A
Inventor(s): (std): GEORG E BALOG ; GEORGE OSBORN JEFFREY ; GEORGE P STOY ; STOY GEORGE P ; STOY VLADIMIR A ; VLADIMIR A STOY ; BALOGT GEORG ENDRE ; STOY VLADIMIR ; STOY GEORGE
Inventor(s): VLADIMIR ASTOY ; GEORGE PSTOY ; STOY GP ; STOY VA
Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; GOUDREAU GAGE DUBUC; BENJAMIN J BARISH
Designated states: AT AU BE BR CH DE FR GB JP LI LU NL SE US

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
AT37483 E	19881015	LSGT	+	granted / extensions (spc, cpc, pte)	
AT37483 E	20030304	PEXP		Calculated Patent Term Expiry	
AU198313760 A1	19840928	LSPB	+	published / reissued	
DE3378103 D1	19891019	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE3378103 D1	19891019	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE3378103 D1	19891019	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE3378103 D1	19891019	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
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DE3378103 D1	19900308	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	

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DE3378103 D1	19900308	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
EP0137774 A1	19850424	LSPB	+	published / reissued	
EP0137774 A1	19850515	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19850228
EP0137774 A1	19860326	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 19860207
EP0137774 A1	19870429	LSES	D17Q	FIRST EXAMINATION REPORT DESPATCHED (DELETED)	
EP0137774 B1	19880928	LSGT	+	granted / extensions (spc, cpc, pte)	
EP0137774 B1	19880928	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT LAPSED DATE : 19880928
EP0137774 B1	19880928	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL LAPSED DATE : 19880928
EP0137774 B1	19880928	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE LAPSED DATE : 19880928
EP0137774 B1	19890304	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB LAPSED DATE : 19890304
EP0137774 B1	19890316	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
EP0137774 B1	19890331	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE LAPSED DATE : 19890331
EP0137774 B1	19890331	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH LAPSED DATE : 19890331
EP0137774 B1	19890331	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LI LAPSED DATE : 19890331
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EP0137774 B1	19891101	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP
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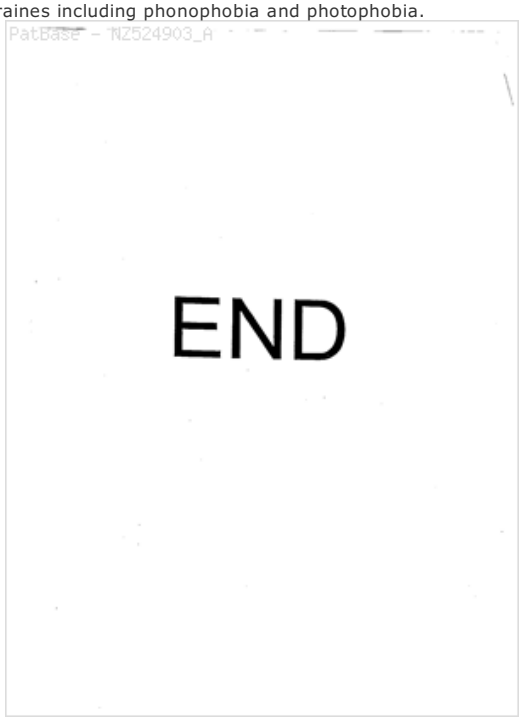
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EP0137774 B1	19891201	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE LAPSED DATE : 19891201
EP0137774 B1	19900126	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST
IL71095 A1	19871030	LSPB	+	published / reissued	
IL71095 A1	20011125	LSLE	-MM9K	PATENT NOT IN FORCE DUE TO NON-PAYMENT OF RENEWAL FEES	
IT1196687 A	19881125	LSGT	+	granted / extensions (spc, cpc, pte)	
IT1196687 A	20040302	PEXP		Calculated Patent Term Expiry	
JP60500844 T2	19850606	LSPB	+	published / reissued	
KR19840008295 A	19841214	LSPB	+	published / reissued	
KR840008295 A	19841214	LSPB	+	published / reissued	
KR840008295 A	19890303	LSDW	-WITN	WITHDRAWAL DUE TO NO REQUEST FOR EXAMINATION	
US4563182 A	19860107	LSGT	+	granted / extensions (spc, cpc, pte)	
US4563182 A	19900107	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US4563182 A	19900107	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US4563182 A	19900107	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US4563182 A	19900327	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 19900107
WO8403434 A1	19840913	LSPB	+	published / reissued	
WO8403434 A1	19841025	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1983901157 COUNTRY OF REF DOCUMENT : EP
WO8403434 A1	19850424	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1983901157 COUNTRY OF REF DOCUMENT : EP
WO8403434 A1	19880928	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1983901157 COUNTRY OF REF DOCUMENT : EP
ZA8401577 A	19841128	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA8401577 A	20040301	PEXP		Calculated Patent Term Expiry	

41) Family number: 20725020 (US2004006044A)

Title: PHARMACEUTICAL COMPOSITIONS FOR HEADACHE, MIGRAINE, NAUSEA AND EMESIS

Abstract: S-alkylsiothiouronium derivatives such as S-ethylisothiouronium diethylphosphate are used for the treatment of headaches, in particular, migraines, as well as for the prevention or treatment of nausea and vomiting. The compositions of the invention are also effective in preventing or alleviating emesis associated with migraines or other medical conditions such as chemotherapy or radiotherapy, as well as other symptoms of migraines including phonophobia and photophobia.

Classifications:
International (IPC 8-9): A01N47/28 A61J1/03 A61J1/06 A61K A61K31/105 A61K31/145 A61K31/155 A61K31/17 A61K31/425 A61K31/535 A61K31/66 A61K31/727 A61K33/42 A61K9/08 A61K9/20 A61K9/48 A61P A61P1/08 A61P25/00 A61P25/06 (Advanced/Invention);
A61K31/66 A61K31/715 (Advanced/Non-invention);
A61K31/095 A61K31/145 A61K31/155 A61K31/425 A61K31/535 A61K31/66 A61P25/00 (Core/Invention);
A61K31/715 (Core/Non-invention);
A61K A61P C07C (Subclass/Invention)
International (IPC 1-7): A61J1/03 A61J1/06 A61K0/00 A61K31/00 A61K31/155 A61K31/17 A61K31/40 A61K31/4178 A61K31/421 A61K31/426 A61K31/445 A61K31/495 A61K31/537 A61K31/54 A61K31/66 A61K31/736 A61K33/42 A61K9/08 A61K9/20 A61K9/48 A61P1/08 A61P25/06 C07C
CPC: A61K31/17 A61K31/66 A61P1/08 A61P25/06
European: A61K31/17 A61K31/66
US: 514/114 514/114S 514/227.5 514/227.500S 514/237.8 514/237.800S 514/252.12 514/252.120S 514/331 514/331S 514/365 514/365S 514/374 514/374S 514/400 514/400S 514/408 514/408S 514/54 514/54P 514/579 514/58 514/580 514/580S 514/706



Family:

Publication number	Publication date	Application number	Application date
AT375797 E	20071115	AT20010965546T	20010830
AU2001286178 AA	20020322	AU20010286178	20010830
AU2001286178 BB	20060914	AU20010286178	20010830
AU200186178 A1	20020322	AU20010086178	20010830
AU200186178 A5	20020322	AU20010086178	20010830
BRPI0113698 A	20031209	BR2001PI13698	20010830
CA2420410 AA	20030226	CA20012420410	20010830
CA2420410 C	20110426	CA20012420410	20010830
CN100448439 C	20090107	CN20018015179	20010830
CN1464788 A	20031231	CN20018015179	20010830
CY1107270 T1	20121121	CY20081100071T	20080117
DE60131004 D1	20071129	DE20016031004T	20010830
DE60131004 D1	20071129	DE20016031004	20010830
DE60131004 T2	20080731	DE20016031004T	20010830
DK1315505 T3	20080303	DK20010965546T	20010830
EP1315505 A2	20030604	EP20010965546	20010830
EP1315505 A4	20060222	EP20010965546	20010830
EP1315505 B1	20071017	EP20010965546	20010830
ES2296792 T3	20080501	ES20010965546T	20010830
HK1058009 A1	20090918	HK20040100896	20040211
HK1058009 B	20090918	HK20040100896	20040211
HU0302362 AB	20031128	HU20030002362	20010830
HU0302362 AC	20050530	HU20030002362	20010830
IL144632 A0	20020523	IL20010144632	20010730
IL154456 A0	20030917	IL20010154456	20010830
IL154456 A1	20130530	IL20010154456	20010830
IN02885KN2007 A	20080801	IN2007KN02885	20070807
JP2004508311 T2	20040318	JP20020524446T	20010830
KR100849999 B1	20080801	KR20037003277	20010830
KR20030055257 A	20030702	KR20037003277	20010830
MD20020139 A	20021130	MD20020000139	20010830
MD2447 F2	20040531	MD20020000139	20010830
MD2447 G2	20051231	MD20020000139	20010830
MXPA03001737 A1	20040910	MX2003PA01737	20010830
NO20031902 A	20030609	NO20030001902	20030428
NO20031902 A0	20030428	NO20030001902	20030428
NO20031902 L	20030609	NO20030001902	20030428
NZ524903 A	20041126	NZ20010524903	20010830
PT1315505 T	20080128	PT20010965546T	20010830
RU2003109617 A	20040827	RU20030109617	20010830
RU2275905 C2	20060510	RU20030109617	20010830

US2004006044 AA	20040108	US20030382217	20030305
US2007088005 AA	20070419	US20060550548	20061018
US7148208 BB	20061212	US20030382217	20030305
US8673979 BB	20140318	US20060550548	20061018
WO0219961 A2	20020314	WO2001IL00817	20010830
WO0219961 A3	20020815	WO2001IL00817	20010830
ZA200301350 A	20040219	ZA20030001350	20030219

Priority:

US20000229812 20000905 US20000229812P 20000905 IL20010144632 20010730
EP20010965546 20010830 IL20010154456 20010830 WO2001IL00817 20010830
IL20030154456 20030213 US20030382217 20030305 WO2001IL00817 20030305
US20060550548 20061018

Probable Assignee: MEDITOR PHARMACEUTICALS LTD

Assignee(s): (std): BARKAN RAPHAEL ; MEDITOR PHARMACEUTICALS LTD ; MIRIMSKY ALEXANDER

Assignee(s): RAPHAEL BARKAN ; ALEXANDER MIRIMSKY ; MEDITOR PHARMACEUTICALS LTD REHOVOT ; MEDITOR PHAMMACEUTICALS LTD

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Inventor(s): ALEZANDER MIRIMSKY

Agent(s): FPA PATENT ATTORNEYS PTY LTD; FREEHILLS PATENT AND TRADE MARK ATTORNEYS; FREEHILLS PATENT ATTORNEYS; HERBERT SMITH FREEHILLS; SIM AND MCBURNEY; CHINA SINDA INTELLECTUAL PROPERTY LTD; WEBB AND CO; WINSTON AND STRAWN LLP PATENT DEPARTMENT; WINSTON AND STRAWN LLP

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)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
AT375797 E	20071115	LSGT	+	granted / extensions (spc, cpc, pte)	
AT375797 E	20080415	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	REF DOCUMENT NUMBER : 1315505 COUNTRY OF REF DOCUMENT : EP
AT375797 E	20210830	PEXP		Calculated Patent Term Expiry	
AU2001286178 AA	20020322	LSPB	+	published / reissued	
AU2001286178 BB	20060914	LSGT	+	granted / extensions (spc, cpc, pte)	
AU2001286178 BB	20070118	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU2001286178 BB	20190328	LSLE	-MK14	PATENT CEASED SECTION 143(A) (ANNUAL FEES NOT PAID) OR EXPIRED	
AU2001286178 BB	20210830	PEXP		Calculated Patent Term Expiry	
AU200186178 A1	20020322	LSPB	+	published / reissued	
BRPI0113698 A	20031209	LSPB	+	published / reissued	
BRPI0113698 A	20100608	LSES	B07A	TECHNICAL EXAMINATION (OPINION): PUBLICATION OF TECHNICAL EXAMINATION (OPINION)	
BRPI0113698 A	20120807	LSRV	-B11B	DISMISSAL ACC. ART. 36, PAR 1 OF IPL - NO REPLY WITHIN 90 DAYS TO FULLFIL THE NECESSARY REQUIREMENTS	
CA2420410 AA	20030226	LSPB	+	published / reissued	
CA2420410 AA	20060809	LSES	+EEER	EXAMINATION REQUEST	
CA2420410 C	20110426	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2420410 C	20151012	LSLE	-MKLA	LAPSED	EFFECTIVE DATE : 20150831
CA2420410 C	20210830	PEXP		Calculated Patent Term Expiry	

CN100448439 C	20090107	LSGT	+	granted / extensions (spc, cpc, pte)	
CN100448439 C	20090107	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN100448439 C	20090107	LSGT	+GR01	授权 (The grant of patent right)	TEXT：授权 (AUTHORIZATION)
CN100448439 C	20190816	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 : 20180830
CN100448439 C	20190816	LSLE	-CF01	TERMINATION OF PATENT RIGHT DUE TO NON-PAYMENT OF ANNUAL FEE	
CN100448439 C	20210830	PEXP		Calculated Patent Term Expiry	
CN1464788 A	20031231	LSPB	+	published / reissued	
CN1464788 A	20031231	LSPB	+C06	PUBLICATION	
CN1464788 A	20031231	LSPB	PB01	公开 (The publication of application)	TEXT：公开 (DISCLOSURE)
CY1107270 T1	20121121	LSGT	+	granted / extensions (spc, cpc, pte)	
CY1107270 T1	20280117	PEXP		Calculated Patent Term Expiry	
DE60131004 D1	20080703	LSAS	8327	CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER	PARTYTYPE : OWNER OWNER : MEDITOR PHARMACEUTICALS LTD., NESS-ZIONA, IL
DE60131004 D1	20080703	LSAS	8327	CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER	PARTYTYPE : OWNER OWNER : MEDITOR PHARMACEUTICALS LTD., NESS-ZIONA, IL
DE60131004 D1	20080703	LSAS	8327	CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER	PARTYTYPE : OWNER OWNER : MEDITOR PHARMACEUTICALS LTD., NESS-ZIONA, IL
DE60131004 D1	20080703	LSAS	8327	CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER	PARTYTYPE : OWNER OWNER : MEDITOR PHARMACEUTICALS LTD., NESS-ZIONA, IL
DE60131004 D1	20081106	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE60131004 D1	20081106	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE60131004 T2	20080731	LSGT	+	granted / extensions (spc, cpc, pte)	
DE60131004 T2	20081106	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE60131004 T2	20210830	PEXP		Calculated Patent Term Expiry	
DK1315505 T3	20080303	LSGT	+	granted / extensions (spc, cpc, pte)	
DK1315505 T3	20210830	PEXP		Calculated Patent Term Expiry	
EP1315505 A2	20030604	LSPB	+	published / reissued	
EP1315505 A2	20030604	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20030303
EP1315505 A2	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20160824 YEAR OF FEE PAYMENT : 16
EP1315505 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 : 16
EP1315505 A2	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20160823 YEAR OF FEE PAYMENT : 16
EP1315505 A2	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO	COUNTRY OF REF

				NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	DOCUMENT : FR PAYMENT DATE : 20160712 YEAR OF FEE PAYMENT : 16
EP1315505 A4	20060222	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	EFFECTIVE DATE : 20060110
EP1315505 B1	20071017	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1315505 B1	20071017	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP1315505 B1	20071115	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1315505 B1	20071128	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP1315505 B1	20080229	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : EP REF DOCUMENT NUMBER : 20080400166 COUNTRY OF REF DOCUMENT : GR
EP1315505 B1	20080314	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : CH OWNER : MEDITOR PHARMACEUTICALS LTD. REF LEGAL EVENT CODE : PFA OLDPARTY : MEDITOR PHARMACEUTICALS LTD.#TAMAR SCIENCE PARK 10 PLAUT STREET#REHOVOT 76123 (IL) -TRANSFER TO- MEDITOR PHARMACEUTICALS LTD.#WEIZMANN SCIENCE PARK 1 PINHAS SAPIR STREET#NESS-ZIONA 70400 (IL)
EP1315505 B1	20080319	LSAS	RAP2	RIGHTS OF A PATENT TRANSFERRED	PARTYTYPE : OWNER OWNER : MEDITOR PHARMACEUTICALS LTD.
EP1315505 B1	20080501	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2296792 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP1315505 B1	20080924	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20080718
EP1315505 B1	20081031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20080902 YEAR OF FEE PAYMENT : 8
EP1315505 B1	20081031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20080821 YEAR OF FEE PAYMENT : 8
EP1315505 B1	20081128	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20080829 YEAR OF FEE PAYMENT : 8
EP1315505 B1	20090331	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY PAYMENT DATE : 20080930 YEAR OF FEE PAYMENT : 8
EP1315505 B1	20100310	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 : 20100301
EP1315505 B1	20100331	LSLE	-PG25	LAPSED IN A CONTRACTING STATE	COUNTRY OF REF DOCUMENT : MC

				[ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20090831
EP1315505 B1	20100430	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 : 20100301
EP1315505 B1	20100531	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 : 20090830
EP1315505 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 : 20090830
EP1315505 B1	20110531	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 : 20100830
EP1315505 B1	20110729	LSRE	+PGRI	PATENT REINSTATED IN CONTRACTING STATE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT REINSTATED DATE : 20110616
EP1315505 B1	20120430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20120223 YEAR OF FEE PAYMENT : 11
EP1315505 B1	20120629	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20120221 YEAR OF FEE PAYMENT : 11
EP1315505 B1	20120629	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20120221 YEAR OF FEE PAYMENT : 11
EP1315505 B1	20120629	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20120229 YEAR OF FEE PAYMENT : 11
EP1315505 B1	20120629	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20120221 YEAR OF FEE PAYMENT : 11
EP1315505 B1	20120629	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20120221 YEAR OF FEE PAYMENT : 11
EP1315505 B1	20120731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20120224 YEAR OF FEE PAYMENT : 11
EP1315505 B1	20130228	LSLE	-BERE	BE: LAPSED	PARTYTYPE : OWNER REF COUNTRY CODE : EP OWNER : MEDITOR PHARMACEUTICALS LTD. EFFECTIVE DATE : 20120831
EP1315505 B1	20130313	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : V1 EFFECTIVE DATE : 20130301
EP1315505 B1	20130329	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20120222 YEAR OF FEE PAYMENT : 11
EP1315505 B1	20130402	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DK REF LEGAL EVENT CODE : EBP

EP1315505 B1	20130402	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SE REF LEGAL EVENT CODE : EUG
EP1315505 B1	20130415	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MM01 REF DOCUMENT NUMBER : 375797 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20120830
EP1315505 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 NON-PAYMENT OF DUE FEES LAPSED DATE : 20120830
EP1315505 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 : 20120831
EP1315505 B1	20130430	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 : 20130301
EP1315505 B1	20130501	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : ML REF DOCUMENT NUMBER : 20080400166 COUNTRY OF REF DOCUMENT : GR EFFECTIVE DATE : 20130304
EP1315505 B1	20130522	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP1315505 B1	20130531	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 : 20120831
EP1315505 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 NON-PAYMENT OF DUE FEES LAPSED DATE : 20130304
EP1315505 B1	20130628	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 : 20120830
EP1315505 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 : 20120830
EP1315505 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 NON-PAYMENT OF DUE FEES LAPSED DATE : 20120831
EP1315505 B1	20140430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20140226 YEAR OF FEE PAYMENT : 13
EP1315505 B1	20140530	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20140226 YEAR OF FEE PAYMENT : 13

EP1315505 B1	20140530	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20140311 YEAR OF FEE PAYMENT : 13
EP1315505 B1	20150331	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP1315505 B1	20150430	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 : 20140831
EP1315505 B1	20150430	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 : 20140831
EP1315505 B1	20150928	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20150928
EP1315505 B1	20151023	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
EP1315505 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 NON-PAYMENT OF DUE FEES LAPSED DATE : 20140831
EP1315505 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 : 16
EP1315505 B1	20170829	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 17
EP1315505 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 NON-PAYMENT OF DUE FEES LAPSED DATE : 20140830
EP1315505 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20170830 YEAR OF FEE PAYMENT : 17
EP1315505 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170822 YEAR OF FEE PAYMENT : 17
EP1315505 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170829 YEAR OF FEE PAYMENT : 17
EP1315505 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 : 17
EP1315505 B1	20190301	LSDW	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R119 REF DOCUMENT NUMBER : 60131004 COUNTRY OF REF DOCUMENT : DE
EP1315505 B1	20190424	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20180830

EP1315505 B1	20190731	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 : 20190301
EP1315505 B1	20190731	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 : 20180830
EP1315505 B1	20190830	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 : 20180831
EP1315505 B1	20191031	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 : 20180830
EP1315505 B1	20210830	PEXP		Calculated Patent Term Expiry	
ES2296792 T3	20080501	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2296792 T3	20210830	PEXP		Calculated Patent Term Expiry	
HK1058009 A1	20090918	LSPB	+	published / reissued	
HK1058009 A1	20150327	LSLE	-PC	PATENT CEASED (I.E. PATENT HAS LAPSED DUE TO THE FAILURE TO PAY THE RENEWAL FEE)	EFFECTIVE DATE : 20140830
HK1058009 A1	20240211	PEXP		Calculated Patent Term Expiry	
HK1058009 B	20090918	LSGT	+	granted / extensions (spc, cpc, pte)	
HK1058009 B	20240211	PEXP		Calculated Patent Term Expiry	
HU0302362 AB	20031128	LSPB	+	published / reissued	
HU0302362 AC	20121128	LSRE	-FA9A	LAPSE OF PROVISIONAL PATENT PROTECTION DUE TO RELINQUISHMENT OR PROTECTION CONSIDERED RELINQUISHED	
IL154456 A1	20130530	LSPB	+	published / reissued	
IL154456 A1	20130930	LSGT	+FF	PATENT GRANTED	
IL154456 A1	20131231	LSFE	+KB	PATENT RENEWED	
IL154456 A1	20151029	LSFE	+KB	PATENT RENEWED	
IL154456 A1	20200331	LSLE	-MM9K	PATENT NOT IN FORCE DUE TO NON-PAYMENT OF RENEWAL FEES	
IN02885KN2007 A	20080801	LSPB	+	published / reissued	
JP2004508311 T2	20040318	LSPB	+	published / reissued	
JP2004508311 T2	20080830	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20080829
JP2004508311 T2	20080830	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20080829
JP2004508311 T2	20110907	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20110906
JP2004508311 T2	20120521	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20120518
KR100849999 B1	20080801	LSGT	+	granted / extensions (spc, cpc, pte)	
KR100849999 B1	20120727	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20120727 YEAR OF FEE PAYMENT : 5

KR100849999 B1	20130723	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20130723 YEAR OF FEE PAYMENT : 6
KR100849999 B1	20140729	LSLE	-LAPS	LAPSE DUE TO UNPAID ANNUAL FEE	
KR100849999 B1	20230305	PEXP		Calculated Patent Term Expiry	
KR20030055257 A	20030702	LSPB	+	published / reissued	
KR20030055257 A	20060814	LSES	A201	REQUEST FOR EXAMINATION	
KR20030055257 A	20070828	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR20030055257 A	20080428	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
KR20030055257 A	20080728	LSGT	+GRNT	WRITTEN DECISION TO GRANT	
MD20020139 A	20021130	LSPB	+	published / reissued	
MD2447 F2	20040531	LSGT	+	granted / extensions (spc, cpc, pte)	
MD2447 F2	20160331	LSLE	-KA4A	PATENT FOR INVENTION LAPSED DUE TO NON-PAYMENT OF FEES (WITH RIGHT OF RESTORATION)	
MD2447 F2	20170228	LSLE	-MM4A	PATENT FOR INVENTION DEFINITELY LAPSED DUE TO NON-PAYMENT OF FEES	
MD2447 F2	20210830	PEXP		Calculated Patent Term Expiry	
MD2447 G2	20051231	LSGT	+	granted / extensions (spc, cpc, pte)	
MD2447 G2	20210830	PEXP		Calculated Patent Term Expiry	
MXPA03001737 A1	20040910	LSPB	+	published / reissued	
MXPA03001737 A1	20080325	LSGT	+FG	GRANT OR REGISTRATION	
NO20031902 A	20030609	LSPB	+	published / reissued	
NO20031902 A	20040126	LSRE	+RE	REESTABLISHMENT OF RIGHTS (PAR. 72 PATENTS ACT)	
NO20031902 A	20110426	LSRV	-FC2A	WITHDRAWAL, REJECTION OR DISMISSAL OF LAID OPEN PATENT APPLICATION	
NZ524903 A	20041126	LSPB	+	published / reissued	
NZ524903 A	20050324	LSGT	+PSEA	PATENT SEALED	
NZ524903 A	20050930	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	
NZ524903 A	20080926	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	
NZ524903 A	20120330	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	
NZ524903 A	20150327	LSLE	-LAPS	PATENT LAPSED	
PT1315505 T	20080128	LSGT	+	granted / extensions (spc, cpc, pte)	
PT1315505 T	20210830	PEXP		Calculated Patent Term Expiry	
RU2003109617 A	20040827	LSPB	+	published / reissued	
RU2275905 C2	20060510	LSGT	+	granted / extensions (spc, cpc, pte)	
RU2275905 C2	20190715	LSLE	-MM4A	THE PATENT IS INVALID DUE TO NON-PAYMENT OF FEES	EFFECTIVE DATE : 20180831
RU2275905 C2	20210830	PEXP		Calculated Patent Term Expiry	
US2004006044 AA	20040108	LSPB	+	published / reissued	
US2004006044 AA	20061122	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE

US2007088005 AA	20070419	LSPB	+	published / reissued	
US2007088005 AA	20131031	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MEDITOR PHARMACEUTICALS LTD., ISRAEL OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BARKAN, RAPHAEL; MIRIMSKY, ALEXANDER; SIGNING DATES FROM 20030305 TO 20030309; REEL/FRAME:031525/0376
US2007088005 AA	20140226	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US7148208 BB	20061212	LSGT	+	granted / extensions (spc, cpc, pte)	
US7148208 BB	20030530	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MEDITOR PHARMACEUTICALS LTD., ISRAEL OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BARKAN, RAPHAEL; MIRIMSKY, ALEXANDER; REEL/FRAME:014140/0894; SIGNING DATES FROM 20030305 TO 20030309
US7148208 BB	20061122	LSGT	PAT1	Patented Case	
US7148208 BB	20070320	LSRE	CC	CERTIFICATE OF CORRECTION	
US7148208 BB	20100512	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US7148208 BB	20141211	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US7148208 BB	20171212	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US7148208 BB	20231219	PEXP		Calculated Patent Term Expiry (PTA 289 days)	
US8673979 BB	20140318	LSGT	+	granted / extensions (spc, cpc, pte)	
US8673979 BB	20140226	LSGT	PAT1	Patented Case	
US8673979 BB	20170319	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8673979 BB	20271228	PEXP		Calculated Patent Term Expiry (PTA 436 days)	
WO0219961 A2	20020314	LSPB	+	published / reissued	
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WO0219961 A3	20030213	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 154456 COUNTRY OF REF DOCUMENT : IL
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WO0219961 A3	20030303	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2001965546 COUNTRY OF REF DOCUMENT : EP
WO0219961 A3	20030304	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2002524446 COUNTRY OF REF DOCUMENT : JP
WO0219961 A3	20030305	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 018151795 COUNTRY OF REF DOCUMENT : CN
WO0219961 A3	20030305	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1020037003277 COUNTRY OF REF DOCUMENT : KR
WO0219961 A3	20030305	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 10382217 COUNTRY OF REF DOCUMENT : US
WO0219961 A3	20030324	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 524903 COUNTRY OF REF DOCUMENT : NZ
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WO0219961 A3	20030717	LSWD	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : 8642
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WO0219961 A3	20050310	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 524903 COUNTRY OF REF DOCUMENT : NZ
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ZA200301350 A	20040219	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA200301350 A	20230218	PEXP		Calculated Patent Term Expiry	

42) Family number: 20697020 (US2002146700A)

Title: DIAGNOSTICS AND THERAPEUTICS FOR DISEASES ASSOCIATED WITH AN IL-1 INFLAMMATORY HAPLOTYPE

Abstract: Methods and kits for determining whether a subject has or is predisposed to developing a disease which is associated with IL-1 polymorphisms and assays for identifying therapeutics for treating and/or preventing the development of these diseases are provided.

Classifications:
International (IPC 8-9): A61K31/56 A61K38/00 A61K48/00 A61P1/04 A61P17/06 A61P29/00 A61P37/00 A61P43/00 C07H C07H21/02 C07H21/04 C12N C12N15/09 C12N15/25 C12Q1/68 C12Q1/6883 G01N33/50 G01N33/53 G01N33/564 (Advanced/Invention);
A61K48/00 A61P29/00 A61P37/00 A61P43/00 C12N15/09 C12N15/25 C12Q1/68 G01N33/53 (Advanced/Non-invention);
C12N15/09 C12Q1/68 (Core/Invention)
International (IPC 1-7): A61J A61K A61K3/800 A61K38/00 A61K48/00 A61P1/04 A61P17/06 A61P29/00 A61P37/00 A61P43/00 C07H2/100 C07H2/102 C07H21/00 C07H21/02 C07H21/04 C07K14/54 C12N15/09 C12P1/934 C12P19/34 C12P21/02 C12P21/04 C12Q C12Q1/68 G01N G01N33/53 G01N33/68
CPC: C12Q2600/136 C12Q2600/106 C12Q2600/16 C12Q2525/204 C12Q2600/118 C12Q2600/158 A61P1/04 A61P17/06 C12Q1/6827 A61P29/00 A61P37/00 A61P43/00 C12Q1/6883 C12Q2600/156 C12Q2600/172 G01N33/5008 G01N33/502 G01N33/5091 Y10T436/143333
European: C12Q1/68B6 C12Q1/68M6 C12Q1/68M6+535/131 G01N33/50D2 G01N33/50D2E G01N33/50D4 M12Q600/156 M12Q600/172
US: 435/320.1 435/320.100S 435/325 435/325S 435/6 435/6.1 435/6.100P 435/6.100S 435/6.11 435/6.110P 435/6.110S 435/6.12 435/6.120S 435/6.14 435/6.16 435/6.160P 435/6.17 435/6.170S 435/6.18 435/6.180S 435/69.52 435/69.520P 435/6P 435/6S 435/91.1 435/91.2 435/91.200S 436/506 436/506S 436/94 436/94S 514/1.4 514/1.5 514/12 514/13.2 514/16.4 514/17.9 514/18.2 514/182 514/19.3 514/20.8 514/21.3 514/21.4 514/3.8 514/9.7 530/351 530/351S 536/22.1 536/23.1 536/23.5 536/23.500S 536/24.3 536/24.300S 536/24.31 536/24.33 536/25.3

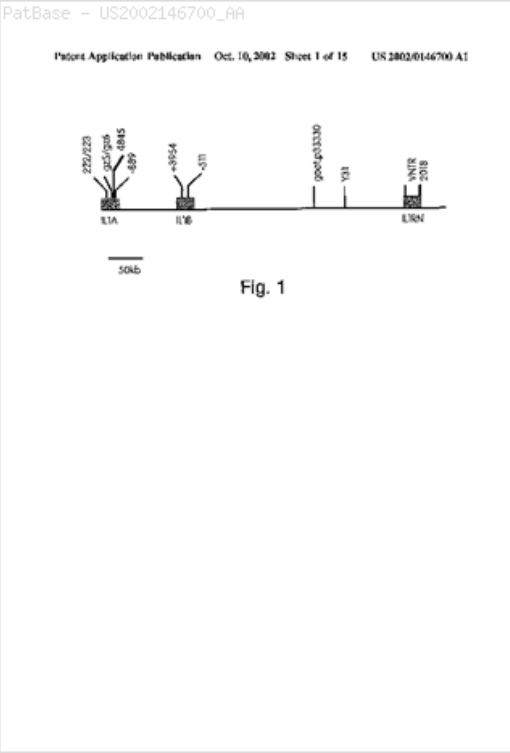


Fig. 1

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Publication number	Publication date	Application number	Application date
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Priority:

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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 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 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)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
AR016754 AA	20010801	LSPB	+	published / reissued	
AR016754 AA	20070503	LSWD	-FB	SUSPENSION OF GRANTING PROCEDURE	
AT383438 E	20080115	LSGT	+	granted / extensions (spc, cpc, pte)	
AT383438 E	20080715	LSLE	-RER	CEASED AS TO PARAGRAPH 5 LIT. 3 LAW INTRODUCING PATENT TREATIES	
AT383438 E	20181109	PEXP		Calculated Patent Term Expiry	
AT462800 E	20100415	LSGT	+	granted / extensions (spc, cpc, pte)	
AT462800 E	20100915	LSLE	-RER	CEASED AS TO PARAGRAPH 5 LIT. 3 LAW INTRODUCING PATENT TREATIES	
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AU2002359431 AA	20040805	LSLE	-MK6	APPLICATION LAPSED SECTION 142(2)(F)/REG. 8.3(3) - PCT APPLIC. NOT ENTERING NATIONAL PHASE	
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AU755107 B2	20021205	LSGT	+	granted / extensions (spc, cpc, pte)	
AU755107 B2	20010809	LSAS	PC1	ASSIGNMENT BEFORE GRANT (SECT. 113)	PARTYTYPE : OWNER OWNER : INTERLEUKIN GENETICS INC OLDPARTY : THE FORMER OWNER WAS: GORDON DUFF,

					ANGELA COX, NICOLA JANE CAMP, FRANCESCO SAVERIO DE GIOVINE
AU755107 B2	20030403	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
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AU760856 B2	20030807	LSPB	SREP	SPECIFICATION REPUBLISHED	
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CN1177059 C	20041124	LSGT	+	granted / extensions (spc, cpc, pte)	
CN1177059 C	20041124	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN1177059 C	20180615	LSLE	-CX01	EXPIRY OF PATENT TERM	
CN1177059 C	20180521	PEXP		Calculated Patent Term Expiry	
CN1278868 A	20010103	LSPB	+	published / reissued	
CN1278868 A	20010103	LSPB	+C06	PUBLICATION	
CN1753903 A	20060329	LSPB	+	published / reissued	
CN1753903 A	20060329	LSPB	+C06	PUBLICATION	
CN1753903 B	20100512	LSGT	+	granted / extensions (spc, cpc, pte)	
CN1753903 B	20100512	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN1753903 B	20130116	LSLE	-C17	CESSATION OF PATENT RIGHT	
CN1753903 B	20221119	PEXP		Calculated Patent Term Expiry	
DE69838984 D1	20090212	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE69838984 D1	20090212	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE69838984 T2	20090108	LSGT	+	granted / extensions (spc, cpc, pte)	
DE69838984 T2	20090212	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE69838984 T2	20181109	PEXP		Calculated Patent Term Expiry	
DE69841588 D1	20100304	LSAS	R081	CHANGE OF APPLICANT/PATENTEE	PARTYTYPE : OWNER OWNER : INTERLEUKIN GENETICS, INC., WALTHAM, MASS., US OLDPARTY : CAMP, NICOLA JANE, SHEFFIELD, GB OLDPARTY : COX, ANGELA, SHEFFIELD, GB OLDPARTY : DUFF, GORDON, SHEFFIELD, GB OLDPARTY : GIOVINE, FRANCESCO, SAVERIO DE, SHEFFIELD, GB
DE69841588 D1	20100304	LSAS	R081	CHANGE OF APPLICANT/PATENTEE	PARTYTYPE : OWNER OWNER : INTERLEUKIN GENETICS, INC., WALTHAM, MASS., US OLDPARTY : CAMP, NICOLA JANE, SHEFFIELD, GB OLDPARTY : COX, ANGELA, SHEFFIELD, GB OLDPARTY : DUFF, GORDON, SHEFFIELD, GB OLDPARTY : GIOVINE, FRANCESCO, SAVERIO DE, SHEFFIELD, GB
DE69841588 D1	20110421	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE69841588 D1	20110421	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE69841588 D1	20110421	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE69841588 D1	20110421	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE69841588 D1	20180521	LSLE	-R071	EXPIRY OF RIGHT	
DE69841588 D1	20180521	LSLE	-R071	EXPIRY OF RIGHT	

EA199901097 A1	20000626	LSPB	+	published / reissued	
EP0983385 A1	20000308	LSPB	+	published / reissued	
EP0983385 A1	20000308	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19991224
EP0983385 A1	20040901	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : INTERLEUKIN GENETICS, INC.
EP0983385 A1	20080116	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20071218
EP0983385 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20160526 YEAR OF FEE PAYMENT : 19
EP0983385 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20160527 YEAR OF FEE PAYMENT : 19
EP0983385 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20160527 YEAR OF FEE PAYMENT : 19
EP0983385 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20160530 YEAR OF FEE PAYMENT : 19
EP0983385 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20160520 YEAR OF FEE PAYMENT : 19
EP0983385 B1	20100331	LSGT	+	granted / extensions (spc, cpc, pte)	
EP0983385 B1	20100331	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP0983385 B1	20100331	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP0983385 B1	20100428	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP0983385 B1	20100720	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2342992 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP0983385 B1	20100721	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : VDEP EFFECTIVE DATE : 20100331
EP0983385 B1	20100831	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 : 20100331
EP0983385 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 : 20100331
EP0983385 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 FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20100331

EP0983385 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 : 20100331
EP0983385 B1	20101029	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 : 20100331
EP0983385 B1	20101029	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 : 20100331
EP0983385 B1	20101231	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 : 20100531
EP0983385 B1	20101231	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP0983385 B1	20110131	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 : 20100331
EP0983385 B1	20110131	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 : 20100802
EP0983385 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
EP0983385 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
EP0983385 B1	20110309	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20110104
EP0983385 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 : 20100521
EP0983385 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 : 20100521
EP0983385 B1	20140829	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF

				NATIONAL OFFICE TO EPO]	THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20100331
EP0983385 B1	20160530	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 19
EP0983385 B1	20170525	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 20
EP0983385 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170525 YEAR OF FEE PAYMENT : 20
EP0983385 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 : 20
EP0983385 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170530 YEAR OF FEE PAYMENT : 20
EP0983385 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 : 20
EP0983385 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 : 20
EP0983385 B1	20180521	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R071 REF DOCUMENT NUMBER : 69841588 COUNTRY OF REF DOCUMENT : DE
EP0983385 B1	20180613	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : PE20 EXPIRY DATE : 20180520
EP0983385 B1	20180731	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 : 20180520
EP0983385 B1	20200723	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20200723
EP0983385 B1	20180520	PEXP		Calculated Patent Term Expiry	
EP0983385 B1	20180521	PEXP		Calculated Patent Term Expiry	
EP1029079 A2	20000823	LSPB	+	published / reissued	
EP1029079 A2	20000823	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20000601
EP1029079 A2	20001011	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : INTERLEUKIN GENETICS, INC.
EP1029079 A2	20070502	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20051124
EP1029079 A2	20070615	LSWD	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HK REF LEGAL EVENT CODE : WD REF DOCUMENT NUMBER : 1030438 COUNTRY OF REF DOCUMENT : HK
EP1029079 B1	20080109	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1029079 B1	20080109	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP1029079 B1	20080131	LSNP	REG	REFERENCE TO A	REF COUNTRY CODE : CH

				NATIONAL CODE	REF LEGAL EVENT CODE : EP
EP1029079 B1	20080206	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP1029079 B1	20080501	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2297900 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP1029079 B1	20080530	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 : 20080109
EP1029079 B1	20080701	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
EP1029079 B1	20080731	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 : 20080109
EP1029079 B1	20080731	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 : 20080109
EP1029079 B1	20080731	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 : 20080109
EP1029079 B1	20080731	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP1029079 B1	20080829	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 : 20080109
EP1029079 B1	20080930	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 : 20080109
EP1029079 B1	20080930	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 : 20080609
EP1029079 B1	20081031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE	COUNTRY OF REF DOCUMENT : DK

				[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 : 20080109
EP1029079 B1	20081031	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 : 20080409
EP1029079 B1	20081217	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20081010
EP1029079 B1	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
EP1029079 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 : 20080109
EP1029079 B1	20091030	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 : 20081110
EP1029079 B1	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 : 20081109
EP1029079 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 : 20080410
EP1029079 B1	20110131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20101202 YEAR OF FEE PAYMENT : 13
EP1029079 B1	20110228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20101126 YEAR OF FEE PAYMENT : 13
EP1029079 B1	20110331	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20101124 YEAR OF FEE PAYMENT : 13
EP1029079 B1	20110331	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20101124 YEAR OF FEE PAYMENT : 13
EP1029079 B1	20110630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20101125 YEAR OF FEE PAYMENT : 13
EP1029079 B1	20120725	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20111109
EP1029079 B1	20120817	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20120731

EP1029079 B1	20120831	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 : 20111109
EP1029079 B1	20120927	LSDW	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R119 REF DOCUMENT NUMBER : 69838984 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20120601
EP1029079 B1	20121031	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 : 20111109
EP1029079 B1	20121231	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 : 20111130
EP1029079 B1	20130604	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20130604
EP1029079 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 : 20120601
EP1029079 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 : 20111110
EP1029079 B1	20181109	PEXP		Calculated Patent Term Expiry	
EP1194590 A2	20020410	LSPB	+	published / reissued	
EP1194590 A2	20020410	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20020124
EP1194590 A2	20050406	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20050222
EP1194590 A2	20100106	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20090714
EP1463745 A2	20041006	LSPB	+	published / reissued	
EP1463745 A2	20041006	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20040609
EP1463745 A4	20071107	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	EFFECTIVE DATE : 20071009
EP1463745 A4	20080213	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20080114
EP1463745 A4	20120627	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20120110
EP1463745 A4	20120629	LSWD	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HK REF LEGAL EVENT CODE : WD REF DOCUMENT NUMBER : 1070898 COUNTRY OF REF DOCUMENT : HK
EP1751304 A2	20070214	LSPB	+	published / reissued	
EP1751304 A2	20070214	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20061204
EP1751304 A2	20070502	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20070402
EP1751304 B1	20101201	LSGT	+	granted / extensions (spc, cpc, pte)	

EP1751304 B1	20101201	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP1751304 B1	20101215	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1751304 B1	20110105	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP1751304 B1	20110330	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : VDEP EFFECTIVE DATE : 20101201
EP1751304 B1	20110405	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2356167 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) : EFFECTIVE DATE : 20110405
EP1751304 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 : 20101201
EP1751304 B1	20110525	LSRV	-LTIE	LT: INVALIDATION OF EUROPEAN PATENT OR PATENT EXTENSION	REF COUNTRY CODE : EP EFFECTIVE DATE : 20101201
EP1751304 B1	20110531	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 : 20101201
EP1751304 B1	20110531	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 : 20101201
EP1751304 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 : 20110301
EP1751304 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 : 20101201
EP1751304 B1	20110531	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 : 20101201
EP1751304 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 : 20101201
EP1751304 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 FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20101201
EP1751304 B1	20110630	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 : 20110302
EP1751304 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 : 20110401
EP1751304 B1	20110729	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 : 20101201
EP1751304 B1	20110729	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 : 20101201
EP1751304 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 : 20101201
EP1751304 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 : 20110401
EP1751304 B1	20110729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20110526 YEAR OF FEE PAYMENT : 7
EP1751304 B1	20110729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20110607 YEAR OF FEE PAYMENT : 7
EP1751304 B1	20110831	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 : 20101201
EP1751304 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

				EPO]	THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20101201
EP1751304 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 : 20101201
EP1751304 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 : 7
EP1751304 B1	20110930	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20110527 YEAR OF FEE PAYMENT : 7
EP1751304 B1	20110930	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20110524 YEAR OF FEE PAYMENT : 7
EP1751304 B1	20111031	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 : 20101201
EP1751304 B1	20111109	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20110902
EP1751304 B1	20111229	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 602005025111 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20110902
EP1751304 B1	20111230	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 : 20110531
EP1751304 B1	20111230	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP1751304 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
EP1751304 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
EP1751304 B1	20120229	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP1751304 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 : 20110503
EP1751304 B1	20130130	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20120503
EP1751304 B1	20130228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM	COUNTRY OF REF DOCUMENT : IT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES

				NATIONAL OFFICE TO EPO]	LAPSED DATE : 20120503
EP1751304 B1	20130301	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20130131
EP1751304 B1	20130314	LSDW	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R119 REF DOCUMENT NUMBER : 602005025111 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20121201
EP1751304 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 : 20120503
EP1751304 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
EP1751304 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 : 20110503
EP1751304 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
EP1751304 B1	20130820	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20130820
EP1751304 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 : 20101201
EP1751304 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 NON-PAYMENT OF DUE FEES LAPSED DATE : 20120504
EP1751304 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 : 20101201
EP1751304 B1	20250503	PEXP		Calculated Patent Term Expiry	
ES2297900 T3	20080501	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2297900 T3	20181109	PEXP		Calculated Patent Term Expiry	
ES2342992 T3	20100720	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2342992 T3	20200723	LSLE	-FD2A	ANNOUNCEMENT OF LAPSE IN SPAIN	LAPSED DATE : 20200723 EFFECTIVE DATE : 20200723
ES2342992 T3	20180521	PEXP		Calculated Patent Term Expiry	
ES2356167 T3	20110405	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2356167 T3	20250503	PEXP		Calculated Patent Term Expiry	

GB9723553 A0	19990203	LSWD	-AT	APPLICATIONS TERMINATED BEFORE PUBLICATION UNDER SECTION 16(1)	
HK1070898 A1	20050630	LSPB	+	published / reissued	
HK1070898 A3	20050630	LSPB	+	published / reissued	
HK1153504 A1	20120330	LSPB	+	published / reissued	
HU0301197 AB	20030728	LSPB	+	published / reissued	
JP2001522586 T2	20011120	LSPB	+	published / reissued	
JP2001522586 T2	20051105	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20051104
JP2001522586 T2	20051105	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20051104
JP2001522586 T2	20080926	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20080925
JP2001522586 T2	20090522	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20090521
JP2002500513 T2	20020108	LSPB	+	published / reissued	
JP2002500513 T2	20050210	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20050120
JP2002500513 T2	20050210	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20050120
JP2002500513 T2	20080513	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20080513
JP2002500513 T2	20081204	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20081113
JP2002500513 T2	20090609	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20090609
JP2003508022 T2	20030304	LSPB	+	published / reissued	
JP2003508022 T2	20070703	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20070702
JP2003508022 T2	20070703	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20070702
JP2003508022 T2	20100609	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20100608
JP2003508022 T2	20110216	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20110215
JP2005509432 T2	20050414	LSPB	+	published / reissued	
JP2005509432 T2	20080206	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20080205
JP2005509432 T2	20080805	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20080804
JP2005509432 T2	20080806	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20080805
JP2005509432 T2	20090715	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20090714
JP2005509432 T2	20091117	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20091116

JP2005509432 T2	20091201	LSAL	A911	TRANSFER OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A911 EFFECTIVE DATE : 20091130
JP2005509432 T2	20100120	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20100119
JP2005509432 T2	20100127	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20100126
JP2005509432 T2	20100204	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A821 EFFECTIVE DATE : 20100115
JP2005509432 T2	20100218	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2005509432 T2	20100302	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20100302
JP2005509432 T2	20100304	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01
JP2005509432 T2	20100408	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20100331
JP2005509432 T2	20100416	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP2005509432 T2	20100419	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP2010029220 A2	20100212	LSPB	+	published / reissued	
JP2010029220 A2	20091217	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20091216
JP2010029220 A2	20100115	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20100114
JP2010029220 A2	20111109	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20111108
JP2010029220 A2	20120404	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20120403
JP4492849 B2	20100630	LSGT	+	granted / extensions (spc, cpc, pte)	
JP4492849 B2	20050125	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A821 EFFECTIVE DATE : 20041216
JP4492849 B2	20050316	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20050315
JP4492849 B2	20050316	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20050315
JP4492849 B2	20100406	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP4492849 B2	20130411	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP4492849 B2	20130416	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 4
JP4492849 B2	20140410	LSFE	R20	特許料納付書 (Patent fee payment form)	

JP4492849 B2	20140415	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4492849 B2	20150528	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4492849 B2	20150602	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4492849 B2	20160407	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4492849 B2	20160412	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4492849 B2	20170420	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4492849 B2	20170425	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4492849 B2	20180419	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4492849 B2	20180424	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4492849 B2	20180511	LSAS	S111	REQUEST FOR CHANGE OF OWNERSHIP OR PART OF OWNERSHIP	TEXT : JAPANESE INTERMEDIATE CODE: R313113
JP4492849 B2	20180521	LSAS	R350	WRITTEN NOTIFICATION OF REGISTRATION OF TRANSFER	TEXT : JAPANESE INTERMEDIATE CODE: R350
JP4492849 B2	20190418	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4492849 B2	20190423	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4492849 B2	20221119	PEXP		Calculated Patent Term Expiry	
KR101019131 B1	20110307	LSGT	+	granted / extensions (spc, cpc, pte)	
KR101019131 B1	20140207	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20140210 YEAR OF FEE PAYMENT : 4
KR101019131 B1	20150519	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20150520 YEAR OF FEE PAYMENT : 5
KR101019131 B1	20160204	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20160205 YEAR OF FEE PAYMENT : 6
KR101019131 B1	20170220	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20170221 YEAR OF FEE PAYMENT : 7
KR101019131 B1	20180302	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20180305 YEAR OF FEE PAYMENT : 8
KR101019131 B1	20190219	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20190220 YEAR OF FEE PAYMENT : 9
KR101019131 B1	20221119	PEXP		Calculated Patent Term Expiry	
KR101059898 B1	20110829	LSGT	+	granted / extensions (spc, cpc, pte)	
KR101059898 B1	20100824	LSES	A201	REQUEST FOR EXAMINATION	
KR101059898 B1	20150804	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20150805 YEAR OF FEE PAYMENT : 5
KR101059898 B1	20160808	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20160809 YEAR OF FEE PAYMENT : 6
KR101059898 B1	20171120	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20171121 YEAR OF FEE PAYMENT : 7
KR101059898 B1	20180820	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20180821 YEAR OF FEE PAYMENT : 8
KR101059898 B1	20221119	PEXP		Calculated Patent Term Expiry	

KR20010024597 A	20010326	LSPB	+	published / reissued	
KR20010024597 A	20031110	LSES	A201	REQUEST FOR EXAMINATION	
KR20010024597 A	20050930	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR20010024597 A	20051209	LSRV	-E601	DECISION TO REFUSE APPLICATION	
KR20040066832 A	20040727	LSPB	+	published / reissued	
KR20040066832 A	20071101	LSES	A201	REQUEST FOR EXAMINATION	
KR20040066832 A	20090430	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR20040066832 A	20100227	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR20040066832 A	20101130	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
KR20040066832 A	20110224	LSGT	+GRNT	WRITTEN DECISION TO GRANT	
KR20100095652 A	20100831	LSPB	+	published / reissued	
KR20100095652 A	20101124	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR20100095652 A	20110531	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
KR20100095652 A	20110822	LSGT	+GRNT	WRITTEN DECISION TO GRANT	
NO20002176 A	20000705	LSPB	+	published / reissued	
NO20002176 A	20020805	LSRV	-FC2A	WITHDRAWAL, REJECTION OR DISMISSAL OF LAID OPEN PATENT APPLICATION	
NO995803 A	20000118	LSPB	+	published / reissued	
NO995803 A	20020325	LSRV	-FC2A	WITHDRAWAL, REJECTION OR DISMISSAL OF LAID OPEN PATENT APPLICATION	
PL337080 A1	20000731	LSPB	+	published / reissued	
PL340624 A1	20010212	LSPB	+	published / reissued	
TR200001263 T2	20001221	LSPB	+	published / reissued	
TWI236502 B	20050721	LSGT	+	granted / extensions (spc, cpc, pte)	
TWI236502 B	20120421	LSLE	-MM4A	ANNULMENT OR LAPSE OF PATENT DUE TO NON-PAYMENT OF FEES	
TWI236502 B	20180529	PEXP		Calculated Patent Term Expiry	
US2002146700 AA	20021010	LSPB	+	published / reissued	
US2002146700 AA	20040226	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2003235890 AA	20031225	LSPB	+	published / reissued	
US2003235890 AA	20030815	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SHEFFIELD, UNIVERSITY OF, UNITED KINGDOM OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:WYLLIE, DAVID; DUFF, GORDON W.; REEL/FRAME:014393/0371 EFFECTIVE DATE : 20030404
US2003235890 AA	20030828	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INTERLEUKIN GENETICS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:AZIZ, NAZNEEN; HSIEH, CHUNG MING; KORNMAN, KENNETH S.; REEL/FRAME:014436/0541;

					SIGNING DATES FROM 20030423 TO 20030430
US2003235890 AA	20030828	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INTERLEUKIN GENETICS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:UNIVERSITY OF SHEFFIELD; REEL/FRAME:014436/0554 EFFECTIVE DATE : 20030404
US2003235890 AA	20080417	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2003235890 AA	20171226	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ORIG3N, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:INTERLEUKIN GENETICS, INC; REEL/FRAME:044485/0984 EFFECTIVE DATE : 20171122
US2004152124 AA	20040805	LSPB	+	published / reissued	
US2004152124 AA	20080221	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2005064453 AA	20050324	LSPB	+	published / reissued	
US2005064453 AA	20081008	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2005282198 AA	20051222	LSPB	+	published / reissued	
US2005282198 AA	20050824	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INTERLEUKIN GENETICS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:KORNMAN, KENNETH; WILKINS, LEON; CHEN, HONG MIN; AND OTHERS; REEL/FRAME:016913/0459; SIGNING DATES FROM 20050701 TO 20050709
US2005282198 AA	20050824	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SHEFFIELD, UNIVERSITY OF, UNITED KINGDOM OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:DUFF, GORDON W.; COX, ANGELA; CAMP, NICOLA JANE; AND OTHERS; REEL/FRAME:016913/0596; SIGNING DATES FROM 20050705 TO 20050810
US2005282198 AA	20091019	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2008118920 AA	20080522	LSPB	+	published / reissued	
US2008118920 AA	20080130	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INTERLEUKIN GENETICS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:KORNMAN, KENNETH S.; WILKINS, LEON; CHEN, HONG MIN; AND OTHERS; REEL/FRAME:020436/0898; SIGNING DATES FROM 20080111 TO 20080117
US2008118920 AA	20080130	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : UNIVERSITY OF SHEFFIELD, UNITED KINGDOM OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:DUFF, GORDON; REEL/FRAME:020436/0965 EFFECTIVE DATE : 20080111
US2008118920 AA	20111017	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	

US2008187920 AA	20080807	LSPB	+	published / reissued	
US2008187920 AA	20091116	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2008311581 AA	20081218	LSPB	+	published / reissued	
US2008311581 AA	20100104	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2008311581 AA	20171226	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ORIG3N, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:INTERLEUKIN GENETICS, INC; REEL/FRAME:044485/0984 EFFECTIVE DATE : 20171122
US2009163460 AA	20090625	LSPB	+	published / reissued	
US2009163460 AA	20090218	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INTERLEUKIN GENETICS, INC.,MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:KORNMAN, KENNETH; VAN DIJK, SIMON; SIGNING DATES FROM 20081107 TO 20081110; REEL/FRAME:022272/0884
US2009163460 AA	20090218	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : UNIVERSITY OF SHEFFIELD,UNITED KINGDOM OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:DUFF, GORDON; REEL/FRAME:022272/0934 EFFECTIVE DATE : 20081107
US2009163460 AA	20100804	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2010279280 AA	20101104	LSPB	+	published / reissued	
US2010279280 AA	20100106	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INTERLEUKIN GENETICS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:KORNMAN, KENNETH S.; AZIZ, NAZNEEN; HSIEH, CHUNG-MING; SIGNING DATES FROM 20080508 TO 20080519; REEL/FRAME:023740/0372
US2010279280 AA	20100106	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : UNIVERSITY OF SHEFFIELD, UNITED KINGDOM OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:WYLLIE, DAVID; DUFF, GORDON W.; SIGNING DATES FROM 20081205 TO 20091202; REEL/FRAME:023740/0702
US2010279280 AA	20111006	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2010279280 AA	20171226	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ORIG3N, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:INTERLEUKIN GENETICS, INC; REEL/FRAME:044485/0984 EFFECTIVE DATE : 20171122
US6140047 A	20001031	LSGT	+	granted / extensions (spc, cpc, pte)	
US6140047 A	19980518	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SHEFFIELD, UNIVERSITY OF, THE, UNITED KINGDOM OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:DUFF, GORDON W.; DI GIOVINE, FRANCO; BARNES, PETER; AND OTHERS; REEL/FRAME:009204/0321;

					SIGNING DATES FROM 19980304 TO 19980505
US6140047 A	19990517	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MEDICAL SCIENCE SYSTEMS, INC., TEXAS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:UNIVERSITY OF SHEFFIELD; REEL/FRAME:009956/0214 EFFECTIVE DATE : 19990428
US6140047 A	19991112	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INTERLEUKIN GENETICS, INC., TEXAS OLDPARTY : CHANGE OF NAME; ASSIGNOR:MEDICAL SCIENCE SYSTEMS, INC; REEL/FRAME:010371/0858 EFFECTIVE DATE : 19990820
US6140047 A	20021023	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PYXIS INNOVATIONS INC., MICHIGAN OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:INTERLEUKIN GENETICS, INC.; REEL/FRAME:013193/0257 EFFECTIVE DATE : 20021023
US6140047 A	20040430	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6140047 A	20080430	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US6140047 A	20121031	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US6140047 A	20121126	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US6140047 A	20121126	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US6140047 A	20121218	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20121031
US6140047 A	20180112	PEXP		Calculated Patent Term Expiry	
US6268142 BA	20010731	LSGT	+	granted / extensions (spc, cpc, pte)	
US6268142 BA	19991101	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INTERLEUKIN GENETICS, INC., TEXAS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:SHEFFIELD, UNIVERSITY OF; REEL/FRAME:010349/0150 EFFECTIVE DATE : 19991001
US6268142 BA	19991101	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SHEFFIELD, UNIVERSITY OF, UNITED KINGDOM OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:DUFF, GORDON W.; COX, ANGELA; CAMP, NICOLA JANE; AND OTHERS; REEL/FRAME:010349/0167 EFFECTIVE DATE : 19991001
US6268142 BA	20010716	LSGT	PAT1	Patented Case	
US6268142 BA	20010716	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US6268142 BA	20021023	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PYXIS INNOVATIONS INC., MICHIGAN OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:INTERLEUKIN GENETICS, INC.; REEL/FRAME:013193/0257 EFFECTIVE DATE : 20021023

US6268142 BA	20050131	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6268142 BA	20090202	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US6268142 BA	20130524	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US6268142 BA	20170413	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : HORIZON TECHNOLOGY FINANCE CORPORATION, CONNECTICU OLDPARTY : SECURITY INTEREST; ASSIGNOR:INTERLEUKIN GENETICS, INC.; REEL/FRAME:042001/0331 EFFECTIVE DATE : 20170413
US6268142 BA	20171127	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INTERLEUKIN GENETICS, INC., TEXAS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:HORIZON TECHNOLOGY FINANCE CORPORATION; REEL/FRAME:044511/0467 EFFECTIVE DATE : 20171121
US6268142 BA	20171127	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INTERLEUKIN GENETICS INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:HORIZON TECHNOLOGY FINANCE CORPORATION; REEL/FRAME:044511/0428 EFFECTIVE DATE : 20171121
US6268142 BA	20190630	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
US6706478 BB	20040316	LSGT	+	granted / extensions (spc, cpc, pte)	
US6706478 BB	20040226	LSGT	PAT1	Patented Case	
US6706478 BB	20041109	LSRE	CC	CERTIFICATE OF CORRECTION	
US6706478 BB	20070915	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6706478 BB	20110916	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US6706478 BB	20130401	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : UNIVERSITY OF SHEFFIELD, UNITED KINGDOM OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:DUFF, GORDON W.; COX, ANGELA; CAMP, NICOLA JANE; AND OTHERS; REEL/FRAME:030125/0130 EFFECTIVE DATE : 19991001
US6706478 BB	20130403	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INTERLEUKIN GENETICS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:UNIVERSITY OF SHEFFIELD; REEL/FRAME:030143/0591 EFFECTIVE DATE : 19991001
US6706478 BB	20150916	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US6706478 BB	20170413	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : HORIZON TECHNOLOGY FINANCE CORPORATION, CONNECTICU OLDPARTY : SECURITY INTEREST; ASSIGNOR:INTERLEUKIN GENETICS, INC.; REEL/FRAME:042001/0331 EFFECTIVE DATE : 20170413
US6706478 BB	20171127	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INTERLEUKIN GENETICS, INC., TEXAS OLDPARTY : RELEASE BY

					SECURED PARTY; ASSIGNOR:HORIZON TECHNOLOGY FINANCE CORPORATION; REEL/FRAME:044511/0467 EFFECTIVE DATE : 20171121
US6706478 BB	20171127	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INTERLEUKIN GENETICS INC., MASSACHUSETTS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:HORIZON TECHNOLOGY FINANCE CORPORATION; REEL/FRAME:044511/0428 EFFECTIVE DATE : 20171121
US6706478 BB	20210427	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
US6730476 BA	20040504	LSGT	+	granted / extensions (spc, cpc, pte)	
US6730476 BA	20071105	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6730476 BA	20120504	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US6730476 BA	20120604	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US6730476 BA	20120604	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US6730476 BA	20120626	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20120504
US6730476 BA	20201107	PEXP		Calculated Patent Term Expiry (PTA 95 days and a terminal disclaimer has been filed)	
US6746839 BA	20040608	LSGT	+	granted / extensions (spc, cpc, pte)	
US6746839 BA	20030617	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : UNIVERSITY OF SHEFFIELD, UNITED KINGDOM OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:DUFF, GORDON W.; DI GIOVINE, FRANCO; BARNES, PETER; AND OTHERS; REEL/FRAME:014187/0743; SIGNING DATES FROM 19980331 TO 19980505
US6746839 BA	20030618	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INTERLEUKIN GENETICS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:SHEFFIELD, UNIVERSITY OF; REEL/FRAME:014204/0079 EFFECTIVE DATE : 19990428
US6746839 BA	20071210	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6746839 BA	20120608	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US6746839 BA	20120709	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US6746839 BA	20120709	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US6746839 BA	20120731	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20120608

US6746839 BA	20200706	PEXP		Calculated Patent Term Expiry (PTA 35 days and a terminal disclaimer has been filed)	
WO0100880 A2	20010104	LSPB	+	published / reissued	
WO0100880 A3	20011221	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2378221 COUNTRY OF REF DOCUMENT : CA
WO0100880 A3	20011226	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2001 506870 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO0100880 A3	20020110	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 60679/00 COUNTRY OF REF DOCUMENT : AU
WO0100880 A3	20020124	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2000947005 COUNTRY OF REF DOCUMENT : EP
WO0100880 A3	20020410	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2000947005 COUNTRY OF REF DOCUMENT : EP
WO0100880 A3	20020502	LSWD	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : 8642
WO03044176 A2	20030530	LSPB	+	published / reissued	
WO03044176 A3	20041006	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2002793968 COUNTRY OF REF DOCUMENT : EP
WO03044176 A3	20100727	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1020107016833 COUNTRY OF REF DOCUMENT : KR
WO03044176 C1	20030821	LSRE	CR1	CORRECTION OF ENTRY IN SECTION I	TEXT : IN PCT GAZETTE 22/2003 UNDER (72) ADDRESSES OF "WYLLIE, D.", "AZIZ, NAZNEEN" AND "HSIEH, CHUNG, MING" ADDED
WO03044176 C2	20040518	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2467717 COUNTRY OF REF DOCUMENT : CA
WO03044176 C2	20040519	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2003545801 COUNTRY OF REF DOCUMENT : JP
WO03044176 C2	20040519	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1020047007653 COUNTRY OF REF DOCUMENT : KR
WO03044176 C2	20040609	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2002793968 COUNTRY OF REF DOCUMENT : EP
WO03044176 C2	20040719	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2002827282X COUNTRY OF REF DOCUMENT : CN
WO05108619 A2	20051117	LSPB	+	published / reissued	
WO05108619 A3	20061031	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2007511490 COUNTRY OF REF DOCUMENT : JP
WO05108619 A3	20061102	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2565562 COUNTRY OF REF DOCUMENT : CA

WO05108619 A3	20061104	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE	REF COUNTRY CODE : DE
WO05108619 A3	20061104	LSWD	-WWW	WIPO INFORMATION: WITHDRAWN IN NATIONAL OFFICE	TEXT : DE
WO05108619 A3	20061204	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2005744466 COUNTRY OF REF DOCUMENT : EP
WO05108619 A3	20070214	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2005744466 COUNTRY OF REF DOCUMENT : EP
WO05108619 A3	20070419	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE	REF COUNTRY CODE : JP
WO05108619 A3	20080118	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 11579296 COUNTRY OF REF DOCUMENT : US
WO9854359 A1	19981203	LSPB	+	published / reissued	
WO9854359 A1	19980521	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 98807656.X COUNTRY OF REF DOCUMENT : CN
WO9854359 A1	19980521	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 133128 COUNTRY OF REF DOCUMENT : IL
WO9854359 A1	19990630	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 09345217 COUNTRY OF REF DOCUMENT : US
WO9854359 A1	19991124	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 501298 COUNTRY OF REF DOCUMENT : NZ
WO9854359 A1	19991125	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : PV1999-4220 COUNTRY OF REF DOCUMENT : CZ
WO9854359 A1	19991126	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2291731 COUNTRY OF REF DOCUMENT : CA
WO9854359 A1	19991126	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2291731 COUNTRY OF REF DOCUMENT : CA KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO9854359 A1	19991129	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 1999500358 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO9854359 A1	19991129	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : PA/A/1999/011004 COUNTRY OF REF DOCUMENT : MX
WO9854359 A1	19991203	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 75398/98 COUNTRY OF REF DOCUMENT : AU
WO9854359 A1	19991222	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1998922938 COUNTRY OF REF DOCUMENT : EP
WO9854359 A1	19991228	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO	REF DOCUMENT NUMBER : 199901097 COUNTRY OF REF DOCUMENT :

				NATIONAL PHASE	EA
WO9854359 A1	20000308	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1998922938 COUNTRY OF REF DOCUMENT : EP
WO9854359 A1	20000330	LSWD	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : 8642
WO9854359 A1	20010529	LSRV	-WWR	WIPO INFORMATION: REFUSED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : PV1999-4220 COUNTRY OF REF DOCUMENT : CZ
WO9854359 A1	20030320	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 75398/98 COUNTRY OF REF DOCUMENT : AU
WO9924615 A2	19990520	LSPB	+	published / reissued	
WO9924615 A2	19981109	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 135957 COUNTRY OF REF DOCUMENT : IL
WO9924615 A3	20000503	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 504318 COUNTRY OF REF DOCUMENT : NZ
WO9924615 A3	20000504	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2308570 COUNTRY OF REF DOCUMENT : CA
WO9924615 A3	20000504	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2308570 COUNTRY OF REF DOCUMENT : CA KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO9924615 A3	20000504	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : PV2000-1651 COUNTRY OF REF DOCUMENT : CZ
WO9924615 A3	20000504	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : PA/A/2000/004381 COUNTRY OF REF DOCUMENT : MX
WO9924615 A3	20000505	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2000/01263 COUNTRY OF REF DOCUMENT : TR
WO9924615 A3	20000508	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2000 519607 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO9924615 A3	20000508	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1020007004981 COUNTRY OF REF DOCUMENT : KR
WO9924615 A3	20000512	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1998957658 COUNTRY OF REF DOCUMENT : EP
WO9924615 A3	20000607	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 13863/99 COUNTRY OF REF DOCUMENT : AU
WO9924615 A3	20000710	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 98812972.8 COUNTRY OF REF DOCUMENT : CN
WO9924615 A3	20000823	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN	REF DOCUMENT NUMBER : 1998957658 COUNTRY OF REF DOCUMENT :

				NATIONAL OFFICE	EP
WO9924615 A3	20000907	LSWD	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : 8642
WO9924615 A3	20001005	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : P-260/00 COUNTRY OF REF DOCUMENT : YU
WO9924615 A3	20010326	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1020007004981 COUNTRY OF REF DOCUMENT : KR
WO9924615 A3	20010601	LSRV	-WWR	WIPO INFORMATION: REFUSED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : PV2000-1651 COUNTRY OF REF DOCUMENT : CZ
WO9924615 A3	20030911	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 13863/99 COUNTRY OF REF DOCUMENT : AU
WO9924615 A3	20051209	LSRV	-WWR	WIPO INFORMATION: REFUSED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1020007004981 COUNTRY OF REF DOCUMENT : KR
WO9924615 A3	20080109	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1998957658 COUNTRY OF REF DOCUMENT : EP
ZA9804490 A	19981202	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA9804490 A	20180525	PEXP		Calculated Patent Term Expiry	
ZA9810221 A	20000215	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA9810221 A	20181108	PEXP		Calculated Patent Term Expiry	

43) Family number: 33544020 (EP0630647A1)

Title: COMPOSITIONS AND METHODS OF MANUFACTURE OF ORAL DISSOLVABLE MEDICAMENTS.

Abstract: Dosage form and method of manufacture for producing a medicament capable of absorption through mucosal tissues. The drug (24) is to be incorporated into a dissolvable matrix (22). An appliance or holder (26) is attached to the dissolvable matrix (22) and mounted or sealed against button (28).

Classifications:
International (IPC 8-9): A23G3/00 A23G3/36 A23G3/54 A23G3/56 A24B15/16 A24F47/00 A61J3/00 A61J7/00 A61K31/465 A61K9/00 A61K9/20 (Advanced/Invention)
International (IPC 1-7): A61K9/00 A61K9/68
CPC: A23G3/368 A23G3/54 A23G3/563 A24B15/16 A24F47/002 A61J3/00 A61J7/003 A61K9/0056 A61K31/465
European: A23G3/36M4 A23G3/54 A23G3/56D A24B15/16 A24F47/00B A61J3/00 A61J7/00D4 A61K31/465 A61K9/00M18B

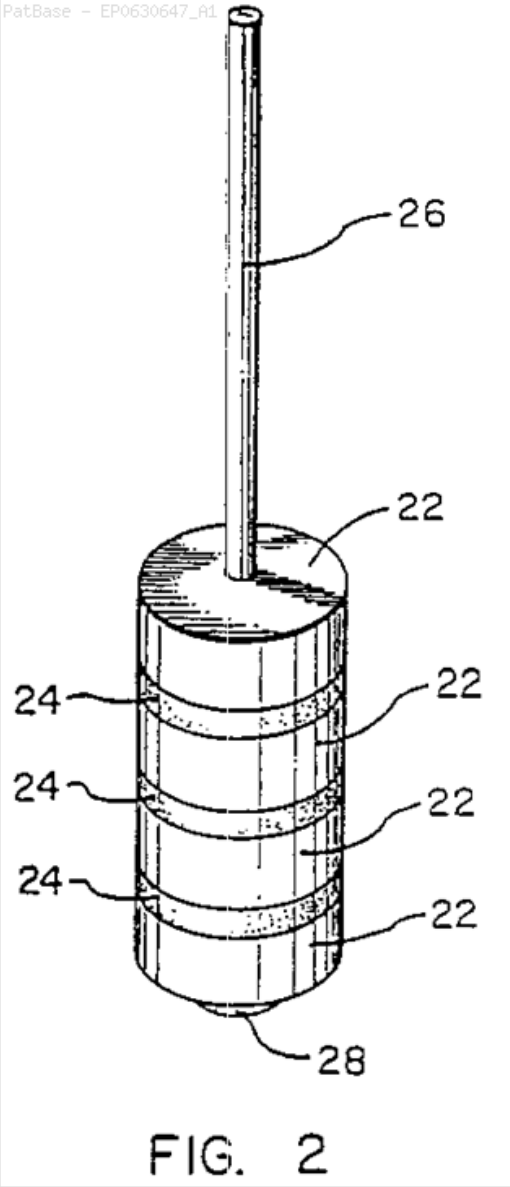


FIG. 2

Family:

Publication number	Publication date	Application number	Application date
EP0630647 A1	19941228	EP19940111352	19900803
EP0630647 B1	19990303	EP19940111352	19900803

Priority:

US19890403751 19890905 US19890403751 19890905 EP19900912733 19900803 EP19900912733 19900803

Probable Assignee: UNIVERSITY OF UTAH RESEARCH FOUNDATION

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

Assignee(s): UNIVERSITY OF UTAH RESEARCH FOUNDATION ; UTAH RESEARCH FOUNDATION UNIV ; OF UTAH RESEARCH FOUNDATION UNIV

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

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

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
EP0630647 A1	19941228	LSPB	+	published / reissued	
EP0630647 A1	19941228	LSES	+17P	REQUEST FOR	EFFECTIVE DATE : 19940728

				EXAMINATION FILED	
EP0630647 A1	19971119	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 19971009
EP0630647 B1	19990303	LSGT	+	granted / extensions (spc, cpc, pte)	
EP0630647 B1	19990303	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 : 19990303
EP0630647 B1	19990315	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP0630647 B1	19990803	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 : 19990803
EP0630647 B1	19990916	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2133448 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP0630647 B1	20000223	LSGT	+26N	NO OPPOSITION FILED	
EP0630647 B1	20071015	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : CH OWNER : UNIVERSITY OF UTAH RESEARCH FOUNDATION REF LEGAL EVENT CODE : PFA OLDPARTY : UNIVERSITY OF UTAH RESEARCH FOUNDATION#210 PARK BUILDING#SALT LAKE CITY, UTAH 84112 (US) -TRANSFER TO- UNIVERSITY OF UTAH RESEARCH FOUNDATION#210 PARK BUILDING#SALT LAKE CITY, UTAH 84112 (US)
EP0630647 B1	20091030	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20090827 YEAR OF FEE PAYMENT : 20
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EP0630647 B1	20091130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20090825 YEAR OF FEE PAYMENT : 20
EP0630647 B1	20091130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20090825 YEAR OF FEE PAYMENT : 20
EP0630647 B1	20091130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20090824 YEAR OF FEE PAYMENT : 20
EP0630647 B1	20091130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20090827 YEAR OF FEE PAYMENT : 20

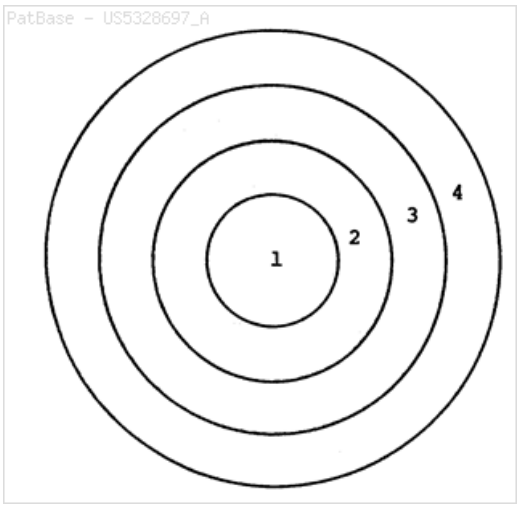
EP0630647 B1	20100129	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20090827 YEAR OF FEE PAYMENT : 20
EP0630647 B1	20100226	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20090915 YEAR OF FEE PAYMENT : 20
EP0630647 B1	20100430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20090827 YEAR OF FEE PAYMENT : 20
EP0630647 B1	20100811	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : V4 EFFECTIVE DATE : 20100803
EP0630647 B1	20100813	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP0630647 B1	20100823	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DK REF LEGAL EVENT CODE : EUP
EP0630647 B1	20100825	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : PE20 EXPIRY DATE : 20100802
EP0630647 B1	20100831	LSLE	-BE20	BE: PATENT EXPIRED	PARTYTYPE : OWNER REF COUNTRY CODE : EP OWNER : *UNIVERSITY OF UTAH RESEARCH FOUNDATION EFFECTIVE DATE : 20100803
EP0630647 B1	20101005	LSLE	-EUG	SE: EUROPEAN PATENT HAS LAPSED	REF COUNTRY CODE : EP
EP0630647 B1	20101028	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20100804
EP0630647 B1	20101029	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 EXPIRATION OF PROTECTION LAPSED DATE : 20100803
EP0630647 B1	20101231	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 : 20100802
EP0630647 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 EXPIRATION OF PROTECTION LAPSED DATE : 20100803
EP0630647 B1	20100802	PEXP		Calculated Patent Term Expiry	
EP0630647 B1	20100803	PEXP		Calculated Patent Term Expiry	

44) Family number: 20226020 (US5328697A)

Title: COMPOSITIONS AND PROCESSES FOR THE SUSTAINED RELEASE OF DRUGS

Abstract: The present invention relates to compositions for the sustained release of drugs and to methods for the production of such compositions. In one embodiment, somatotropin is layered onto non-pareil seeds, which, in turn are sprayed with a glycine solution. Next, a coating of a wax mixture is applied.

Classifications:
International (IPC 8-9): A61K31/13 A61K31/135 A61K31/165 A61K31/166 A61K38/27 A61K47/36 A61K47/42 A61K9/22 A61K9/24 A61K9/38 A61K9/50 (Advanced/Invention);
A61K31/13 A61K31/165 A61K31/166 A61K38/27 A61K47/36 A61K47/42 A61K9/22 A61K9/24 (Advanced/Non-invention);
A61K31/13 A61K31/165 A61K31/166 A61K38/27 A61K47/36 A61K47/42 A61K9/22 A61K9/24 A61K9/30 A61K9/50 (Core/Invention);
A61K9/24 (Core/Non-invention)
International (IPC 1-7): A61J3/00 A61K31/13 A61K31/135 A61K31/165 A61K31/195 A61K37/36 A61K38/27 A61K47/36 A61K47/42 A61K9/22 A61K9/24 A61K9/28 A61K9/30 A61K9/36 A61K9/38 A61K9/42 A61K9/50 A61K9/52 A61P43/00
CPC: A61K9/5078 A61P43/00
European: A61K9/50K2
US: 241/18 424/468 424/474 424/475 424/476 424/477 424/491 424/495 424/498 424/499 424/500 424/501 514/960



Family:

Publication number	Publication date	Application number	Application date
AT145552 E	19961215	AT19930905844T	19930209
AU199336610 A1	19930903	AU19930036610	19930209
AU669884 B2	19960627	AU19930036610	19930209
CA2129754 AA	19940808	CA19932129754	19930209
CN1071113 C	20010919	CN19931001390	19930209
CN1075253 A	19930818	CN19931001390	19930209
DE69306243 D1	19970109	DE19936006243	19930209
DE69306243 D1	19970109	DE19936006243T	19930209
DE69306243 T2	19970320	DE19936006243T	19930209
DK0625900 T3	19970602	DK19930905844T	19930209
EP0625900 A1	19941130	EP19930905844	19930209
EP0625900 B1	19961127	EP19930905844	19930209
ES2095045 T3	19970201	ES19930905844T	19930209
JP8502020 T2	19960305	JP19930514257T	19930209
NZ249658 A	19960528	NZ19930249658	19930209
TW272133 B	19960311	TW19930100841	19930208
US5328697 A	19940712	US19920833197	19920210
WO9315725 A1	19930819	WO1993US01173	19930209

Priority:
US19920833197 19920210 WO1993US01173 19930209

Probable Assignee: SCHERING PLOUGH ANIMAL HEALTH CORP

Assignee(s): (std): MALLINCKRODT VETERINARY INC ; MALLINCKRODT VETERINARY INC FO ; PITMAN MOORE INC

Assignee(s): PITMAN MOORE INCUS ; RAMAN SIVA N ; SCHERING PLOUGH ANIMAL HEALTH CORP ; SMITH RODGER L ; MALLINCKRODT VETERINARY INC WAS PITMAN MOORE INC.. ; MALLINCKRODT VETERINARY INC FORMERLY PITMAN MOORE INC ; MALLINCKRODT VETERINARY INC MUNDELEIN ILL US ; MALLINCKRODT VETERINARY INC WAS PITMAN MOORE ; GRAY MATTHEW W

Inventor(s): (std): GRAY M W ; GRAY MATTHEW W ; MATTHEW W GRAY ; MW GRAY ; RAMAN S N ; RAMAN SIVA N ; RAMAN SIVD N ; RL SMITH ; RODGER L SMITH ; SIVD NRAMAN ; SMITH R L ; SMITH RODGER L ; SIVA N RAMAN ; SN RAMAN

Inventor(s): SIVD N RAMAN ; SMITH RODGER L LINCOLN NE 68517 US ; S N RAMAN ; RAMAN SIVA N ST LOUIS MI 63141 US ; R L SMITH ; GRAY MATTHEW W TERRE HAUTE IN 47805 US ; M W GRAY

Agent(s): FB RICE; FB RICE PTY LTD; OSLER HOSKIN AND HARCOURT LLP

Designated states: AT AU BB BE BF BG BJ BR CA CF CG CH CI CM CZ 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 NZ PL PT RO RU SD SE SK SN TD TG UA

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT145552 E	19961215	LSGT	+	granted / extensions (spc, cpc, pte)	
AT145552 E	19970515	LSLE	-RER	CEASED AS TO PARAGRAPH 5 LIT. 3 LAW INTRODUCING PATENT TREATIES	
AT145552 E	20130209	PEXP		Calculated Patent Term Expiry	

AU199336610 A1	19930903	LSPB	+	published / reissued	
AU669884 B2	19960627	LSGT	+	granted / extensions (spc, cpc, pte)	
AU669884 B2	20130209	PEXP		Calculated Patent Term Expiry	
CA2129754 AA	19940808	LSPB	+	published / reissued	
CA2129754 AA	19990930	LSES	+EEER	EXAMINATION REQUEST	
CA2129754 AA	20050209	LSLE	-FZDE	DEAD	
CN1071113 C	20010919	LSGT	+	granted / extensions (spc, cpc, pte)	
CN1071113 C	20010919	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN1071113 C	20060419	LSLE	-C19	LAPSE OF PATENT RIGHT DUE TO NON-PAYMENT OF THE ANNUAL FEE	
CN1071113 C	20130209	PEXP		Calculated Patent Term Expiry	
CN1075253 A	19930818	LSPB	+	published / reissued	
CN1075253 A	19930818	LSPB	+C06	PUBLICATION	
DE69306243 D1	19980102	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE69306243 D1	19980102	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE69306243 D1	20060831	LSAS	8327	CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER	PARTYTYPE : OWNER OWNER : SCHERING PLOUGH ANIMAL HEALTH CORP., UNION, N.J.,
DE69306243 D1	20060831	LSAS	8327	CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER	PARTYTYPE : OWNER OWNER : SCHERING PLOUGH ANIMAL HEALTH CORP., UNION, N.J.,
DE69306243 D1	20130209	LSLE	-R071	EXPIRY OF RIGHT	
DE69306243 D1	20130209	LSLE	-R071	EXPIRY OF RIGHT	
DE69306243 D1	20130212	LSLE	-R071	EXPIRY OF RIGHT	REF DOCUMENT NUMBER : 625900 COUNTRY OF REF DOCUMENT : EP
DE69306243 D1	20130212	LSLE	-R071	EXPIRY OF RIGHT	REF DOCUMENT NUMBER : 625900 COUNTRY OF REF DOCUMENT : EP
DE69306243 T2	19970320	LSGT	+	granted / extensions (spc, cpc, pte)	
DE69306243 T2	19980102	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE69306243 T2	20060831	LSAS	8327	CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER	PARTYTYPE : OWNER OWNER : SCHERING PLOUGH ANIMAL HEALTH CORP., UNION, N.J.,
DE69306243 T2	20130212	LSLE	-R071	EXPIRY OF RIGHT	REF DOCUMENT NUMBER : 625900 COUNTRY OF REF DOCUMENT : EP
DE69306243 T2	20130209	PEXP		Calculated Patent Term Expiry	
DK0625900 T3	19970602	LSGT	+	granted / extensions (spc, cpc, pte)	
DK0625900 T3	20130209	PEXP		Calculated Patent Term Expiry	
EP0625900 A1	19941130	LSPB	+	published / reissued	
EP0625900 A1	19941130	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19940907
EP0625900 A1	19950118	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : MALLINCKRODT VETERINARY, INC.
EP0625900 A1	19950426	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 19950308

EP0625900 A1	19961127	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT LAPSED DATE : 19961127
EP0625900 A1	19961127	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH LAPSED DATE : 19961127
EP0625900 A1	19961127	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 : 19961127
EP0625900 A1	19961127	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 : 19961127
EP0625900 A1	19961127	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LI LAPSED DATE : 19961127
EP0625900 A1	19961230	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D TEXT : 70796
EP0625900 A1	19970201	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2095045 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP0625900 A1	19970227	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT LAPSED DATE : 19970227
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EP0625900 A1	19970831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC LAPSED DATE : 19970831
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EP0625900 A1	20120430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20120306 YEAR OF FEE PAYMENT : 20

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EP0625900 A1	20120629	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20120224 YEAR OF FEE PAYMENT : 20
EP0625900 A1	20120629	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20120224 YEAR OF FEE PAYMENT : 20
EP0625900 A1	20120629	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20120227 YEAR OF FEE PAYMENT : 20
EP0625900 A1	20120731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20120228 YEAR OF FEE PAYMENT : 20
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EP0625900 A1	20130211	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DK REF LEGAL EVENT CODE : EUP
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TW272133 B	20130208	PEXP		Calculated Patent Term Expiry	
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US5328697 A	19940418	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MALLINCKRODT VETERINARY, INC., ILLINOIS OLDPARTY : CHANGE OF NAME EFFECTIVE MARCH 155, 1994; ASSIGNOR:PITMAN-MOORE, INC.; REEL/FRAME:006965/0686 EFFECTIVE DATE : 19940315
US5328697 A	19940701	LSGT	PAT1	Patented Case	
US5328697 A	19940701	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5328697 A	19980112	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SCHERING-PLOUGH ANIMAL HEALTH CORPORATION, NEW JER OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:MALLINCKRODT VETERINARY, INC.; REEL/FRAME:008886/0872 EFFECTIVE DATE : 19970628
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US5328697 A	20020111	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8

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US5328697 A	20120210	PEXP		Calculated Patent Term Expiry	
WO9315725 A1	19930819	LSPB	+	published / reissued	
WO9315725 A1	19940808	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2129754 COUNTRY OF REF DOCUMENT : CA
WO9315725 A1	19940809	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 249658 COUNTRY OF REF DOCUMENT : NZ
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45) Family number: 49613020 (US2011230441A)

Title: STABLE BORTEZOMIB FORMULATIONS

Abstract: Multi-dose formulations for bortezomib are presented in which bortezomib has significantly improved stability. Especially preferred formulations include those in which bortezomib is in a liquid form suitable for injection, wherein the solvent system predominantly comprises propylene glycol. In other preferred aspects, bortezomib is present as a Lewis donor-acceptor complex with a hetero-bifunctional Lewis base.

Classifications:
International (IPC 8-9): A01N55/08 A61J1/10 A61K31/19 A61K31/4965 A61K31/69 A61K38/00 A61K38/05 A61K47/10 A61K47/12 A61K47/18 A61K47/30 A61K47/34 A61K47/42 A61K9/00 A61K9/08 A61K9/19 A61M5/178 A61P35/00 A61P35/02 A61P43/00 C07B63/04 C07D241/00 C07D241/02 C07F5/02 C07F5/04 C07F7/02 C07K5/08 (Advanced/Invention); A61K47/00 A61K9/00 (Core/Invention)
CPC: C07B63/04 A61K47/12 A61K9/0019 A61K9/08 A61K9/19 A61K31/4965 A61K31/69 A61K47/10 A61P35/00 A61P35/02 A61P43/00
European: A61K31/69 A61K47/10 A61K9/00M5 A61K9/08 K61K9/19
US: 1/1 514/255.06 514/64 514/64P 514/64S 530/331 530/331S 544/229 544/229S 544/336 604/187 604/187P 604/408 604/408S

Family:

Publication number	Publication date	Application number	Application date
AU2011227083 AA	20110922	AU20110227083	20110318
AU2011227083 AA	20121004	AU20110227083	20110318
AU2011227083 BB	20130718	AU20110227083	20110318
CA2784240 AA	20130927	CA20122784240	20120727
CA2784240 C	20140708	CA20122784240	20120727
CY1115552 T1	20170104	CY20141100654T	20140814
DE602011040891 D1	20170928	DE201160040891T	20110318
DE602012001741 D1	20140618	DE201260001741T	20120906
DK2644189 T3	20140818	DK20120183276T	20120906
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EP2547333 A4	20140430	EP20110757060	20110318
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EP2644189 A1	20131002	EP20120183276	20120906
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JP2013522320 T2	20130613	JP20130500229T	20110318
JP5661912 B2	20150128	JP20130500229T	20110318
JP5774561 B2	20150909	JP20120184022	20120823
KR101530942 B1	20150623	KR20127027272	20110318
KR20130010902 A	20130129	KR20127027272	20110318
NZ602392 A	20140328	NZ20110602392	20110318
PL2644189 T3	20141231	PL20120183276T	20120906
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PT2644189 T	20140829	PT20120183276T	20120906
RU2012144316 A	20140427	RU20120144316	20110318
RU2529800 C2	20140927	RU20120144316	20110318
SI2644189 T1	20141030	SI20120030066T	20120906
US2011230441 AA	20110922	US20110051102	20110318
US2012172808 AA	20120705	US20120431313	20120327
US2012322762 AA	20121220	US20120592228	20120822
US2012322763 AA	20121220	US20120592235	20120822
US8263578 BB	20120911	US20120431313	20120327
US9061037 BB	20150623	US20110051102	20110318
US9107821 BB	20150818	US20120592228	20120822
US9180093 BB	20151110	US20120592235	20120822
WO11116286 A2	20110922	WO2011US29003	20110318
WO11116286 A3	20120322	WO2011US29003	20110318
WO11116286 A4	20120510	WO2011US29003	20110318

Priority:

US20100315080P 20100310 US20100315080P 20100318 EP20110757060 20110318
US20110051102 20110318 WO2011US29003 20110318 US20120431313 20120327
CA20122784240 20120727 US20120592228 20120822 US20120592235 20120822
EP20120183276 20120906

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Inventor(s): SOPPIMATH KUMARESH MONMOUTH ; SOPPIMATH KUMARESHUS ; SODUM RAMA PRINCETON ; SODUM RAMAUS ; PURI NAVNEET BRIDGEWATER ; PURI NAVNEETUS ; SATISH PEJAVER ; RAMA SODUM ; NAVNEET PURI ; LAKKARAJU DASARADHI ; KUMARESH SOPPIMATH ; KANAIYALAL R PATEL ; HARI DESU ; PEJAVER SATISH BRIDGEWATER ; PEJAVER SATISHUS ; PATEL KANAIYALAL R UNION ; PATEL KANAIYALAL RUS ; DESU HARI PLAINSBORO ; DESU HARIUS ; DASARADHI LAKKARAJU PRINCETON JUNCTION ; DASARADHI LAKKARAJUUS

Agent(s): PIZZEYS PATENT AND TRADE MARK ATTORNEYS; PIZZEYS PATENT AND TRADE MARK ATTORNEYS PTY LTD; MILTONS IP PI; NOTARBARTOLO AND GERVASI GMBH; Pallini Diego; PALLINI GERVASI DIEGO; MARTIN VICTORIA SOFIA; FISH AND ASSOCIATES PC; FISH AND TSANG LLP; FESSENMAIER MARTIN

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)

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Patent	Date recorded	Event group	Code	Event	Details
AU2011227083 AA	20110922	LSPB	+	published / reissued	
AU2011227083 AA	20121004	LSPB	+	published / reissued	
AU2011227083 AA	20131114	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU2011227083 AA	20131114	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU2011227083 AA	20171012	LSLE	-MK14	PATENT CEASED SECTION 143(A) (ANNUAL FEES NOT PAID) OR EXPIRED	
AU2011227083 AA	20171012	LSLE	-MK14	PATENT CEASED SECTION 143(A) (ANNUAL FEES NOT PAID) OR EXPIRED	
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AU2011227083 BB	20310318	PEXP		Calculated Patent Term Expiry	
CA2784240 AA	20130927	LSPB	+	published / reissued	
CA2784240 C	20140708	LSGT	+	granted / extensions (spc, cpc, pte)	
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CY1115552 T1	20170104	LSGT	+	granted / extensions (spc, cpc, pte)	
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DK2644189 T3	20140818	LSGT	+	granted / extensions (spc, cpc, pte)	
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EP2547333 A2	20130123	LSPB	+	published / reissued	
EP2547333 A2	20130123	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20121010
EP2547333 A4	20140430	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	EFFECTIVE DATE : 20140402
EP2547333 A4	20160803	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20160701
EP2547333 A4	20170412	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20170317
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EP2547333 B1	20170831	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
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EP2547333 B1	20170928	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602011040891 COUNTRY OF REF DOCUMENT : DE
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EP2547333 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20180312 YEAR OF FEE PAYMENT : 8
EP2547333 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20180222 YEAR OF FEE PAYMENT : 8
EP2547333 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 : 8
EP2547333 B1	20180801	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20180524
EP2547333 B1	20180831	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 : 20170823
EP2547333 B1	20181031	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP2547333 B1	20181121	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20180318
EP2547333 B1	20181130	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 : 20170823
EP2547333 B1	20181231	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 : 20180318
EP2547333 B1	20190131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20181228 YEAR OF FEE PAYMENT : 9

				OFFICE TO EPO]	
EP2547333 B1	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 : 20180318
EP2547333 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 : 20180331
EP2547333 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 : 20180331
EP2547333 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 : 20180331
EP2547333 B1	20190228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20181221 YEAR OF FEE PAYMENT : 9
EP2547333 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20181219 YEAR OF FEE PAYMENT : 9
EP2547333 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20181213 YEAR OF FEE PAYMENT : 9
EP2547333 B1	20200131	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 : 20180318
EP2547333 B1	20200331	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 : 20170823
EP2547333 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20200225 YEAR OF FEE PAYMENT : 10
EP2547333 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20200214 YEAR OF FEE PAYMENT : 10
EP2547333 B1	20200529	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 : 20170823
EP2547333 B1	20200529	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 : 20110318
EP2547333 B1	20200630	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 NON-PAYMENT OF DUE FEES LAPSED DATE : 20170823
EP2547333 B1	20200630	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 : 20170823
EP2547333 B1	20200630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20200219 YEAR OF FEE PAYMENT : 10
EP2547333 B1	20310318	PEXP		Calculated Patent Term Expiry	
EP2644189 A1	20131002	LSPB	+	published / reissued	
EP2644189 A1	20140312	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20140128
EP2644189 A1	20140326	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20140228
EP2644189 A1	20151030	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20150922 YEAR OF FEE PAYMENT : 4
EP2644189 A1	20151030	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20150917 YEAR OF FEE PAYMENT : 4
EP2644189 A1	20151030	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20150928 YEAR OF FEE PAYMENT : 4
EP2644189 A1	20151130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20150922 YEAR OF FEE PAYMENT : 4
EP2644189 A1	20160129	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20150930 YEAR OF FEE PAYMENT : 4
EP2644189 A1	20170228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20161212 YEAR OF FEE PAYMENT : 5
EP2644189 A1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170222 YEAR OF FEE PAYMENT : 5
EP2644189 A1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20170223 YEAR OF FEE PAYMENT : 5
EP2644189 B1	20140514	LSGT	+	granted / extensions (spc, cpc, pte)	
EP2644189 B1	20140514	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP2644189 B1	20140615	LSNP	REG	REFERENCE TO A	REF COUNTRY CODE : AT

				NATIONAL CODE	REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 667684 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20140615
EP2644189 B1	20140618	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP2644189 B1	20140618	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602012001741 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20140618
EP2644189 B1	20140923	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2497665 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) : EFFECTIVE DATE : 20140923
EP2644189 B1	20140924	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : T3
EP2644189 B1	20141023	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : EP REF DOCUMENT NUMBER : 20140401645 COUNTRY OF REF DOCUMENT : GR EFFECTIVE DATE : 20140930
EP2644189 B1	20141027	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : LT REF LEGAL EVENT CODE : MG4D
EP2644189 B1	20141031	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 : 20140514
EP2644189 B1	20141031	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 : 20140814
EP2644189 B1	20141031	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 : 20140914
EP2644189 B1	20141128	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 : 20140514
EP2644189 B1	20141128	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 : 20140514
EP2644189 B1	20141128	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 : 20140514
EP2644189 B1	20150130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE	COUNTRY OF REF DOCUMENT : BE 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 : 20140514
EP2644189 B1	20150217	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 602012001741 COUNTRY OF REF DOCUMENT : DE
EP2644189 B1	20150422	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20150217
EP2644189 B1	20150430	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 : 20140514
EP2644189 B1	20150528	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 602012001741 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20150217
EP2644189 B1	20150828	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HU REF LEGAL EVENT CODE : AG4A REF DOCUMENT NUMBER : E023276 COUNTRY OF REF DOCUMENT : HU
EP2644189 B1	20150922	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
EP2644189 B1	20151030	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20150902 YEAR OF FEE PAYMENT : 4
EP2644189 B1	20151030	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20150918 YEAR OF FEE PAYMENT : 4
EP2644189 B1	20151030	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20150901 YEAR OF FEE PAYMENT : 4
EP2644189 B1	20151030	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20150904 YEAR OF FEE PAYMENT : 4
EP2644189 B1	20151030	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK PAYMENT DATE : 20150902 YEAR OF FEE PAYMENT : 4
EP2644189 B1	20151030	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20150911 YEAR OF FEE PAYMENT : 4
EP2644189 B1	20151030	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG PAYMENT DATE : 20150914 YEAR OF FEE PAYMENT : 4
EP2644189 B1	20151030	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE PAYMENT DATE : 20150911 YEAR OF FEE PAYMENT : 4
EP2644189 B1	20151103	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : RO REF LEGAL EVENT CODE : EPE
EP2644189 B1	20151130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20150901

				OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	YEAR OF FEE PAYMENT : 4
EP2644189 B1	20151130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20151008 YEAR OF FEE PAYMENT : 4
EP2644189 B1	20151130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20150918 YEAR OF FEE PAYMENT : 4
EP2644189 B1	20151130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20150918 YEAR OF FEE PAYMENT : 4
EP2644189 B1	20151130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20150923 YEAR OF FEE PAYMENT : 4
EP2644189 B1	20151130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20150915 YEAR OF FEE PAYMENT : 4
EP2644189 B1	20151130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20150910 YEAR OF FEE PAYMENT : 4
EP2644189 B1	20151231	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20150918 YEAR OF FEE PAYMENT : 4
EP2644189 B1	20160229	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20150917 YEAR OF FEE PAYMENT : 4
EP2644189 B1	20160229	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY PAYMENT DATE : 20150914 YEAR OF FEE PAYMENT : 4
EP2644189 B1	20160531	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 : 20140514
EP2644189 B1	20160630	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 : 20140514
EP2644189 B1	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20140906 YEAR OF FEE PAYMENT : 3
EP2644189 B1	20170222	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 : 5
EP2644189 B1	20170228	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 : 20160930

EP2644189 B1	20170413	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : CH OWNER : INNOPHARMA, INC., US REF LEGAL EVENT CODE : PFA OLDPARTY : FORMER OWNER: INNOPHARMA, INC., US
EP2644189 B1	20170417	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : EE REF LEGAL EVENT CODE : MM4A REF DOCUMENT NUMBER : E009627 COUNTRY OF REF DOCUMENT : EE EFFECTIVE DATE : 20160930
EP2644189 B1	20170424	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DK REF LEGAL EVENT CODE : EBP EFFECTIVE DATE : 20160930
EP2644189 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 : 20160906
EP2644189 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 NON-PAYMENT OF DUE FEES LAPSED DATE : 20160907
EP2644189 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170227 YEAR OF FEE PAYMENT : 5
EP2644189 B1	20170428	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP2644189 B1	20170502	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SE REF LEGAL EVENT CODE : EUG
EP2644189 B1	20170531	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 : 20160906
EP2644189 B1	20170531	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 : 20160906
EP2644189 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 : 20170306
EP2644189 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20170224 YEAR OF FEE PAYMENT : 5
EP2644189 B1	20170602	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SK REF LEGAL EVENT CODE : MM4A REF DOCUMENT NUMBER : E 17087 COUNTRY OF REF DOCUMENT : SK EFFECTIVE DATE : 20160906
EP2644189 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 NON-PAYMENT OF DUE FEES LAPSED DATE : 20161001
EP2644189 B1	20170630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20170227 YEAR OF FEE PAYMENT : 5

				FROM NATIONAL OFFICE TO EPO]	
EP2644189 B1	20170705	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : ML REF DOCUMENT NUMBER : 20140401645 COUNTRY OF REF DOCUMENT : GR EFFECTIVE DATE : 20170411
EP2644189 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
EP2644189 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 NON-PAYMENT OF DUE FEES LAPSED DATE : 20160930
EP2644189 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
EP2644189 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 NON-PAYMENT OF DUE FEES LAPSED DATE : 20160906
EP2644189 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
EP2644189 B1	20170731	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SI REF LEGAL EVENT CODE : KO00 EFFECTIVE DATE : 20170612
EP2644189 B1	20170823	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 6
EP2644189 B1	20170831	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 : 20160906
EP2644189 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 NON-PAYMENT OF DUE FEES LAPSED DATE : 20170406
EP2644189 B1	20170831	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 : 20160907
EP2644189 B1	20170831	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 : 20160907
EP2644189 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20170829 YEAR OF FEE PAYMENT : 6

EP2644189 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20170915 YEAR OF FEE PAYMENT : 6
EP2644189 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 : 6
EP2644189 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 NON-PAYMENT OF DUE FEES LAPSED DATE : 20160930
EP2644189 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20170918 YEAR OF FEE PAYMENT : 6
EP2644189 B1	20180131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170928 YEAR OF FEE PAYMENT : 6
EP2644189 B1	20180228	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 : 20160906
EP2644189 B1	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20171004 YEAR OF FEE PAYMENT : 6
EP2644189 B1	20180531	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 : 20160906
EP2644189 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 : 20140514
EP2644189 B1	20180817	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 7
EP2644189 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 : 20140514
EP2644189 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180815 YEAR OF FEE PAYMENT : 7
EP2644189 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20180920 YEAR OF FEE PAYMENT : 7
EP2644189 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 : 7
EP2644189 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID	COUNTRY OF REF DOCUMENT : FR

				TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	PAYMENT DATE : 20180817 YEAR OF FEE PAYMENT : 7
EP2644189 B1	20181115	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MM01 REF DOCUMENT NUMBER : 667684 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20170906
EP2644189 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 : 7
EP2644189 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 NON-PAYMENT OF DUE FEES LAPSED DATE : 20170906
EP2644189 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 : 7
EP2644189 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20190813 YEAR OF FEE PAYMENT : 8
EP2644189 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20190826 YEAR OF FEE PAYMENT : 8
EP2644189 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20190924 YEAR OF FEE PAYMENT : 8
EP2644189 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20190819 YEAR OF FEE PAYMENT : 8
EP2644189 B1	20191231	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20190827 YEAR OF FEE PAYMENT : 8
EP2644189 B1	20200228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20191001 YEAR OF FEE PAYMENT : 8
EP2644189 B1	20320906	PEXP		Calculated Patent Term Expiry	
ES2497665 T3	20140923	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2497665 T3	20320906	PEXP		Calculated Patent Term Expiry	
JP2013203738 A2	20131007	LSPB	+	published / reissued	
JP2013203738 A2	20140108	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20140107
JP2013203738 A2	20140401	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20140331
JP2013203738 A2	20141203	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20141202

JP2013203738 A2	20150212	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20150212
JP2013203738 A2	20150521	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2013203738 A2	20150603	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20150602
JP2013203738 A2	20150709	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20150701
JP2013203738 A2	20150710	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 5774561 COUNTRY OF REF DOCUMENT : JP
JP2013522320 T2	20130613	LSPB	+	published / reissued	
JP2013522320 T2	20140416	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20140415
JP2013522320 T2	20140711	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20140710
JP2013522320 T2	20140820	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20140819
JP2013522320 T2	20141002	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20141001
JP2013522320 T2	20141029	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2013522320 T2	20141105	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20141104
JP2013522320 T2	20141211	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20141203
JP2013522320 T2	20141212	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 5661912 COUNTRY OF REF DOCUMENT : JP
JP5661912 B2	20150128	LSGT	+	granted / extensions (spc, cpc, pte)	
JP5661912 B2	20141106	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP5661912 B2	20141209	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP5661912 B2	20141212	LSGT	+R150	特許証 (Patent certificate)	
JP5661912 B2	20171207	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5661912 B2	20171212	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5661912 B2	20181206	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5661912 B2	20181211	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250

JP5661912 B2	20191128	LSFE	R20	特許料納付書 (Patent fee payment form)	EFFECTIVE DATE : 20191127
JP5661912 B2	20191203	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5661912 B2	20310318	PEXP		Calculated Patent Term Expiry	
JP5774561 B2	20150909	LSGT	+	granted / extensions (spc, cpc, pte)	
JP5774561 B2	20150604	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP5774561 B2	20150604	LSGT	+A01	特許査定書 (Decision of patent grant)	EFFECTIVE DATE : 20150602
JP5774561 B2	20150707	LSFE	R100	特許料納付書 (Patent fee payment form)	TEXT : 51501328884 EFFECTIVE DATE : 20150701
JP5774561 B2	20150707	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP5774561 B2	20150710	LSGT	+R150	特許証 (Patent certificate)	
JP5774561 B2	20150710	LSGT	+R150	特許証 (Patent certificate)	EFFECTIVE DATE : 20150721
JP5774561 B2	20180830	LSFE	R20	特許料納付書 (Patent fee payment form)	TEXT : 51801745201 EFFECTIVE DATE : 20180827
JP5774561 B2	20180830	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5774561 B2	20180904	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5774561 B2	20190704	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5774561 B2	20190704	LSFE	R20	特許料納付書 (Patent fee payment form)	TEXT : 51901377778 EFFECTIVE DATE : 20190628
JP5774561 B2	20190709	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5774561 B2	20200629	LSFE	R20	特許料納付書 (Patent fee payment form)	TEXT : 52001304682 EFFECTIVE DATE : 20200626
JP5774561 B2	20200630	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5774561 B2	20320823	PEXP		Calculated Patent Term Expiry	
KR101530942 B1	20150623	LSGT	+	granted / extensions (spc, cpc, pte)	
KR101530942 B1	20121226	LSES	A201	REQUEST FOR EXAMINATION	
KR101530942 B1	20180618	LSLE	-LAPS	LAPSE DUE TO UNPAID ANNUAL FEE	
KR101530942 B1	20310318	PEXP		Calculated Patent Term Expiry	
KR20130010902 A	20130129	LSPB	+	published / reissued	
KR20130010902 A	20140228	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR20130010902 A	20140917	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR20130010902 A	20150320	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
KR20130010902 A	20150617	LSGT	+GRNT	WRITTEN DECISION TO GRANT	

NZ602392 A	20140328	LSPB	+	published / reissued	
NZ602392 A	20140725	LSGT	+PSEA	PATENT SEALED	
NZ602392 A	20150327	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	TEXT : PATENT RENEWED FOR 1 YEAR UNTIL 18 MAR 2016 BY DENNEMEYER + CO. EFFECTIVE DATE : 20150310
NZ602392 A	20160331	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	TEXT : PATENT RENEWED FOR 1 YEAR UNTIL 18 MAR 2017 BY DENNEMEYER + CO EFFECTIVE DATE : 20160315
NZ602392 A	20170929	LSLE	-LAPS	PATENT LAPSED	
PL2644189 T3	20141231	LSGT	+	granted / extensions (spc, cpc, pte)	
PL2644189 T4	20150430	LSGT	+	granted / extensions (spc, cpc, pte)	
PT2644189 T	20140829	LSGT	+	granted / extensions (spc, cpc, pte)	
PT2644189 T	20320906	PEXP		Calculated Patent Term Expiry	
RU2012144316 A	20140427	LSPB	+	published / reissued	
RU2529800 C2	20140927	LSGT	+	granted / extensions (spc, cpc, pte)	
RU2529800 C2	20171218	LSLE	-MM4A	THE PATENT IS INVALID DUE TO NON-PAYMENT OF FEES	EFFECTIVE DATE : 20170319
RU2529800 C2	20310318	PEXP		Calculated Patent Term Expiry	
SI2644189 T1	20141030	LSGT	+	granted / extensions (spc, cpc, pte)	
SI2644189 T1	20320906	PEXP		Calculated Patent Term Expiry	
US2011230441 AA	20110922	LSPB	+	published / reissued	
US2011230441 AA	20111201	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INNOPHARMA LLC, NEW JERSEY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:SOPPIMATH, KUMARESH; PEJAVER, SATISH; PATEL, KANAIYALAL R.; AND OTHERS; SIGNING DATES FROM 20111114 TO 20111116; REEL/FRAME:027310/0092
US2011230441 AA	20120620	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INNOPHARMA, INC., NEW JERSEY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:INNOPHARMA LLC; REEL/FRAME:028413/0474 EFFECTIVE DATE : 20120106
US2011230441 AA	20131029	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ATHYRIUM OPPORTUNITIES FUND (A) LP, NEW YORK OLDPARTY : NOTICE OF GRANT OF SECURITY INTEREST IN PATENTS; ASSIGNOR:INNOPHARMA, INC.; REEL/FRAME:031508/0055 EFFECTIVE DATE : 20131023
US2011230441 AA	20140924	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INNOPHARMA, INC., NEW JERSEY OLDPARTY : TERMINATION AND RELEASE OF SECURITY INTEREST IN PATENTS; ASSIGNOR:ATHYRIUM OPPORTUNITIES FUND (A) LP, AS ADMINISTRATIVE AGENT; REEL/FRAME:033812/0595 EFFECTIVE DATE : 20140924

US2011230441 AA	20150603	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2012172808 AA	20120705	LSPB	+	published / reissued	
US2012172808 AA	20120816	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INNOPHARMA, INC., NEW JERSEY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:INNOPHARMA, LLC; REEL/FRAME:028800/0992 EFFECTIVE DATE : 20120106
US2012172808 AA	20120822	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2012322762 AA	20121220	LSPB	+	published / reissued	
US2012322762 AA	20131029	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ATHYRIUM OPPORTUNITIES FUND (A) LP, NEW YORK OLDPARTY : NOTICE OF GRANT OF SECURITY INTEREST IN PATENTS; ASSIGNOR:INNOPHARMA, INC.; REEL/FRAME:031508/0055 EFFECTIVE DATE : 20131023
US2012322762 AA	20140924	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INNOPHARMA, INC., NEW JERSEY OLDPARTY : TERMINATION AND RELEASE OF SECURITY INTEREST IN PATENTS; ASSIGNOR:ATHYRIUM OPPORTUNITIES FUND (A) LP, AS ADMINISTRATIVE AGENT; REEL/FRAME:033812/0595 EFFECTIVE DATE : 20140924
US2012322762 AA	20150729	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2012322763 AA	20121220	LSPB	+	published / reissued	
US2012322763 AA	20131029	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ATHYRIUM OPPORTUNITIES FUND (A) LP, NEW YORK OLDPARTY : NOTICE OF GRANT OF SECURITY INTEREST IN PATENTS; ASSIGNOR:INNOPHARMA, INC.; REEL/FRAME:031508/0055 EFFECTIVE DATE : 20131023
US2012322763 AA	20140924	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INNOPHARMA, INC., NEW JERSEY OLDPARTY : TERMINATION AND RELEASE OF SECURITY INTEREST IN PATENTS; ASSIGNOR:ATHYRIUM OPPORTUNITIES FUND (A) LP, AS ADMINISTRATIVE AGENT; REEL/FRAME:033812/0595 EFFECTIVE DATE : 20140924
US2012322763 AA	20151021	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US8263578 BB	20120911	LSGT	+	granted / extensions (spc, cpc, pte)	
US8263578 BB	20120518	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INNOPHARMA LLC, NEW JERSEY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:PURI, NAVNEET; DESU, HARI; SODUM, RAMA; AND OTHERS; SIGNING DATES FROM 20111114 TO 20111116; REEL/FRAME:028235/0471
US8263578 BB	20120822	LSGT	PAT1	Patented Case	
US8263578 BB	20131029	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ATHYRIUM OPPORTUNITIES FUND (A) LP, NEW YORK OLDPARTY : NOTICE OF GRANT OF SECURITY INTEREST IN PATENTS; ASSIGNOR:INNOPHARMA, INC.; REEL/FRAME:031508/0055 EFFECTIVE DATE : 20131023

US8263578 BB	20140924	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INNOPHARMA, INC., NEW JERSEY OLDPARTY : TERMINATION AND RELEASE OF SECURITY INTEREST IN PATENTS; ASSIGNOR:ATHYRIUM OPPORTUNITIES FUND (A) LP, AS ADMINISTRATIVE AGENT; REEL/FRAME:033812/0595 EFFECTIVE DATE : 20140924
US8263578 BB	20160307	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8263578 BB	20200218	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US8263578 BB	20320327	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
US9061037 BB	20150623	LSGT	+	granted / extensions (spc, cpc, pte)	
US9061037 BB	20150603	LSGT	PAT1	Patented Case	
US9061037 BB	20181115	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US9061037 BB	20310318	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
US9107821 BB	20150818	LSGT	+	granted / extensions (spc, cpc, pte)	
US9107821 BB	20120822	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INNOPHARMA LLC, NEW JERSEY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:SOPPIMATH, KUMARESH; PEJAVER, SATISH; PATEL, KANAIYALAL R.; AND OTHERS; SIGNING DATES FROM 20111114 TO 20111116; REEL/FRAME:028831/0834
US9107821 BB	20120822	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INNOPHARMA INC., NEW JERSEY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:INNOPHARMA LLC; REEL/FRAME:028831/0847 EFFECTIVE DATE : 20120106
US9107821 BB	20150729	LSGT	PAT1	Patented Case	
US9107821 BB	20190116	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US9107821 BB	20320822	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
US9180093 BB	20151110	LSGT	+	granted / extensions (spc, cpc, pte)	
US9180093 BB	20120822	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INNOPHARMA LLC, NEW JERSEY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:SOPPIMATH, KUMARESH; PEJAVER, SATISH; PATEL, KANAIYALAL R.; AND OTHERS; SIGNING DATES FROM 20111114 TO 20111116; REEL/FRAME:028831/0834
US9180093 BB	20120822	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : INNOPHARMA INC., NEW JERSEY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:INNOPHARMA LLC; REEL/FRAME:028831/0847 EFFECTIVE DATE : 20120106

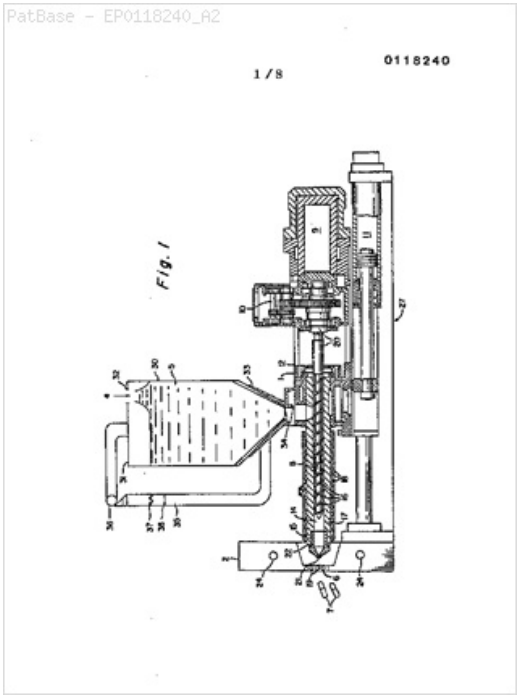
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US9180093 BB	20190411	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US9180093 BB	20321001	PEXP		Calculated Patent Term Expiry (PTA 40 days and a terminal disclaimer has been filed)	
WO11116286 A2	20110922	LSPB	+	published / reissued	
WO11116286 A4	20120912	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2011227083 COUNTRY OF REF DOCUMENT : AU
WO11116286 A4	20120914	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2013500229 COUNTRY OF REF DOCUMENT : JP
WO11116286 A4	20120917	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2011757060 COUNTRY OF REF DOCUMENT : EP
WO11116286 A4	20120918	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE	REF COUNTRY CODE : DE
WO11116286 A4	20121004	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2011227083 COUNTRY OF REF DOCUMENT : AU DATE OF REF DOCUMENT : 20110318 KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO11116286 A4	20121018	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 20127027272 COUNTRY OF REF DOCUMENT : KR KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO11116286 A4	20121018	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2012144316 COUNTRY OF REF DOCUMENT : RU

46) Family number: 34575021 (EP0118240A2)

Title: PROCESS FOR INJECTION MOULDING STARCH.

Abstract: Capsules and other shaped products formed from a moldable starch composition in an injection molding device is dislosed in the present invention. The composition comprising starch having a molecular mass range of 10,000 to 20,000,000 Dalton, and a water content range from 5 to 30 percent by weight. The starch contains about 0 to 100 percent of amylose, and about 100 to 0 percent of amylo-pectin.

Classifications:
International (IPC 8-9): A23L1/00 A23L1/0522 A61J3/07 A61K47/36 A61K9/48 B01J13/02 B29C45/00 B29C65/56 B29C65/58 C08L21/00 C08L3/00 C08L33/00 C08L33/02 C08L7/00 (Advanced/Invention); A23L1/00 A23L1/0522 A61J3/07 A61K47/36 B01J13/02 B29C65/56 B29K1/00 C08L21/00 C08L33/00 C08L7/00 (Advanced/Non-invention); A23L1/00 A23L1/0522 A61J3/07 A61K47/36 A61K9/48 B01J13/02 B29C45/00 B29C65/56 C08L21/00 C08L3/00 C08L33/00 C08L7/00 (Core/Invention)
International (IPC 1-7): A61J3/07 A61K9/26 A61K9/48 A61K9/58 B29C39/02 B29C45/00 B29C45/48 C08J5/00 C08L1/02 C08L3/00 C08L3/02
CPC: A61K9/4816 B29C45/0001 B29K2003/00 B29K2995/0059 B29L2031/7174 C08L3/00
European: A61K9/48B B29C45/00B B29C65/56 B29C65/58 B29C66/534 B29C66/71 C08L3/00 L29C65/56 L29C66/71 L29K3/00 L29K995/00F14 L29L31/7174



Family:

Publication number	Publication date	Application number	Application date
AT44975 E	19890815	AT19840300940T	19840214
AU198424656 A1	19840823	AU19840024656	19840216
AU572119 B2	19880505	AU19840024656	19840216
BG46154 A3	19891016	BG19840066412	19840207
CA1238738 A1	19880628	CA19840447377	19840214
DD218113 A5	19850130	DD19840260133	19840216
DD218113 B5	20030515	DD19840260133	19840216
DE3479129 D1	19890831	DE19843479129	19840214
DE3479129 D1	19890831	DE19843479129T	19840214
DK76584 A	19840819	DK19840000765	19840217
DK76584 A0	19840217	DK19840000765	19840217
EP0118240 A2	19840912	EP19840300940	19840214
EP0118240 A3	19850828	EP19840300940	19840214
EP0118240 B1	19890726	EP19840300940	19840214
EP0118240 B2	19970618	EP19840300940	19840214
FI81823 B	19900831	FI19840000614	19840215
FI81823 C	19901210	FI19840000614	19840215
FI840614 A	19840819	FI19840000614	19840215
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IE840380 L	19840818	IE19840000380	19840217
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NO170590 B	19920727	NO19840000598	19840217
NO170590 C	19921104	NO19840000598	19840217
NO840598 A	19840820	NO19840000598	19840217
NO840598 L	19840820	NO19840000598	19840217
NZ207188 A	19860910	NZ19840207188	19840217
PT78123 A	19840301	PT19840078123	19840217
PT78123 B	19861021	PT19840078123	19840217
TR23047 A	19890214	TR19840001152	19840217

Priority:

US19830467982 19830218
EP19840300940 19840214
US19840579318 19840213
US19840579318 19840218
CA19840447377 19840214

Probable Assignee: WARNER LAMBERT CO

Assignee(s): (std): WARNER LAMBERT CO

Assignee(s): WARNER LAMBERT CO LLC ; WARNER LAMBERT COMP ; WITTWER FRITZ ; WARNER LAMBERT COMPANY ; WARNER LAMBERT CO US ; TOMKA IVAN ; NOVON INT INC ; WARNER LAMBERT COMPANY US

Inventor(s): (std): WITTWER F ; WITTWER FRITZ ; TOMKA I ; TOMKA IVAN

Inventor(s): TOMKA IVAN CH ; WITTWER FRITZ CH ; IVAN TOMKA ; FRITZ WITTWER
Agent(s): SHELSTON IP PTY LTD; SHELSTON IP; MACRAE AND CO; REINHOLD COHN AND PARTNERS
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
AT44975 E	19890815	LSGT	+	granted / extensions (spc, cpc, pte)	
AT44975 E	20031115	LSLE	-REN	CEASED DUE TO NON-PAYMENT OF THE ANNUAL FEE	
AT44975 E	20040214	PEXP		Calculated Patent Term Expiry	
AU198424656 A1	19840823	LSPB	+	published / reissued	
AU572119 B2	19880505	LSGT	+	granted / extensions (spc, cpc, pte)	
AU572119 B2	20040923	LSLE	-MK14	PATENT CEASED SECTION 143(A) (ANNUAL FEES NOT PAID) OR EXPIRED	
AU572119 B2	20040216	PEXP		Calculated Patent Term Expiry	
BG46154 A3	19891016	LSGT	+	granted / extensions (spc, cpc, pte)	
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DD218113 A5	19850130	LSGT	+	granted / extensions (spc, cpc, pte)	
DD218113 A5	19990610	LSAS	RPI	CHANGE IN THE PERSON, NAME OR ADDRESS OF THE PATENTEE (SEARCHES ACCORDING TO ART. 11 AND 12 EXTENSION ACT)	
DD218113 A5	19990624	LSES	+EP	REQUEST FOR EXAMINATION UNDER PARAGRAPH 12(1) FILED	
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DD218113 B5	20030515	LSGT	+	granted / extensions (spc, cpc, pte)	
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EP0118240 A2	19840912	LSPB	+	published / reissued	
EP0118240 A2	19850306	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19841217
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EP0118240 B2	19970715	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : AEN TEXT : AUFRECHTERHALTUNG DES PATENTES IN GEAENDERTER FORM
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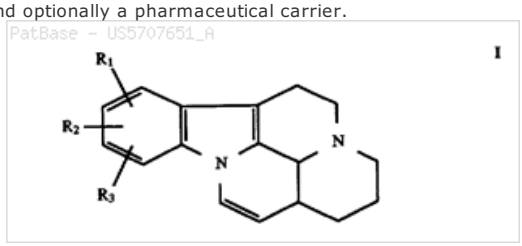
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EP0118240 B2	20040315	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP0118240 B2	20040330	LSLE	-EUG	SE: EUROPEAN PATENT HAS LAPSED	REF COUNTRY CODE : EP
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FI81823 B	20040215	PEXP		Calculated Patent Term Expiry	
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NZ207188 A	19860910	LSPB	+	published / reissued	
PT78123 A	19840301	LSPB	+	published / reissued	
PT78123 B	19861021	LSGT	+	granted / extensions (spc, cpc, pte)	
PT78123 B	20040217	PEXP		Calculated Patent Term Expiry	
TR23047 A	19890214	LSGT	+	granted / extensions (spc, cpc, pte)	
TR23047 A	20040217	PEXP		Calculated Patent Term Expiry	

47) Family number: 9487021 (US5707651A)

Title: SOFT CAPSULES CONTAINING DINREBURNAMENINE COMPOUNDS

Abstract: A soft capsule containing a) a capsule casing containing **gelatin** and optionally a plasticizer and other additives, b) a compound of the formula I wherein R1, R2 and R3 are individually selected from the group consisting of hydrogen, halogen, alkyl and alkoxy of 1 to 5 carbon atoms, -OH, -CF3, -NO2, -NH2, alkylamino and dialkylamino of 1 to 5 alkyl carbon atoms and acylamino of acyl of an aliphatic carboxylic acid of 1 to 6 carbon atoms or a non-toxic, pharmaceutically acceptable acid addition salt thereof and c) at least one mineral oil and optionally a pharmaceutical carrier.



Classifications:
International (IPC 8-9): A61J3/07 A61K31/435 A61K31/4375 A61K31/445 A61K9/48 A61P25/00 A61P25/24 A61P25/26 A61P25/28 A61P43/00 C07D471/22 (Advanced/Invention);
A61J3/07 A61K31/435 A61K31/4353 A61K9/48 A61P25/00 A61P43/00 C07D471/00 (Core/Invention)
International (IPC 1-7): A61J3/07 A61K31/435 A61K31/445 A61K31/475 A61K9/48 C07D209/00 C07D211/26 C07D211/72 C07D471/22 C07D487/22
CPC: A61K9/4858 A61K31/4375 A61P25/00 A61P25/24 A61P25/26 A61P25/28 A61P43/00
European: A61K31/4375 A61K9/48H4
US: 424/451 424/456

Family:

Publication number	Publication date	Application number	Application date
AT171618 E	19981015	AT19960400419T	19960228
CA2170844 AA	19960904	CA19962170844	19960301
DE69600702 D1	19981105	DE19966000702	19960228
DE69600702 D1	19981105	DE19966000702T	19960228
DE69600702 T2	19990401	DE19966000702T	19960228
DK0729749 T3	19990621	DK19960400419T	19960228
EP0729749 A1	19960904	EP19960400419	19960228
EP0729749 B1	19980930	EP19960400419	19960228
ES2122767 T3	19981216	ES19960400419T	19960228
FR2731154 A1	19960906	FR19950002482	19950303
FR2731154 B1	19970509	FR19950002482	19950303
JP8325148 A2	19961210	JP19960068933	19960301
US5707651 A	19980113	US19960608284	19960228

Priority:
FR19950002482 19950303 CA19962170844 19960301

Probable Assignee: AVENTIS PHARMA SA

Assignee(s): (std): HOECHST MARION ROUSSEL INC ; ROUSSEL UCLAF

Assignee(s): UCLAF ROUSSEL ; HOECHST MARION ROUSSEL PUTEAUX FR ; METZIGER PIERRE ; AVENTIS PHARMA SA ; BECOURT PHILIPPE ; DUBOIS JEAN LUC ; HOECHST MARION ROUSSEL

Inventor(s): (std): BECOURT PHILIPPE ; DUBOIS JEAN LUC ; METZIGER PIERRE ; PIEERU METSUTOJIJIE ; JIYANRIYUKU DEYUBOWA ; FUIRIPU BUKUURU

Inventor(s): METZIGER PIERRE F 67450 LAMPERTHEIM FR ; DUBOIS JEAN LUC F 75019 PARIS FR ; BECOURT PHILIPPE F 91300 MASSY FR

Agent(s): ROBIC

Designated states: AT BE CH DE DK ES 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
AT171618 E	19981015	LSGT	+	granted / extensions (spc, cpc, pte)	
AT171618 E	19990415	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	
AT171618 E	20041115	LSLE	-REN	CEASED DUE TO NON-PAYMENT OF THE ANNUAL FEE	
AT171618 E	20160228	PEXP		Calculated Patent Term Expiry	
CA2170844 AA	19960904	LSPB	+	published / reissued	
CA2170844 AA	20030207	LSES	+EEER	EXAMINATION REQUEST	
CA2170844 AA	20050301	LSLE	-FZDE	DEAD	
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DE69600702 D1	20030403	LSAS	8327	CHANGE IN THE	PARTYTYPE : OWNER

				PERSON/NAME/ADDRESS OF THE PATENT OWNER	OWNER : AVENTIS PHARMA S.A., ANTONY CEDEX, FR
DE69600702 D1	20030403	LSAS	8327	CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER	PARTYTYPE : OWNER OWNER : AVENTIS PHARMA S.A., ANTONY CEDEX, FR
DE69600702 D1	20041209	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
DE69600702 D1	20041209	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
DE69600702 T2	19990401	LSGT	+	granted / extensions (spc, cpc, pte)	
DE69600702 T2	19991028	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE69600702 T2	20030403	LSAS	8327	CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER	PARTYTYPE : OWNER OWNER : AVENTIS PHARMA S.A., ANTONY CEDEX, FR
DE69600702 T2	20041209	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
DE69600702 T2	20160228	PEXP		Calculated Patent Term Expiry	
DK0729749 T3	19990621	LSGT	+	granted / extensions (spc, cpc, pte)	
DK0729749 T3	20160228	PEXP		Calculated Patent Term Expiry	
EP0729749 A1	19960904	LSPB	+	published / reissued	
EP0729749 A1	19970502	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19970304
EP0729749 A1	19970806	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 19970618
EP0729749 A1	19980610	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : HOECHST MARION ROUSSEL
EP0729749 B1	19980930	LSGT	+	granted / extensions (spc, cpc, pte)	
EP0729749 B1	19980930	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP0729749 B1	19981216	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2122767 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP0729749 B1	19981216	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D TEXT : FRENCH
EP0729749 B1	19990922	LSGT	+26N	NO OPPOSITION FILED	
EP0729749 B1	20010713	LSAS	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : TP
EP0729749 B1	20021129	LSAS	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PFA TEXT : HOECHST MARION ROUSSEL TRANSFER- AVENTIS PHARMA S.A.
EP0729749 B1	20030109	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20030109 YEAR OF FEE PAYMENT : 8
EP0729749 B1	20030114	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20030114 YEAR OF FEE PAYMENT : 8
EP0729749 B1	20030115	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20030115 YEAR OF FEE PAYMENT : 8
EP0729749 B1	20030117	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20030117

				NATIONAL OFFICE TO EPO]	YEAR OF FEE PAYMENT : 8
EP0729749 B1	20030203	LSAS	NLS	NL: ASSIGNMENTS OF EP-PATENTS	PARTYTYPE : OWNER REF COUNTRY CODE : EP OWNER : AVENTIS PHARMA S.A.
EP0729749 B1	20030214	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20030214 YEAR OF FEE PAYMENT : 8
EP0729749 B1	20030218	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20030218 YEAR OF FEE PAYMENT : 8
EP0729749 B1	20030218	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20030218 YEAR OF FEE PAYMENT : 8
EP0729749 B1	20030219	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20030219 YEAR OF FEE PAYMENT : 8
EP0729749 B1	20030220	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20030220 YEAR OF FEE PAYMENT : 8
EP0729749 B1	20030224	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20030224 YEAR OF FEE PAYMENT : 8
EP0729749 B1	20030225	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20030225 YEAR OF FEE PAYMENT : 8
EP0729749 B1	20030227	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20030227 YEAR OF FEE PAYMENT : 8
EP0729749 B1	20030331	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20030331 YEAR OF FEE PAYMENT : 8
EP0729749 B1	20030331	LSAS	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : PT REF LEGAL EVENT CODE : PC4A TEXT : AVENTIS PHARMA, S.A. FR EFFECTIVE DATE : 20030110
EP0729749 B1	20030429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20030429 YEAR OF FEE PAYMENT : 8
EP0729749 B1	20040228	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 : 20040228
EP0729749 B1	20040228	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 : 20040228
EP0729749 B1	20040228	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 : 20040228
EP0729749 B1	20040228	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 : 20040228
EP0729749 B1	20040229	LSLE	-PG25	LAPSED IN A	COUNTRY OF REF DOCUMENT :

				CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	CH NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20040229
EP0729749 B1	20040229	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 : 20040229
EP0729749 B1	20040301	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 : 20040301
EP0729749 B1	20040301	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 : 20040301
EP0729749 B1	20040301	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 : 20040301
EP0729749 B1	20040301	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 : 20040301
EP0729749 B1	20040831	LSLE	-BERE	BE: LAPSED	PARTYTYPE : OWNER REF COUNTRY CODE : EP OWNER : S.A. *AVENTIS PHARMA EFFECTIVE DATE : 20040228
EP0729749 B1	20040831	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 : 20040831
EP0729749 B1	20040901	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 : 20040901
EP0729749 B1	20040901	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 : 20040901
EP0729749 B1	20040903	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 : 20040903
EP0729749 B1	20040927	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DK REF LEGAL EVENT CODE : EBP
EP0729749 B1	20041015	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP0729749 B1	20041020	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP
EP0729749 B1	20041029	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 : 20041029
EP0729749 B1	20041101	LSLE	-NLV4	NL: LAPSED OR	REF COUNTRY CODE : EP

				ANULLED DUE TO NON-PAYMENT OF THE ANNUAL FEE	EFFECTIVE DATE : 20040901
EP0729749 B1	20041102	LSLE	-EUG	SE: EUROPEAN PATENT HAS LAPSED	REF COUNTRY CODE : EP
EP0729749 B1	20041203	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST
EP0729749 B1	20041215	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP0729749 B1	20050228	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 : 20050228
EP0729749 B1	20050516	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20040301
EP0729749 B1	20160228	PEXP		Calculated Patent Term Expiry	
ES2122767 T3	19981216	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2122767 T3	19981216	LSGT	+FG2A	DEFINITIVE PROTECTION	REF DOCUMENT NUMBER : 729749 COUNTRY OF REF DOCUMENT : ES
ES2122767 T3	20160228	PEXP		Calculated Patent Term Expiry	
FR2731154 A1	19960906	LSPB	+	published / reissued	
FR2731154 A1	19970430	LSAS	CD	CHANGE OF NAME OR COMPANY NAME	
FR2731154 B1	19970509	LSGT	+	granted / extensions (spc, cpc, pte)	
FR2731154 B1	19980403	LSAS	TP	TRANSMISSION OF PROPERTY	
FR2731154 B1	20010713	LSAS	TP	TRANSMISSION OF PROPERTY	
FR2731154 B1	20050107	LSLE	-ST	NOTIFICATION OF LAPSE	
FR2731154 B1	20150303	PEXP		Calculated Patent Term Expiry	
JP8325148 A2	19961210	LSPB	+	published / reissued	
JP8325148 A2	20040325	LSWD	-A762	WRITTEN ABANDONMENT OF APPLICATION	TEXT : JAPANESE INTERMEDIATE CODE: A762 EFFECTIVE DATE : 20040324
US5707651 A	19980113	LSGT	+	granted / extensions (spc, cpc, pte)	
US5707651 A	19960315	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ROUSSEL UCLAF, FRANCE OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BECOURT, PHILIPPE; DUBOIS, JEAN-LUC; METZIGER, PIERRE; REEL/FRAME:008027/0459 EFFECTIVE DATE : 19960229
US5707651 A	19980423	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : HOECHST MARION ROUSSEL, FRANCE OLDPARTY : CHANGE OF NAME; ASSIGNOR:ROUSSEL UCLAF; REEL/FRAME:009168/0986 EFFECTIVE DATE : 19971119
US5707651 A	20010201	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AVENTIS PHARMA S.A., FRANCE OLDPARTY : MERGER; ASSIGNOR:ROUSSEL, HOECHST MARION; REEL/FRAME:011497/0001 EFFECTIVE DATE : 20010102
US5707651 A	20010612	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5707651 A	20060113	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	

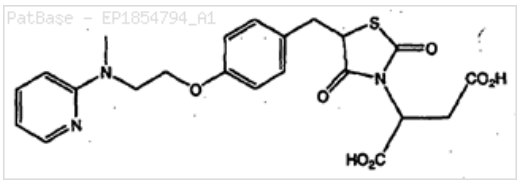
US5707651 A	20060215	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US5707651 A	20060215	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US5707651 A	20060314	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20060113
US5707651 A	20160228	PEXP		Calculated Patent Term Expiry	

48) Family number: 40809022 (EP1854794A1)

Title: 2-N-{5-[[4-[2-(METHYL-2-PYRIDINYLAMINO) ETHOXY] PHENYL]METHYL]-2-4-THIAZOLIDINEDIONE} BUTANEDIOIC ACID, METHODS OF PREPARATION AND COMPOSITIONS WITH ROSIGLITAZONE MALEATE

Abstract: Disclosed is an isolated compound of the formula: along with methods of detecting it and of minimizing it in improved pharmaceutical compositions of rosiglitazone maleate.

Classifications:
International (IPC 8-9): A61J A61J1/03 A61K A61K31/44 A61K31/4439 A61K9/20 A61P A61P3/10 C07D C07D417/12 (Advanced/Invention);
A61J1/00 A61K31/44 A61K31/4427 A61K9/20 A61P3/00 C07D417/00 (Core/Invention)
CPC: A61K9/2077 C07D417/12 A61K9/2027 A61K9/2866 A61K31/4439 A61P3/10
European: A61K9/20K2 C07D417/12



Family:

Publication number	Publication date	Application number	Application date
DE06252444 T1	20080521	DE20060252444T	20060509
DE06252444 T8	20090319	DE20060252444T	20060509
DE202006020710 U1	20091231	DE200620020710U	20060509
EP1854794 A1	20071114	EP20060252444	20060509
EP2270007 A1	20110105	EP20100177961	20060509
ES2294980 T1	20080416	ES20060252444T	20060509
HK1104557 A1	20080118	HK20070112969	20071127
HK1104557 A3	20080118	HK20070112969	20071127
HK1109773 A1	20080620	HK20080103826	20080407
HK1109773 A3	20080620	HK20080103826	20080407

Priority:
DE200620020710U 20060509 EP20060252444 20060509 EP20100177961 20060509

Probable Assignee: TEVA PHARMA IND LTD
Assignee(s): (std): TEVA PHARMA ; TEVA PHARMA IND LTD
Assignee(s): TEVA PHARMACEUTICAL IND LTD ; TEVA PHARMACEUTICAL INDUSTRIES LTD
Inventor(s): (std): SOLOMON BEN ZION ; DOLITZKY YEUDIT ; AVEZOV YOSEPH ; LEIBOVICI MINUTZA ; SPIVAK DINA ; DOLITZKY YEHUDIT
Inventor(s): BEN ZION SOLOMON ; DINA SPIVAK ; MINUTZA LEIBOVICI ; YEUDIT DOLITZKY ; YOSEPH AVEZOV
Agent(s): NACHSHEN NEIL JACOB; JOHNSON STOKES AND MASTER; DEACONS
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 MK NL PL PT RO SE SI SK TR YU

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
DE06252444 T1	20080521	LSPB	+	published / reissued	
DE06252444 T8	20090319	LSRE	8596	REPRINT OF ERRONEOUS FRONT PAGE	
DE202006020710 U1	20091231	LSGT	+	granted / extensions (spc, cpc, pte)	
DE202006020710 U1	20100204	LSGT	R207	UTILITY MODEL SPECIFICATION	EFFECTIVE DATE : 20100204
DE202006020710 U1	20100311	LSGT	+R150	UTILITY MODEL MAINTAINED AFTER PAYMENT OF FIRST MAINTENANCE FEE AFTER THREE YEARS	EFFECTIVE DATE : 20100104
DE202006020710 U1	20130314	LSLE	-R157	LAPSE OF IP RIGHT AFTER 6 YEARS	EFFECTIVE DATE : 20121201
DE202006020710 U1	20160509	PEXP		Calculated Patent Term Expiry	
EP1854794 A1	20071114	LSPB	+	published / reissued	
EP1854794 A1	20080102	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20071120
EP1854794 A1	20080423	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20080319
EP1854794 A1	20080428	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HU REF LEGAL EVENT CODE : AG9A

EP1854794 A1	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 : IS COUNTRY OF REF DOCUMENT : IT COUNTRY OF REF DOCUMENT : LI COUNTRY OF REF DOCUMENT : LT COUNTRY OF REF DOCUMENT : LU COUNTRY OF REF DOCUMENT : LV 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

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EP1854794 A1	20080723	LSFE	+AXX	EXTENSION FEES PAID	COUNTRY OF REF DOCUMENT : AL PAYMENT DATE : 20071120
EP1854794 A1	20080723	LSFE	+AXX	EXTENSION FEES PAID	COUNTRY OF REF DOCUMENT : BA PAYMENT DATE : 20071120
EP1854794 A1	20080723	LSFE	+AXX	EXTENSION FEES PAID	COUNTRY OF REF DOCUMENT : HR PAYMENT DATE : 20071120
EP1854794 A1	20080723	LSFE	+AXX	EXTENSION FEES PAID	COUNTRY OF REF DOCUMENT : MK PAYMENT DATE : 20071120
EP1854794 A1	20080723	LSFE	+AXX	EXTENSION FEES PAID	COUNTRY OF REF DOCUMENT : YU PAYMENT DATE : 20071120
EP1854794 A1	20110525	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20101207
EP1854794 A1	20131206	LSWD	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HK REF LEGAL EVENT CODE : WD REF DOCUMENT NUMBER : 1104557 COUNTRY OF REF DOCUMENT : HK
EP1854794 A1	20141205	LSWD	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HK REF LEGAL EVENT CODE : WD REF DOCUMENT NUMBER : 1109773 COUNTRY OF REF DOCUMENT : HK
EP2270007 A1	20110105	LSPB	+	published / reissued	
EP2270007 A1	20110105	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20101020
EP2270007 A1	20111116	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE :

					20110122
ES2294980 T1	20080416	LSPB	+	published / reissued	
HK1104557 A1	20080118	LSPB	+	published / reissued	
HK1104557 A3	20080118	LSPB	+	published / reissued	
HK1109773 A1	20080620	LSPB	+	published / reissued	
HK1109773 A3	20080620	LSPB	+	published / reissued	

49) Family number: 28673022 (US2003157182A)

Title: PHARMACEUTICAL PREPARATIONS AND THEIR MANUFACTURE

Abstract: A method for making a composition comprising active particles comprising an active substance comprises the steps of a) providing an emulsion having a dispersed phase comprising a solution of the active substance in a solvent and b) inducing the formation, in the emulsion, of solid particles comprising the active substance. The particles may be isolated from the emulsion. Active particles having a normalized kurtosis of at least 5 and a mean diameter of less than 100 mum are provided.

Classifications:
International (IPC 8-9): A61J3/06 A61K31/167 A61K9/00 A61K9/10 A61K9/107 A61K9/113 A61K9/14 A61K9/16 A61K9/20 A61K9/48 A61K9/51 A61K9/70 A61K9/72 A61M15/00 A61P29/00 B01D9/02 B01J13/00 (Advanced/Invention);
A61J3/06 A61K31/167 A61K9/00 A61K9/10 A61K9/107 A61K9/14 A61K9/20 A61K9/48 A61K9/70 A61K9/72 A61M15/00 A61P29/00 B01J13/00 (Advanced/Non-invention);
A61J3/06 A61K31/167 A61K9/107 A61K9/14 A61K9/16 A61K9/20 A61K9/48 A61K9/70 A61K9/72 A61M15/00 A61P29/00 B01D9/00 B01J13/00 (Core/Invention);
A61K9/00 (Core/Non-invention)
International (IPC 1-7): A61J3/06 A61K A61K31/167 A61K9/10 A61K9/107 A61K9/113 A61K9/14 A61K9/16 A61K9/20 A61K9/48 A61K9/50 A61K9/51 A61K9/70 A61K9/72 A61M15/00 A61P29/00 B01D9/02 B01J13/00 B01J13/02 B01J13/04
CPC: A61K9/0075 A61K9/1688 A61P29/00
European: A61K9/16P2 K61K9/00M20B K61K9/00M20B3
US: 264/4.1 264/41 424/489 424/490

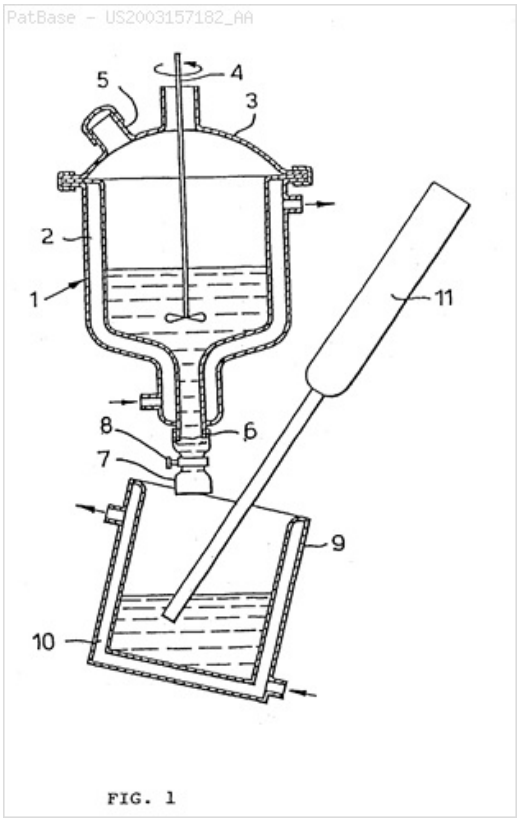


FIG. 1

Family:

Publication number	Publication date	Application number	Application date
AT269057 E	20040715	AT20010917326T	20010405
AU200144406 A1	20011015	AU20010044406	20010405
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EP1267833 B1	20040616	EP20010917326	20010405
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WO0174332 A1	20011011	WO2001GB01562	20010405
ZA200207508 A	20030919	ZA20020007508	20020919

Priority:

GB20000008411 20000405 WO2001GB01562 20010405 US20030240890 20030211
US20090380280 20090225

Probable Assignee: VECTURA LILMITED

Assignee(s): (std): TOBYN MICHAEL JOHN ; STANIFORTH JOHN NICHOLAS ; PRICE ROBERT ; CLINCH CHERYL JULIA ; VECTURA LTD BATH ; VECTURA LIMITED ; VECTURA LTD

Assignee(s): VECTURA LILMITED ; VECTURA LIMITED BATH ; VECTURA LTD CHIPPENHAM ; VECTURA GROUP PLC ; VECTURA LIMITED BATH AVON ; VECTURA BATH LTD ; VECTURA BATH AVON LTD

Inventor(s): (std): CHERYL JULIA CHINCH ; CHERYL JULIA CLINCH ; JOHN NICHOLAS STANIFORTH ; MICHAEL JOHN TOBYN ; ROBERT PRICE ; TOBYN MICHAEL JOHN ; TOBYN MICHAEL ; STANIFORTH JOHN NICHOLAS ; PRICE ROBERT ; CLINCH CHERYL JULIA ; CHINCH CHERYL JULIA

Inventor(s): MICHAEL TOBYN

Agent(s): ALLENS ARTHUR ROBINSON; SIM AND MCBURNEY; DAVIDSON DAVIDSON AND KAPPEL LLC

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
AT269057 E	20040715	LSGT	+	granted / extensions (spc, cpc, pte)	
AT269057 E	20050315	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	REF DOCUMENT NUMBER : 1267833 COUNTRY OF REF DOCUMENT : EP
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AU200144406 A5	20020411	LSLE	-MK6	APPLICATION LAPSED SECTION 142(2)(F)/REG. 8.3(3) - PCT APPLIC. NOT ENTERING NATIONAL PHASE	
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BRPI0109802 A	20061212	LSAS	B25G	REQUESTED CHANGE OF HEADQUARTER APPROVED	PARTYTYPE : OWNER OWNER : VECTURA LIMITED (GB) OLDPARTY : SEDE ALTERADA CONFORME SOLICITADO NA PETICAO NO 020060042098/RJ DE 27/03/2006.
BRPI0109802 A	20090825	LSFE	-B08F	APPLICATION FEES: DISMISSAL - ARTICLE 86 OF INDUSTRIAL PROPERTY LAW	TEXT : REFERENTE 8A. ANUIDADE.
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CA2404367 AA	20021003	LSPB	+	published / reissued	
CA2404367 AA	20060404	LSES	+EEER	EXAMINATION REQUEST	
CA2404367 AA	20090406	LSLE	-FZDE	DEAD	
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CN1420764 A	20030528	LSPB	+C06	PUBLICATION	
CN1420764 A	20031231	LSDW	-C02	DEEMED WITHDRAWAL OF PATENT APPLICATION AFTER PUBLICATION (PATENT LAW 2001)	
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				DECISION NOW FINAL	
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DK1267833 T3	20210405	PEXP		Calculated Patent Term Expiry	
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ES2218402 T3	20041116	LSGT	+	granted / extensions (spc, cpc, pte)	
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KR20030011816 A	20030211	LSPB	+	published / reissued	
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US2003157182 AA	20030211	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : VECTURA LILMITED, UNITED KINGDOM OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:STANIFORTH, JOHN NICHOLAS; TOBYN, MICHAEL JOHN; CLINCH, CHERYL JULIA; AND OTHERS; REEL/FRAME:013741/0207; SIGNING DATES FROM 20021003 TO 20021007
US2003157182 AA	20090413	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2010015234 AA	20100121	LSPB	+	published / reissued	
US2010015234 AA	20110421	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
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WO0174332 A1	20020919	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 200207508 COUNTRY OF REF DOCUMENT : ZA

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WO0174332 A1	20040616	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2001917326 COUNTRY OF REF DOCUMENT : EP
ZA200207508 A	20030919	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA200207508 A	20220918	PEXP		Calculated Patent Term Expiry	

50) Family number: 23434023 (EP0253554A3)

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
AU198775626 A1	19880121	AU19870075626	19870714
AU574955 B2	19880714	AU19870075626D	19870714
CA1296632 A1	19920303	CA19870541904	19870713
CA1296632 AA	19920303	CA19870541904	19870713
CN87104918 A	19880127	CN19871004918	19870714
DD266027 A5	19890322	DD19870304939	19870714
DK364987 A	19880116	DK19870003649	19870714
DK364987 A0	19870714	DK19870003649	19870714
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FI873114 A0	19870714	FI19870003114	19870714
HU45195 A2	19880628	HU19870003214	19870714
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KR19880001280 A	19880422	KR19870007531	19870714
KR900000512 B1	19900131	KR19870007531	19870714
NO872924 A	19880118	NO19870002924	19870714
NO872924 A0	19870714	NO19870002924	19870714
NO872924 L	19880118	NO19870002924	19870714
NZ221071 A	19900327	NZ19870221071	19870714
PH24299 A	19900529	PH19870035541	19870715
PL266839 A1	19880721	PL19870266839	19870715
PT85315 A	19870801	PT19870085315	19870713
PT85315 B	19900430	PT19870085315	19870713
YU130287 A	19881031	YU19870001302	19870712
YU46903 B	19940624	YU19870001302	19870712
ZA8705125 A	19880330	ZA19870005125	19870714

Priority:
US19860885975 19860715 CA19870541904 19870713

Probable Assignee: PFIZER
Assignee(s): (std): PFIZER LTD ; PFIZER INC ; PFIZER
Assignee(s): CURATOLO WILLIAM J ; PFIZER INC US
Inventor(s): (std): WILLIAM JOHN CURATOLO ; UIRIAMU JIYON KURATORO ; CURATOLO WJ ; CURATOLO WILLIAM JOHN ; CURATOLO WILLIAM J ; CURATOLO W J
Inventor(s): CURATOLO WILLIAM J US
Agent(s): ASPEN PHARMA PTY LTD; SPRUSON AND FERGUSON; SMART AND BIGGAR
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
AU198775626 A1	19880121	LSPB	+	published / reissued	
AU574955 B2	19880714	LSGT	+	granted / extensions (spc, cpc, pte)	
AU574955 B2	20070714	PEXP		Calculated Patent Term Expiry	
CA1296632 A1	19920303	LSGT	+	granted / extensions (spc, cpc, pte)	
CA1296632 A1	19940903	LSLE	-MKLA	LAPSED	
CA1296632 A1	20090303	PEXP		Calculated Patent Term Expiry	
CA1296632 AA	19920303	LSPB	+	published / reissued	
CN87104918 A	19880127	LSPB	+	published / reissued	
CN87104918 A	19880127	LSPB	+C06	PUBLICATION	
CN87104918 A	19940706	LSDW	-C01	DEEMED WITHDRAWAL OF PATENT APPLICATION (PATENT LAW 1993)	

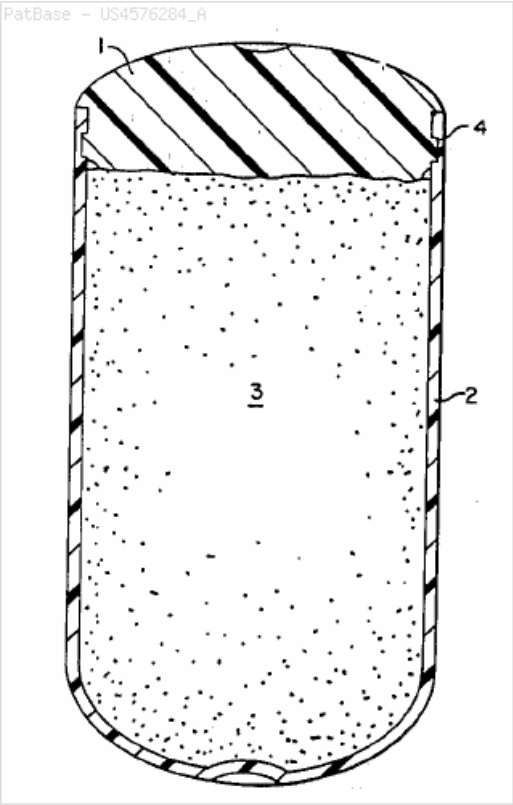
DD266027 A5	19890322	LSGT	+	granted / extensions (spc, cpc, pte)	
DD266027 A5	19950202	LSLE	-ENJ	CEASED DUE TO NON-PAYMENT OF RENEWAL FEE	
DD266027 A5	20050714	PEXP		Calculated Patent Term Expiry	
DK364987 A	19880116	LSPB	+	published / reissued	
DK364987 A	19940328	LSWD	-AHB	APPLICATION SHELVED DUE TO NON-PAYMENT	
EP0253554 A2	19880120	LSPB	+	published / reissued	
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
FI873114 A	19880116	LSPB	+	published / reissued	
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	
HU45195 A2	19921130	LSRV	DFC9	REFUSAL OF APPLICATION	
JP63023815 A2	19880201	LSPB	+	published / reissued	
KR19880001280 A	19880422	LSPB	+	published / reissued	
KR900000512 B1	19900131	LSGT	+	granted / extensions (spc, cpc, pte)	
KR900000512 B1	19870714	LSES	A201	REQUEST FOR EXAMINATION	
KR900000512 B1	19891223	LSPB	G160	DECISION TO PUBLISH PATENT APPLICATION	
KR900000512 B1	19900412	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
KR900000512 B1	19900714	LSGT	+GRNT	WRITTEN DECISION TO GRANT	
KR900000512 B1	19930201	LSLE	-LAPS	LAPSE DUE TO UNPAID ANNUAL FEE	
KR900000512 B1	20070714	PEXP		Calculated Patent Term Expiry	
NO872924 A	19880118	LSPB	+	published / reissued	
NZ221071 A	19900327	LSPB	+	published / reissued	
PH24299 A	19900529	LSGT	+	granted / extensions (spc, cpc, pte)	
PH24299 A	20070529	PEXP		Calculated Patent Term Expiry	
PL266839 A1	19880721	LSPB	+	published / reissued	
PT85315 A	19870801	LSPB	+	published / reissued	
PT85315 B	19900430	LSGT	+	granted / extensions (spc, cpc, pte)	
PT85315 B	19930930	LSLE	-MM3A	ANNULMENT OR LAPSE	TEXT : LAPSE DUE TO NON-PAYMENT OF FEES EFFECTIVE DATE : 19930430
PT85315 B	20070713	PEXP		Calculated Patent Term Expiry	
YU130287 A	19881031	LSPB	+	published / reissued	
ZA8705125 A	19880330	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA8705125 A	20070713	PEXP		Calculated Patent Term Expiry	

51) Family number: 33499023 (US4576284A)

Title: CLOSING OF FILLED CAPSULES

Abstract: A hard shell capsule for the exact dosage of substances, especially for pharmaceutical use, having a body part and a cap part which is joinable with said body. The body part has a side wall, a closed end and an open end. The cap part is die-molded or extruded as a stopper directly into the open end of the body after the body has been filled, so as to seal the contents within the capsule.

Classifications:
International (IPC 8-9): A61J3/07 A61K9/48 B29C65/00 B29C65/58 C08L3/02 (Advanced/Invention);
B29C65/56 (Advanced/Non-invention);
A61J3/07 A61K9/48 B29C65/00 B29C65/56 C08L3/00 (Core/Invention)
International (IPC 1-7): B65D53/06 B65D85/00
CPC: A61J3/071 A61K9/4816 A61K9/4825 B29C65/56 B29C65/58 B29C66/1222 B29C66/1224 B29C66/12822 B29C66/12842 B29C66/53423 B29C66/53461 B29C66/54 B29C66/542 B29C66/545 B29C66/71 B29L2031/7174 C08L3/02 Y10S220/34
European: A61J3/07B A61K9/48B A61K9/48B1 B29C65/56 B29C65/58 B29C66/1122 B29C66/50 B29C66/534 B29C66/71 C08L3/02 L29C65/56 L29C66/71 L29L31/7174
US: 206/528 206/530 215/233 220/DIG.34 426/138



Family:

Publication number	Publication date	Application number	Application date
US4576284 A	19860318	US19830557306	19831202

Priority:

US19830557306 19831202

Probable Assignee: WARNER LAMBERT CO TABOR ROAD MORRIS PLAINS NJ A CORP

Assignee(s): (std): WARNER LAMBERT CO

Assignee(s): WARNER LAMBERT CO TABOR ROAD MORRIS PLAINS NJ A CO ; WARNER LAMBERT CO TABOR ROAD MORRIS PLAINS NJ A CORP ; WARNER LAMBERT COMPANY

Inventor(s): (std): WITTWER FRITZ ; RAIBLE THOMAS

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
US4576284 A	19860318	LSGT	+	granted / extensions (spc, cpc, pte)	
US4576284 A	19831202	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WARNER-LAMBERT COMPANY TABOR ROAD, MORRIS PLAINS, OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNORS:WITTWER, FRITZ; RAIBLE, THOMAS; REEL/FRAME:004203/0876 EFFECTIVE DATE : 19831101
US4576284 A	19831202	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WARNER-LAMBERT COMPANY TABOR ROAD, MORRIS PLAINS, OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:WITTWER, FRITZ; RAIBLE, THOMAS; REEL/FRAME:004203/0876 EFFECTIVE DATE : 19831101
US4576284 A	19860116	LSGT	PAT1	Patented Case	

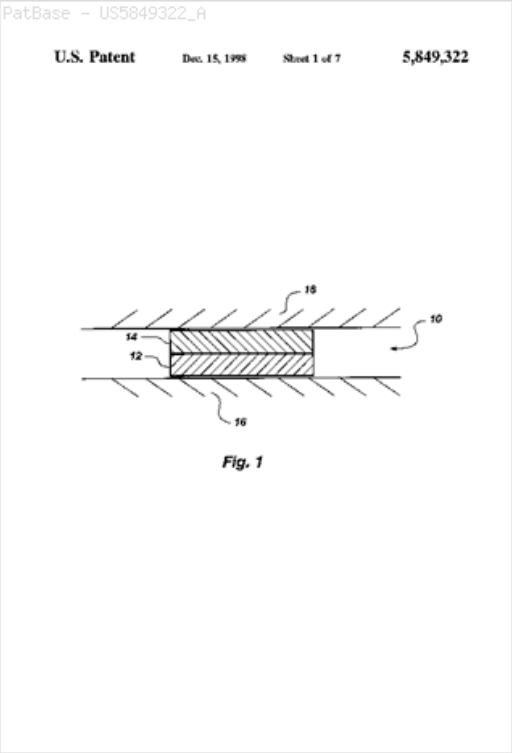
US4576284 A	19860116	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US4576284 A	19890825	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US4576284 A	19930827	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US4576284 A	19970826	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US4576284 A	20031202	PEXP		Calculated Patent Term Expiry	

52) Family number: 20713023 (US5849322A)

Title: COMPOSITIONS AND METHODS FOR BUCCAL DELIVERY OF PHARMACEUTICAL AGENTS

Abstract: A composition for transmucosally administering a drug to the oral cavity comprises an adhesive layer comprising a hydrophilic polymer having one surface adapted to contact a first tissue of the oral cavity and adhere thereto when wet and an opposing surface in contact with and adhering to an adjacent drug-containing layer comprising an effective amount of a drug and optionally an effective amount of a permeation enhancer, wherein the drug-containing layer is adapted to contact and be in drug transfer relationship with a mucosal tissue of the oral cavity when the adhesive layer contacts and adheres to the first tissue. Preferred drugs include peptides, such as glucagon-like insulinotropic peptides. A method of transmucosally administering a drug to the oral cavity is also disclosed.

Classifications:
International (IPC 8-9): A61J3/07 A61K31/00 A61K38/00 A61K38/095 A61K38/11 A61K38/22 A61K38/23 A61K38/28 A61K9/00 A61K9/20 A61K9/70 A61L15/00 A61L15/16 A61P1/00 A61P1/02 (Advanced/Invention);
A61K31/00 A61K38/00 A61K38/22 A61K38/23 A61K38/28 A61K9/20 A61K9/70 A61L15/00 A61P1/00 (Advanced/Non-invention);
A61K31/00 A61K38/00 A61K38/10 A61K38/22 A61K38/23 A61K38/28 A61K9/00 A61K9/70 A61L15/00 A61P1/00 (Core/Invention);
A61K9/20 (Core/Non-invention)
International (IPC 1-7): A61F13/02 A61K A61K31/00 A61K38/00 A61K38/11 A61K38/22 A61K38/23 A61K38/28 A61K9/24 A61K9/70 A61L A61L15/00 A61L15/16
CPC: Y10S514/953 A61P1/00 A61P1/02 A61K9/006 A61K9/2086
European: A61K9/00M18D K61K9/20K4
US: 424/434 424/435 514/953



Family:

Publication number	Publication date	Application number	Application date
AR004226 AA	19981104	AR1996P104864	19961023
AU199674648 A1	19970515	AU19960074648	19961022
AU716054 B2	20000217	AU19960074648	19961022
BRPI9611137 A	19990330	BR1996PI11137	19961022
CA2235402 AA	19980420	CA19962235402	19961022
CN1202821 A	19981223	CN19961098619	19961022
EP0857063 A1	19980812	EP19960936816	19961022
EP0857063 A4	20000301	EP19960936816	19961022
JP11513983 T2	19991130	JP19970516714T	19961022
KR19990064289 A	19990726	KR19980702783	19961022
US5849322 A	19981215	US19950546994	19951023
WO9715297 A1	19970501	WO1996US16892	19961022
ZA9608907 A	19970612	ZA19960008907	19961023

Priority:
US19950546994 19951023 WO1996US16892 19961022

Probable Assignee: ALLERGAN SALES LLC
Assignee(s): (std): THERATECH INC
Assignee(s): ALLERGAN SALES LLC ; EBERT CHARLES D ; GUTNIAK MARK K ; HEIBER SONIA J
Inventor(s): (std): C D EBERT ; CHARLES D EBERT ; EBERT C D ; EBERT CHARLES D ; GUTNIAK M K ; GUTNIAK MARK K ; GUTNIAK MARK L ; HEIBER S J ; HEIBER SONIA J ; M K GUTNIAK ; MARK K GUTNIAK ; S J HEIBER ; SONIA J HEIBER
Inventor(s): MARK L GUTNIAK
Agent(s): FB RICE; FB RICE PTY LTD; SMART AND BIGGAR
Designated states: AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI 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 UZ VN

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AR004226 AA	19981104	LSPB	+	published / reissued	

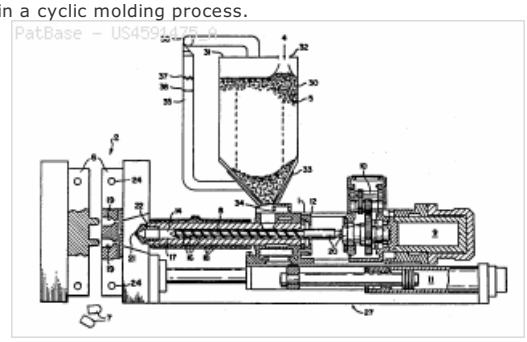
AR004226 AA	20050221	LSWD	-FA	ABANDONMENT OR WITHDRAWAL	
AU199674648 A1	19970515	LSPB	+	published / reissued	
AU716054 B2	20000217	LSGT	+	granted / extensions (spc, cpc, pte)	
AU716054 B2	20000615	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU716054 B2	20161022	PEXP		Calculated Patent Term Expiry	
BRPI9611137 A	19990330	LSPB	+	published / reissued	
BRPI9611137 A	20021210	LSRV	-FA14	DISMISSAL: DISMISSAL - ARTICLE 34 OF INDUSTRIAL PROPERTY LAW	
CA2235402 AA	19980420	LSPB	+	published / reissued	
CA2235402 AA	20011022	LSES	+EEER	EXAMINATION REQUEST	
CA2235402 AA	20050906	LSLE	-FZDE	DEAD	
CN1202821 A	19981223	LSPB	+	published / reissued	
CN1202821 A	19981223	LSPB	+C06	PUBLICATION	
CN1202821 A	20020123	LSDW	-C02	DEEMED WITHDRAWAL OF PATENT APPLICATION AFTER PUBLICATION (PATENT LAW 2001)	
EP0857063 A1	19980812	LSPB	+	published / reissued	
EP0857063 A1	19980812	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19980423
EP0857063 A4	20000301	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	EFFECTIVE DATE : 20000113
EP0857063 A4	20050603	LSWD	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HK REF LEGAL EVENT CODE : WD REF DOCUMENT NUMBER : 1010146 COUNTRY OF REF DOCUMENT : HK
EP0857063 A4	20051207	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20050503
JP11513983 T2	19991130	LSPB	+	published / reissued	
KR19990064289 A	19990726	LSPB	+	published / reissued	
KR19990064289 A	20020313	LSDW	-WITN	WITHDRAWAL DUE TO NO REQUEST FOR EXAMINATION	
US5849322 A	19981215	LSGT	+	granted / extensions (spc, cpc, pte)	
US5849322 A	19960116	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : THERATECH, INC., UTAH OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:EBERT, CHARLES D.; HEIBER, SONIA J.; GUTNIAK, MARK K.; REEL/FRAME:007915/0938 EFFECTIVE DATE : 19951027
US5849322 A	19981112	LSGT	PAT1	Patented Case	
US5849322 A	19981112	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5849322 A	20020614	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4

US5849322 A	20060615	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5849322 A	20100615	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5849322 A	20160926	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ALLERGAN SALES, LLC, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ACTAVIS LABORATORIES UT, INC.; REEL/FRAME:039857/0661 EFFECTIVE DATE : 20151231
US5849322 A	20151023	PEXP		Calculated Patent Term Expiry	
WO9715297 A1	19970501	LSPB	+	published / reissued	
WO9715297 A1	19961022	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 96198619.0 COUNTRY OF REF DOCUMENT : CN
WO9715297 A1	19980417	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1019980702783 COUNTRY OF REF DOCUMENT : KR
WO9715297 A1	19980420	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2235402 COUNTRY OF REF DOCUMENT : CA
WO9715297 A1	19980420	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2235402 COUNTRY OF REF DOCUMENT : CA KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO9715297 A1	19980422	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : PA/A/1998/003136 COUNTRY OF REF DOCUMENT : MX
WO9715297 A1	19980423	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 1997 516714 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO9715297 A1	19980423	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1996936816 COUNTRY OF REF DOCUMENT : EP
WO9715297 A1	19980812	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1996936816 COUNTRY OF REF DOCUMENT : EP
WO9715297 A1	19980827	LSWD	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : 8642
WO9715297 A1	19990726	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1019980702783 COUNTRY OF REF DOCUMENT : KR
WO9715297 A1	20020313	LSWD	-WWW	WIPO INFORMATION: WITHDRAWN IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1019980702783 COUNTRY OF REF DOCUMENT : KR
WO9715297 A1	20050503	LSWD	-WWW	WIPO INFORMATION: WITHDRAWN IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1996936816 COUNTRY OF REF DOCUMENT : EP
ZA9608907 A	19970612	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA9608907 A	20161022	PEXP		Calculated Patent Term Expiry	

53) Family number: 33499024 (US4591475A)

Title: METHOD FOR MOLDING CAPSULES

Abstract: A method of producing capsules of a moldable hydrophilic polymer composition, preferably **gelatin**, using a combination of an injection molding device with a microprocessor to precisely control the conditions of time, temperature, pressure and water content of the hydrophilic polymer composition, in a cyclic molding process.



Classifications:
International (IPC 8-9): A23J3/00 A61J3/07 A61K47/30 A61K9/48 B29C45/00 B29C45/23 B29C45/48 B29C45/50 B29C45/76 C08B30/12 C08K3/22 C08K5/05 C08K5/09 C08K5/10 C08L1/00 C08L1/08 C08L3/00 C08L3/04 C08L39/00 C08L39/06 C08L89/00 (Advanced/Invention);
A61J3/07 B29C45/00 B29C45/23 B29C45/46 B29C45/76 C08B30/00 (Core/Invention)
International (IPC 1-7): B29C45/28 B29C45/54 B29C45/73 B29C45/74
CPC: A61J3/07 B29C45/00 B29C45/50 B29C45/76 B29K2089/00 B29K2093/00 B29L2031/7174 B29C45/231 C08B30/12
European: A61J3/07 B29C45/00 B29C45/23B B29C45/50 B29C45/76 C08B30/12 L29K89/00 L29K93/00 L29L31/7174
US: 264/328.14 264/328.17 264/40.1 264/40.4 424/37 424/456 425/550 425/551 425/564 425/568 425/572

Family:

Publication number	Publication date	Application number	Application date
US4591475 A	19860527	US19830490057	19830429

Priority:
US19820362430 19820326 US19830490057 19830429

Probable Assignee: WARNER LAMBERT CO
Assignee(s): (std): WARNER LAMBERT CO
Assignee(s): WARNER LAMBERT COMPANY
Inventor(s): (std): TOMKA IVAN ; WITTWER FRITZ

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US4591475 A	19860527	LSGT	+	granted / extensions (spc, cpc, pte)	
US4591475 A	19860327	LSGT	PAT1	Patented Case	
US4591475 A	19860327	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US4591475 A	19891026	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US4591475 A	19931022	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US4591475 A	19970929	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US4591475 A	20030527	PEXP		Calculated Patent Term Expiry	

54) Family number: 79849024 (ID202000771A)

Title: MESIN ENKAPSULASI KAPSUL LUNAK NON-**GELATIN** UNTUK PENGEMBANGAN PRODUK SKALA KECIL Encapsulation MACHINE SOFT CAPSULE NON-**GELATIN** FOR PRODUCT DEVELOPMENT IS A SMALL SCALE (Machine translation)

Abstract: Source: ID202000771A [ID] Mesin enkapsulasi dengan mekanisme rotary die process merupakan mesin yang umum digunakan dalam produksi kapsul lunak **gelatin** dalam skala produksi. Kapasitas dan kecepatan mesin enkapsulasi umumnya besar terkait dengan sinkronisasi kecepatan putaran pada proses-proses yang terjadi. Hal tersebut menyebabkan uji coba suatu formulasi memerlukan bahan dalam skala besar yang menyebabkan biaya percobaan cukup tinggi. Pada skala kecil, kecepatan putaran pada setiap tahap harus lambat agar proses dapat kontinyu karena mould yang disusun hanya satu (1), dan sinkronisasi masing-masing proses juga harus tetap dilakukan. Pada formulasi cangkang kapsul lunak non-**gelatin** juga diperlukan kontrol suhu pada pembentukan lembaran film agar massa tidak membentuk gel sebelum proses casting/pembentukan lembaran film terjadi. Invensi ini bertujuan untuk menyediakan mesin enkapsulasi kapsul lunak non-**gelatin** pada skala kecil yang dapat digunakan untuk percobaan skala kecil dan memprediksi parameter proses yang baik saat dilakukan scale up pada mesin produksi dengan mekanisme rotary die process. Kondisi tersebut memungkinkan optimasi formula lebih cepat dan lebih murah. Invensi ini terdiri atas sistem pengaturan suhu massa cangkang sebelum pembentukan lembaran film pada drum casting; rangkaian transmisi worm gear untuk mengurangi kecepatan putaran pada proses pembentukan film cangkang kapsul, pengisian massa obat dan enkapsulasi; dan pengendalian proses menggunakan sistem mikrokontroler. **Machine translation:** Encapsulation machine with the mechanisms of rotary die process is machine that generally used in the production of soft capsule **gelatin** in the scale of production. The capacity and engine speed encapsulation great generally associated with the synchronization of the speed on the process of the process that happens. This led to try out a formulation requires the ingredients in big scale that cause the cost of the experiment high enough. On the small-scale, the speed at every stage must slowly to the process can continue because of the mold lightly organized only one (1), and the synchronization of each process must also remain to be done. In the formulation of the shell capsule non-**gelatin** also required temperature control on the formation of the sheets of the film to the masses not form gel before the process of casting/formation of film sheets. This Manufacture Invension for aims to provide the encapsulation soft capsule non-**gelatin** on the small-scale that can be used to experiment small scale and predict the process parameters that good when done scale installation design up on the production engine with the mechanisms of rotary die process. The condition allows formula optimization faster and more cheap. This Manufacture Invension for consists of the system setting the temperature of the mass of the shell before the establishment of the sheets of movies on a drum casting; a series of the transmission of worm gear to reduce the speed of the sequence in the process of establishing the film the shell capsule, charging the mass of the drug and encapsulation; and control the process using mikrokontroler system.

Classifications:
International (IPC 8-9): A61J3/00 (Advanced/Invention)

Family:

Publication number	Publication date	Application number	Application date
ID202000771 A	20200618	ID2018P0007884	20181004

Priority:

ID2018P0007884 20181004

Probable Assignee: TEKNOLOGI BANDUNG INST

Assignee(s): TEKNOLOGI BANDUNG INST

Inventor(s): I KETUT ADNYANA M SI APT ; LUCY D N SASONGKO M SI APT ; RER NAT SUNDANI NURONO S APT ; UNDIANA BAMBANG SST M ENG ; NI NYOMAN WIWIK S M SI APT

Agent(s):

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
ID202000771 A	20200618	LSPB	+	published / reissued	

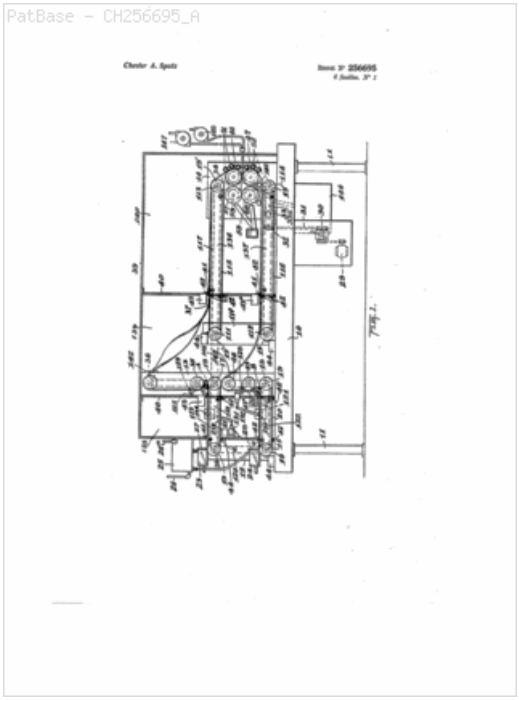
55) Family number: 24778025 (CH256695A)

Title: MACHINE POUR FORMER DES CAPSULES MEDICINALES. MACHINE TO FORM CAPSULES MEDICINALES. (Machine translation)

Abstract: Source: CH256695A [FR] (Claim 1) 1. Machine selon la revendication, caracterisee en ce que le perimetre maximum de ladite piece dans ladite region est plus grand que le perimetre interne du tube, de maniere que celui-ci soit dilate lorsqu'il'passe sur cette piece.

Machine translation: (Claim 1) 1. Machine according to claim, characterized in that the maximum perimeter of said piece in said region is greater than the perimeter of the tube, so as that it is on this piece lorsqu'il'passe expands.

Classifications:
International (IPC 8-9): A61J3/07 (Advanced/Invention); A61J3/07 (Core/Invention)
International (IPC 1-7): A61J5/00
CPC: A61J3/07
European: A61J3/07



Family:

Publication number	Publication date	Application number	Application date
CH256695 A	19480831		19450519

Priority:
19450519

Probable Assignee: SPOTZ CHESTER A
Assignee(s): (std)**:** SPOTZ CHESTER A
Inventor(s): (std)**:** CHESTER A SPOTZ
Inventor(s): A SPOTZ CHESTER

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
CH256695 A	19480831	LSGT	+	granted / extensions (spc, cpc, pte)	
CH256695 A	19650519	PEXP		Calculated Patent Term Expiry	

56) Family number: 55636026 (US2015119473A)

Title: COATING AND EXTRUDING METHOD FOR PRODUCING STARCH **SOFTGEL** CAPSULES

Abstract: The invention discloses a method for preparing starch-based **softgel** capsules, which, specifically, includes the following 2 steps: 1, Extrude the starch-based premixed material into starch-based extrusion film, 2, Apply the gel solution coating to the extrusion film to form composite starch film, 3) Process two composite starch films into starch-based **softgel** capsules by rotary die process.

Classifications:
International (IPC 8-9): A23L1/00 A23P1/04 A61J3/07 A61K47/36 A61K9/48 A61K9/70 (Advanced/Invention)
CPC: A61K9/70 A61K9/7007 A61K9/48 A61K47/36 A23V2002/00 A61K9/4816 A23P10/30 A23P30/20
US: 264/134 426/661 514/778

Family:

Publication number	Publication date	Application number	Application date
CN103520133 A	20140122	CN201310510574	20131026
CN103520133 B	20150204	CN201310510574	20131026
EP2865375 A1	20150429	EP20140190314	20141024
US2015119473 AA	20150430	US20140521570	20141023

Priority:
CN201310510574 20131026

Probable Assignee: ZHONGSHAN CAPSULE STARCH MATERIAL TECHNOLOGY CO LTD

Assignee(s): (std): ZHONGSHAN KAIBOSI STARCH MATERIAL TECHNOLOGY CO LTD ; ZHONGSHAN KAIBOSI STARCH MATERIAL SCIENCE AND TECHNOLOGY CO LTD ; ZHONGSHAN CAPSULE STARCH MATERIAL TECHNOLOGY CO LTD

Assignee(s): ZHONGSHAN KAIBOSI STARCH MATERIAL SCIENCE AND TECHNOLOGY CO ; ZHONGSHAN CAPSULE STARCH MATERIAL TECHNOLOGY CO ; ZHONGSHAN KAIBOSI STARCH MATERIAL TECHNOLOGY CO

Inventor(s): (std): SHUAI FANGWEN ; WANG XIANGFENG ; ZHANG JIAWEI ; ZHANG NUOZI

Agent(s): CLARK JANE ANNE

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
CN103520133 A	20140122	LSPB	+	published / reissued	
CN103520133 A	20140122	LSPB	+C06	PUBLICATION	
CN103520133 B	20150204	LSGT	+	granted / extensions (spc, cpc, pte)	
CN103520133 B	20150204	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN103520133 B	20331026	PEXP		Calculated Patent Term Expiry	
EP2865375 A1	20150429	LSPB	+	published / reissued	
EP2865375 A1	20150429	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20141024
EP2865375 A1	20151209	LSES	+R17P	REQUEST FOR EXAMINATION FILED (CORRECTED)	EFFECTIVE DATE : 20151029
EP2865375 A1	20190703	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20190603
EP2865375 A1	20200318	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20191015
US2015119473 AA	20150430	LSPB	+	published / reissued	
US2015119473 AA	20141027	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ZHONGSHAN CAPSULE STARCH MATERIAL TECHNOLOGY CO., OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:SHUAI, FANGWEN; ZHANG, NUOZI; WANG, XIANGFENG; AND OTHERS; REEL/FRAME:034066/0441 EFFECTIVE DATE : 20141010

US2015119473 AA	20160301	LSES	NFA1	Non Final Action Mailed
US2015119473 AA	20170509	LSES	ADV1	Advisory Action Mailed
US2015119473 AA	20170919	LSES	NFA1	Non Final Action Mailed
US2015119473 AA	20180430	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action

57) Family number: 30114026 (US2001048965A)

Title: CONFECTIONERY COMPOSITIONS

Abstract: A novel encapsulated product is provided and includes: at least one active ingredient; at least one compressible material; and at least one tableting material; wherein the encapsulated product is in the form of a caplet having a diameter of from about 1 millimeter to about 7 millimeters and a length from about 1 millimeter to about 7 millimeters. A method for preparing the encapsulated product is also provided. The encapsulated product may be incorporated into a food item, a soft confectionery product, a hard confectionery product, a jelly gum confectionery product, and a dry beverage or chewing gum product.

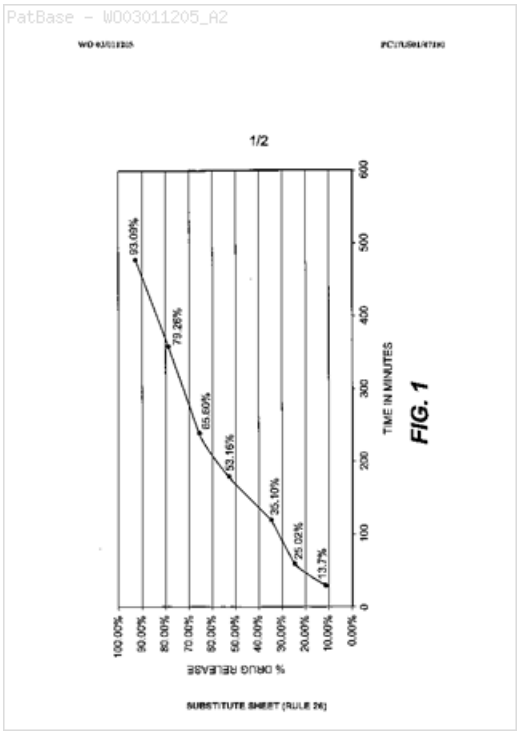


FIG. 1

Classifications:
International (IPC 8-9): A21D13/08 A23G3/00 A23G3/34 A23G3/36 A23G3/54 A23G4/00 A23G4/06 A23G4/12 A23G4/20 A23L1/22 A23L2/395 A23L27/00 A61J3/10 A61K31/135 A61K31/137 A61K31/167 A61K31/192 A61K31/415 A61K31/422 A61K31/437 A61K31/4422 A61K31/4525 A61K31/55 A61K31/5517 A61K31/554 A61K9/00 A61K9/14 A61K9/20 A61K9/26 A61K9/48 A61K9/56 A61K9/60 A61K9/62 A61P1/00 A61P1/04 A61P1/06 A61P1/10 A61P25/18 A61P29/00 A61P31/00 A61P9/00 (Advanced/Invention); A21D13/00 A23G3/00 A23G3/34 A23G4/00 A23G4/18 A23L1/22 A23L2/385 A61J3/10 A61K31/137 A61K9/26 A61K9/52 (Core/Invention)
International (IPC 1-7): A23L1/025 A23L1/09 A23L1/221 A23L1/30 A23L1/302 A23L1/303 A23L1/304 A23L2/56 A23L2/60 A61F9/00 A61J A61J1/00 A61K9/48 A61K9/56 A61K9/60 A61K9/62
CPC: A61K9/2027 A61K9/2077 A61K31/137 Y10S514/947 Y10S514/948 Y10S514/951 Y10S514/959 A23G3/36 A23G3/343 A23G3/346 A23G3/362 A23G3/368 A23G4/06 A23G4/064 A23G4/126 A23G2200/00 A23G2200/04 A23G2220/20 A61J3/10 A61K9/2018 A61K9/2072 A61K9/2013 A61K9/2054 A61K9/4808 A21D13/80 A23L27/72 A61P1/00 A61P1/04 A61P1/06 A61P1/10 A23G3/54 A23G4/20 A23L2/395 A61P25/18 A61P31/00 A61P29/00 A61P9/00
European: A21D13/08 A23G3/00 A23G3/00+D A23G3/00+D4 A23G3/00+F A23G3/00+H6 A23G3/00K A23G3/00K+D4 A23G3/00K+H6 A23G3/00M A23G3/00M+D A23G3/30 A23G3/30+D A23G3/30+D4 A23G3/30+F A23G3/30+H6 A23G3/34C A23G3/34E A23G3/36 A23G3/36F A23G3/36M4 A23G3/54 A23G4/06 A23G4/06F A23G4/12V A23G4/20 A23L1/22B2 A23L2/395 A61J3/10 A61K31/137 A61K9/20H4 A61K9/20H4B A61K9/20H6B A61K9/20H6F2 A61K9/20K A61K9/20K2 A61K9/48A K23G200/00 K23G200/04 K23G220/20
US: 264/122 424/400 424/405 424/408 424/409 424/439 424/440 424/451 424/451P 424/452 424/452P 424/459 424/459P 424/461 424/461S 424/463 424/464 424/465 424/469 424/469P 424/474 424/484 426/103 426/3 426/4 426/638 426/650 426/660 426/660P 426/72 426/72S 426/73 426/74 426/74S 514/211.07 514/211.070S 514/217 514/217S 514/220 514/220S 514/300 514/300S 514/321 514/321S 514/356 514/356S 514/376 514/376S 514/406 514/406S 514/569 514/569S 514/570 514/570S 514/629 514/629S 514/647 514/647S 514/649 514/649S 514/777 514/947 514/948 514/951 514/959 524/777 524/947 524/948 524/951 524/959

Family:

Publication number	Publication date	Application number	Application date
AU2001267026 AA	20011217	AU20010267026	20010604
AU200167026 A1	20011217	AU20010067026	20010604
AU200167026 A5	20011217	AU20010067026	20010604
AU2002239555 AA	20030217	AU20020239555	20011206
AU2002246571 AA	20030217	AU20020246571	20011207
EP1581160 A2	20051005	EP20010987325	20011206
EP1581160 A4	20090812	EP20010987325	20011206
US2001048965 AA	20011206	US20010777927	20010207
US2002044960 AA	20020418	US20010982093	20011019
US2002044962 AA	20020418	US20010982092	20011019
US2003096001 AA	20030522	US20020209659	20020801
US2007059367 AA	20070315	US20060428314	20060630
US2010196466 AA	20100805	US20100696666	20100129
US2013022675 AA	20130124	US20120397475	20120215
US6365209 BB	20020402	US20010777927	20010207
US6555145 BA	20030429	US20000587971	20000606
US7678387 BB	20100316	US20010982093	20011019
WO0193694 A1	20011213	WO2001US40836	20010604
WO03011204 A2	20030213	WO2001US45757	20011207
WO03011204 A3	20030703	WO2001US45757	20011207
WO03011205 A2	20030213	WO2001US47180	20011206
WO03011205 A3	20030619	WO2001US47180	20011206

Priority:

US20000587971 20000606
WO2001US40836 20010604
US20010982092 20011019
WO2001US45757 20011207
US20060428314 20060630
US20010777927 20010207
US20010308568P 20010731
US20010982093 20011019
US20020344331P 20020104
US20100696666 20100129
US20010820093 20010327
US20010982092 20011019
WO2001US47180 20011206
US20020209659 20020801
US20120397475 20120215

Probable Assignee: CAPRICORN PHARMA INC

Assignee(s): (std): CAPRICORN PHARMA INC ; CHERUKURI S RAO ; RAVELLI VITTORINO ; CHERUKURI S R

Assignee(s): CHERUKURI SUBRAMAN RAO

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Inventor(s): CHERUKURI S ; S RAO CHERUKURI ; SUBRAMAN RAO CHERUKURI ; VITTORINO RAVELLI

Agent(s): THORPE NORTH AND WESTERN LLP; HUNTON AND WILLIAMS LLP INTELLECTUAL PROPERTY DEPARTMENT; HUNTON AND WILLIAMS LLP,INTELLECTUAL PROPERTY DEPARTMENT; JERALD L MEYER;

GARY M NATH; NATH AND ASSOCIATES PLLC; HUNTON AND WILLIAMS LLP

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 TR TT TZ UA UG UZ VN YU ZA ZM ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AU2001267026 AA	20011217	LSPB	+	published / reissued	
AU200167026 A1	20011217	LSPB	+	published / reissued	
AU2002239555 AA	20030217	LSPB	+	published / reissued	
AU2002239555 AA	20040506	LSLE	-MK6	APPLICATION LAPSED SECTION 142(2) (F)/REG. 8.3(3) - PCT APPLIC. NOT ENTERING NATIONAL PHASE	
AU2002246571 AA	20030217	LSPB	+	published / reissued	
AU2002246571 AA	20040506	LSLE	-MK6	APPLICATION LAPSED SECTION 142(2) (F)/REG. 8.3(3) - PCT APPLIC. NOT ENTERING NATIONAL PHASE	
EP1581160 A2	20051005	LSPB	+	published / reissued	
EP1581160 A2	20051228	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20040903
EP1581160 A2	20071010	LSRE	D18D	APPLICATION DEEMED TO BE WITHDRAWN (DELETED)	
EP1581160 A4	20090812	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	EFFECTIVE DATE : 20090709
EP1581160 A4	20091223	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20091119
EP1581160 A4	20101208	LSDW	-R18D	APPLICATION DEEMED TO BE WITHDRAWN (CORRECTED)	EFFECTIVE DATE : 20100601
US2001048965 AA	20011206	LSPB	+	published / reissued	
US2002044960 AA	20020418	LSPB	+	published / reissued	
US2002044962 AA	20020418	LSPB	+	published / reissued	
US2002044962 AA	20051128	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2003096001 AA	20030522	LSPB	+	published / reissued	
US2003096001 AA	20021112	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CAPRICORN PHARMA INC., MARYLAND OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:CHERUKURI, S. RAO; RAVELLI, VITTORINO; REEL/FRAME:013481/0727 EFFECTIVE DATE : 20021108
US2003096001 AA	20050930	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2007059367 AA	20070315	LSPB	+	published / reissued	
US2007059367 AA	20061120	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CAPRICORN PHARMA, INC., MARYLAND OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:CHERUKURI, S. RAO; REEL/FRAME:018539/0607 EFFECTIVE DATE : 20061113
US2007059367 AA	20111024	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2010196466 AA	20100805	LSPB	+	published / reissued	
US2010196466 AA	20100518	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CAPRICORN PHARMA, INC., MARYLAND OLDPARTY : ASSIGNMENT OF

					ASSIGNORS INTEREST; ASSIGNOR:CHERUKURI, S. RAO; REEL/FRAME:024400/0250 EFFECTIVE DATE : 20011207
US2010196466 AA	20120315	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2013022675 AA	20130124	LSPB	+	published / reissued	
US2013022675 AA	20140109	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US6365209 BB	20020402	LSGT	+	granted / extensions (spc, cpc, pte)	
US6365209 BB	20010508	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CAPRICORN PHARMA, INC., MARYLAND OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:CHERUKURI, SUBRAMAN RAO; REEL/FRAME:011776/0474 EFFECTIVE DATE : 20010410
US6365209 BB	20051004	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6365209 BB	20090921	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US6365209 BB	20140402	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US6365209 BB	20140428	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US6365209 BB	20140428	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US6365209 BB	20140520	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20140402
US6365209 BB	20210207	PEXP		Calculated Patent Term Expiry	
US6555145 BA	20030429	LSGT	+	granted / extensions (spc, cpc, pte)	
US6555145 BA	20000915	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CAPRICORN PHARMA, INC, MARYLAND OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:CHERUKURI, SUBRAMAN RAO; REEL/FRAME:011102/0352 EFFECTIVE DATE : 20000629
US6555145 BA	20061228	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6555145 BA	20110429	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
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US6555145 BA	20110914	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US6555145 BA	20150429	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US6555145 BA	20150525	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US6555145 BA	20150525	LSLE	-STCH	INFORMATION ON STATUS: PATENT	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF

				DISCONTINUATION	MAINTENANCE FEES UNDER 37 CFR 1.362
US6555145 BA	20150616	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20150429
US6555145 BA	20200606	PEXP		Calculated Patent Term Expiry	
US7678387 BB	20100316	LSGT	+	granted / extensions (spc, cpc, pte)	
US7678387 BB	20020103	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CAPRICORN PHARMA, INC., MARYLAND OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:CHERUKURI, S. RAO; REEL/FRAME:012422/0547 EFFECTIVE DATE : 20011212
US7678387 BB	20020103	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CAPRICORN PHARMA, INC.,MARYLAND OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:CHERUKURI, S. RAO; REEL/FRAME:012422/0547 EFFECTIVE DATE : 20011212
US7678387 BB	20100224	LSGT	PAT1	Patented Case	
US7678387 BB	20130318	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US7678387 BB	20171030	LSFE	FEPP	FEE PAYMENT PROCEDURE	TEXT : MAINTENANCE FEE REMINDER MAILED (ORIGINAL EVENT CODE: REM.)
US7678387 BB	20180416	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	TEXT : PATENT EXPIRED FOR FAILURE TO PAY MAINTENANCE FEES (ORIGINAL EVENT CODE: EXP.)
US7678387 BB	20180416	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US7678387 BB	20180416	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US7678387 BB	20180508	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20180316
US7678387 BB	20211019	PEXP		Calculated Patent Term Expiry	
WO0193694 A1	20011213	LSPB	+	published / reissued	
WO0193694 A1	20021114	LSWD	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : 8642
WO0193694 A1	20030723	LSNE	-122	EP: PCT APPLICATION NON-ENTRY IN EUROPEAN PHASE	REF COUNTRY CODE : WO
WO0193694 A1	20050405	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE	REF COUNTRY CODE : JP
WO03011204 A2	20030213	LSPB	+	published / reissued	
WO03011204 A3	20040609	LSWD	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : 8642
WO03011204 A3	20040915	LSNE	-122	EP: PCT APPLICATION NON-ENTRY IN EUROPEAN PHASE	REF COUNTRY CODE : WO
WO03011204 A3	20060118	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE	REF COUNTRY CODE : JP
WO03011204 A3	20060118	LSWD	-WWW	WIPO INFORMATION: WITHDRAWN IN NATIONAL OFFICE	TEXT : JP
WO03011205 A2	20030213	LSPB	+	published / reissued	
WO03011205 A3	20040609	LSWD	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : 8642
WO03011205 A3	20040903	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO	REF DOCUMENT NUMBER : 2001987325

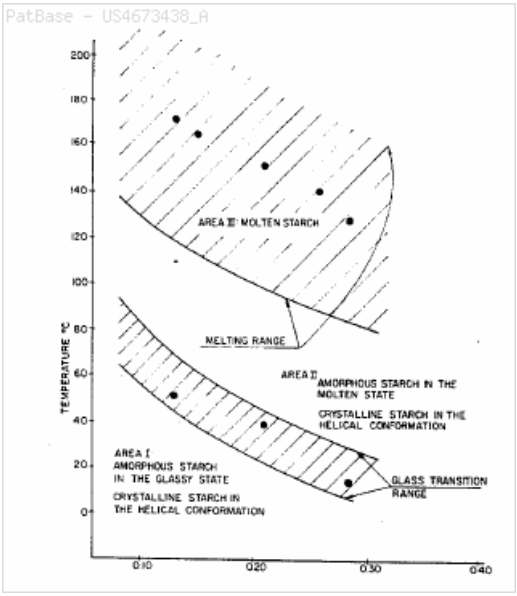
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WO03011205 A3	20060118	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE	REF COUNTRY CODE : JP
WO03011205 A3	20060118	LSWD	-WWW	WIPO INFORMATION: WITHDRAWN IN NATIONAL OFFICE	TEXT : JP

58) Family number: 33499026 (US4673438A)

Title: POLYMER COMPOSITION FOR INJECTION MOLDING

Abstract: Capsules and other shaped products formed from a moldable starch composition in an injection molding device is disclosed in the present invention. The composition comprising starch having a molecular mass range of 10,000 to 20,000,000 Dalton, and a water content range from 5 to 30 percent by weight. The starch contains about 0 to 100 percent of amylose, and about 100 to 0 percent of amylo-pectin.

Classifications:
International (IPC 8-9): A61J3/07 A61K9/48 B29C45/00 B29C65/58 C08L3/00 (Advanced/Invention);
B29C65/56 (Advanced/Non-invention);
A61J3/07 A61K9/48 B29C45/00 B29C65/56 C08L3/00 (Core/Invention)
International (IPC 1-7): B28B7/20 C08L3/00 C09H11/00
CPC: A61J3/07 A61K9/4816 B29C45/0001 B29K2003/00 B29K2995/0059 B29L2031/7174 C08L3/00
European: A61J3/07 A61K9/48B B29C45/00B B29C65/56 B29C65/58 B29C66/534 B29C66/71 C08L3/00 L29C65/56 L29C66/71 L29K3/00 L29K995/00F14 L29L31/7174
US: 106/126 106/128 106/130 106/145.1 106/162.2 106/162.7 106/162.81 106/162.9 106/205.1 106/206.1 106/209.1 106/213 106/217.01 106/217.3 264/328.1 264/328.18 424/473 424/493



Family:

Publication number	Publication date	Application number	Application date
US4673438 A	19870616	US19850796517	19851108

Priority:
US19830467982 19830218 US19840579318 19840213 US19850796517 19851108

Probable Assignee: NOVON INT INC
Assignee(s): (std): WARNER LAMBERT CO
Assignee(s): WARNER LAMBERT COMPANY ; NOVON INT ; NOVON INT INC
Inventor(s): (std): TOMKA IVAN ; WITTWER FRITZ

Legal status (INPADOC)

View legal status timeline

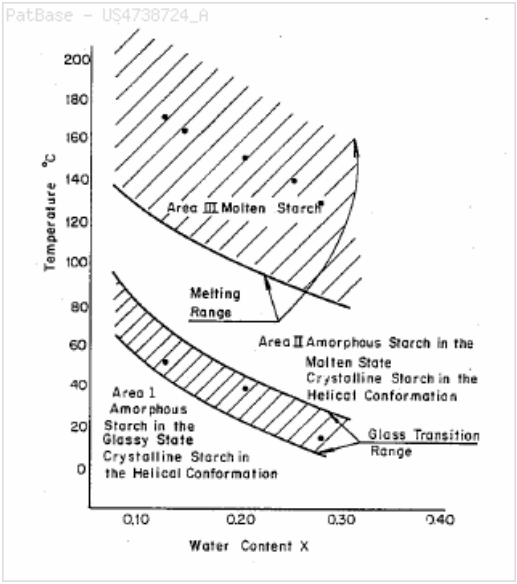
Patent	Date recorded	Event group	Code	Event	Details
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US4673438 A	19870415	LSGT	PAT1	Patented Case	
US4673438 A	19870415	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US4673438 A	19901101	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US4673438 A	19940926	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US4673438 A	19950503	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : NOVON INTERNATIONAL, INC., NEW YORK OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:WARNER-LAMBERT COMPANY; REEL/FRAME:007465/0078 EFFECTIVE DATE : 19941230
US4673438 A	19970602	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : NOVON INTERNATIONAL, INC., NEW YORK OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:MARWAN, ASHRAF, DR.; REEL/FRAME:008535/0674 EFFECTIVE DATE : 19970329
US4673438 A	19981125	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12

59) Family number: 33499027 (US4738724A)

Title: METHOD FOR FORMING PHARMACEUTICAL CAPSULES FROM STARCH COMPOSITIONS

Abstract: Novel injection molded pharmaceutical capsules of starch having a cap member, a body member, means to form a plurality of compartments therein; and means for locking the cap and body members together to form a tamper-resistant connection.

Classifications:
International (IPC 8-9): A61J3/07 A61K9/20 A61K9/48 B29C45/00 B29C65/00 B29C65/58 C08L3/00 C08L3/02 (Advanced/Invention); B29C65/56 (Advanced/Non-invention);
A61J3/07 A61K9/20 A61K9/48 B29C45/00 B29C65/00 B29C65/56 C08L3/00 (Core/Invention)
International (IPC 1-7): B29C45/00 C08C3/00
CPC: A61J3/07 A61J3/071 A61J3/072 A61J2205/20 A61J2205/30 A61J2205/40 A61K9/2072 A61K9/4808 A61K9/4816 A61K9/4825 B29C45/0001 B29C65/561 B29C65/565 B29C65/58 B29C66/112 B29C66/1122 B29C66/114 B29C66/1162 B29C66/118 B29C66/1222 B29C66/1224 B29C66/12425 B29C66/12443 B29C66/12449 B29C66/12463 B29C66/12469 B29C66/1282 B29C66/12841 B29C66/131 B29C66/1312 B29C66/14 B29C66/2276 B29C66/242 B29C66/24221 B29C66/24223 B29C66/24241 B29C66/24244 B29C66/53423 B29C66/53461 B29C66/5414 B29C66/542 B29C66/543 B29C66/545 B29C66/612 B29C66/71 B29C66/73793 B29K2003/00 B29K2995/0059 B29L2031/7174 C08L3/00 C08L3/02
European: A61J3/07 A61J3/07B A61J3/07B1 A61K9/20K A61K9/48A A61K9/48B A61K9/48B1 B29C45/00B B29C65/56 B29C65/56B B29C65/56F B29C65/58 B29C66/1122 B29C66/50 B29C66/534 B29C66/71 C08L3/00 C08L3/02 L29C65/56 L29C66/71 L29K3/00 L29K995/00F14 L29L31/7174
US: 106/126 106/206.1 106/213 106/214 264/328.1 264/328.14 264/328.15 264/328.18



Family:

Publication number	Publication date	Application number	Application date
US4738724 A	19880419	US19860909525	19860919

Priority:

US19820951577 19821220
US19830467982 19830218
US19830543694 19831020
US19830543698 19831020
US19830543699 19831020
US19830593692 19831020
US19830548794 19831104
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US19840579318 19840213
US19840641550 19840817
US19840641663 19840817
US19840641664 19840817
US19850796517 19851108
US19850798344 19851108
US19860909525 19860919

Probable Assignee: WARNER LAMBERT CO A CORP OF DE
Assignee(s): (std): WARNER LAMBERT CO
Assignee(s): WARNER LAMBERT COMPANY ; WARNER LAMBERT CO A CORP OF DE
Inventor(s): (std): BODENMANN HANS ULRICH ; GILLOW LOUIS S ; RAIBLE THOMAS ; TOMKA IVAN ; WITTWER FRITZ

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US4738724 A	19880419	LSGT	+	granted / extensions (spc, cpc, pte)	
US4738724 A	19861124	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WARNER LAMBERT-COMPANY, 201 TABOR ROAD, MORRIS PLA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNORS:WITTWER, FRITZ; TOMKA, IVAN; BODENMANN, HANS-ULRICH; AND OTHERS; REEL/FRAME:004644/0779; SIGNING DATES FROM 19860929 TO 19861120
US4738724 A	19861124	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WARNER LAMBERT-COMPANY, A CORP. OF DE., NEW JERSE OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:WITTWER, FRITZ; TOMKA, IVAN; BODENMANN, HANS-ULRICH; AND OTHERS; SIGNING DATES FROM 19860929 TO 19861120; REEL/FRAME:004644/0779
US4738724 A	19880222	LSGT	PAT1	Patented Case	
US4738724 A	19910927	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US4738724 A	19950920	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8

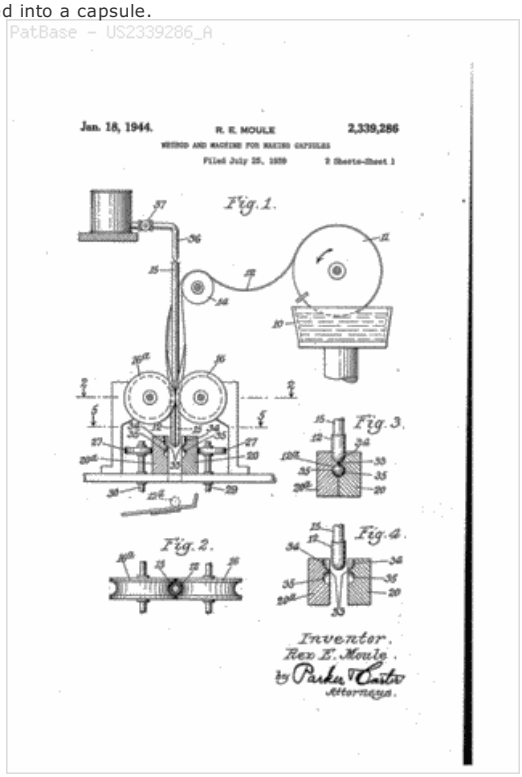
US4738724 A	20000416	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US4738724 A	20000627	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20000419
US4738724 A	20180130	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US4738724 A	20180130	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US4738724 A	20060919	PEXP		Calculated Patent Term Expiry	

60) Family number: 21983027 (US2339286A)

Title: METHOD AND MACHINE FOR MAKING CAPSULES

Abstract: 1. Apparatus for forming sealed filled capsules, comprising a, hollow mandrel. means for forming a. tube ot selatinous materlal about said mandrel and moving it along the mandrel so that it projects beyond the end thereof, means for -introducing capsule filling material into the mandrel and from the mandrel into the tube, and a. capsule shaping device adjacent the end of the mandrel, said device having parts which engage the **gelatin** material about said mandrel and compress lt around. the end of the mandrel so as to close said tube and shape the portion of the tube below the end at the mandrel In the form nt a capsule, and cut nfl' said portion thus formed into a capsule.

Classifications:
International (IPC 8-9): A61J3/07 (Advanced/Invention); A61J3/07 (Core/Invention)
International (IPC 1-7): A61J5/00 B29C24/00
CPC: A61J3/07
European: A61J3/07
US: 226/157 264/163 264/215 264/296 264/4 425/324.1 425/5



Family:

Publication number	Publication date	Application number	Application date
US2339286 A	19440118	US19390286315	19390725

Priority:
US19390286315 19390725

Probable Assignee:	MOULE LAB INC
Assignee(s): (std):	MOULE LAB INC
Assignee(s):	MOULE LABORATORIES INC
Inventor(s): (std):	MOULE REX E

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
US2339286 A	19440118	LSGT	+	granted / extensions (spc, cpc, pte)	

61) Family number: 43959028 (US5019302A)

Title: METHOD FOR GRANULATION

Abstract: Method and apparatus for the formation of granules of a larger size or mass of a desired range from a feed stock of smaller particles comprising feeding a meltable powdery material to be granulated, or a non-meltable powdery material with a meltable binder to the surface of a rotating spreader means in the form of a disk or bowl, at least a portion of which has been heated to a temperature above the melting point of the meltable component of the feed material wherein the rate of feeding, the energy input to the spreader means and the rotational speed of the spreader means are controlled so that there is sufficient time for at least a partial melting of the meltable component of the feed material substantially solely by contact with the heated surface of the spreader means, centrifugally spreading the material across the surface of the disk or bowl and dispersing the same from the edge thereof into an atmosphere cooler than the melting temperature to form the granulated product. For certain materials only a part of the powdery feed material is melted forming a liquid film carrying a major portion of substantially unaffected or minimally affected feed material to produce a product comprising individual granules containing a core as the major part of each granule with the original powdery material essentially unchanged maintained in self-sustaining form by a matrix of melted and resolidified particles bonded to each other at their surface.

Classifications:

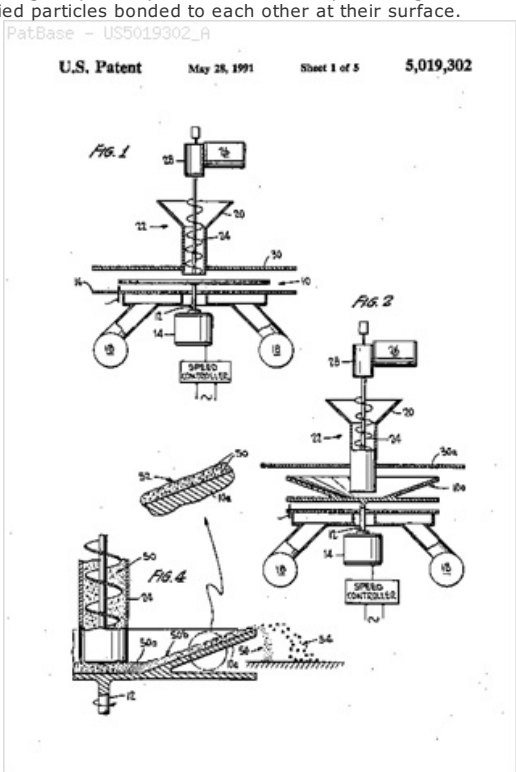
International (IPC 8-9): A01N25/12 A61J3/00 A61J3/06 A61K38/00 A61K9/16 A61P7/00 B01J2/00 B01J2/02 B01J2/14 B01J2/28 B22F9/08 B29B9/00 B29B9/08 B29B9/10 B29C67/00 B29C67/02 C07C213/10 C07C215/60 C07C227/42 C07C229/60 C07C233/25 C07C51/43 C07C63/06 C07D239/42 C07K1/00 C07K1/107 C07K1/113 C07K14/00 C07K14/195 C07K14/41 C07K14/52 C07K14/53 C07K14/535 C12N15/09 C12N15/27 C12P21/02 (Advanced/Invention);
A01N25/12 A61J3/06 A61K38/00 A61P7/00 B01J2/02 B29C67/02 C07K1/00 C07K14/00 C07K14/195 C07K14/41 C12N15/09 C12P21/02 (Advanced/Non-invention);
A61J3/00 A61J3/06 A61K9/16 B01J2/00 B01J2/02 B01J2/14 B01J2/28 B22F9/08 B29B9/00 B29C67/00 B29C67/02 (Core/Invention)

International (IPC 1-7): A01N25/12 A61J3/00 A61J3/06 A61K31/13 A61K31/135 A61K9/16 B01J2/00 B01J2/02 B01J2/04 B01J2/12 B01J2/14 B01J2/16 B01J2/28 B22F9/08 B29B9/00 B29B9/08 B29B9/10 B29C67/00 B29C67/02 C07C213/10 C07C215/60 C07C227/42 C07C229/60 C07C233/25 C07C51/43 C07C63/06 C07D239/42 C08J3/00

CPC: A61K38/00 C07K14/535 A61K9/1688 B01J2/00 B01J2/14 B01J2/28 A61P7/00

European: A61K9/16P2 B01J2/00 B01J2/14 B01J2/28 C07K14/535 K61K38/00

US: 23/313R 264/114 264/117 264/40.1 264/40.6 264/40.7 264/7 264/8 425/143 425/145 425/222 425/8



Family:

Publication number	Publication date	Application number	Application date
AT64547 E	19910715	AT19870302115T	19870311
AU198771626 A1	19871009	AU19870071626	19870304
AU199191665 A1	19920722	AU19910091665	19911218
AU591268 B2	19891130	AU19870071626	19870304
BRPI8707635 A	19890314	BR1987PI07635	19870304
CA1321692 A1	19930831	CA19870529571	19870212
CA2098600 AA	19930616	CA19912098600	19911218
CN1013479 B	19910814	CN19871001837	19870312
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CS8701508 A3	19921118	CS19870001508	19870306
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EG17922 A	19910630	EG19870000125	19870305
EP0237345 A2	19870916	EP19870302115	19870311
EP0237345 A3	19881102	EP19870302115	19870311
EP0237345 B1	19910619	EP19870302115	19870311
EP0563302 A1	19931006	EP19920903705	19911218
EP0563302 A4	19930726	EP19920903705	19911218
ES2023892 B3	19920216	ES19870302115T	19870311
FI884162 A	19880909	FI19880004162	19880909
FI884162 A0	19880909	FI19880004162	19880909
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HU48522 A2	19890628	HU19870001809	19870304
IL81760 A0	19871020	IL19870081760	19870303
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IN165885 A	19900203	IN1987CA00140	19870223
IN166883 A	19900804	IN1988CA00696	19880819
IS1499 B	19920730	IS19870003199	19870226
IS1499 B6	19920730	IS19870003199	19870226

IS3199 A7	19870913	IS19870003199	19870226
JP1501768 T2	19890622	JP19870501926T	19870304
JP6507571 T2	19940901	JP19920503332T	19911218
KR19880701175 A	19880726	KR19870701034	19871112
KR19887001175 A	19880726	KR19870701034	19870304
NO874697 A	19871111	NO19870004697	19871111
NO874697 A0	19871111	NO19870004697	19871111
NO874697 L	19871111	NO19870004697	19871111
NZ219532 A	19900129	NZ19870219532	19870306
PL264591 A1	19880428	PL19870264591	19870312
PT84438 A	19870401	PT19870084438	19870310
PT84438 B	19891004	PT19870084438	19870310
US5019302 A	19910528	US19860838828	19860312
US5100592 A	19920331	US19900631249	19901220
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WO9211120 A1	19920709	WO1991US09192	19911218
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Priority:

US19860838828 19860312 CA19870529571 19870212 IN1987CA00140 19870223
WO1987US00434 19870304 IN1988CA00696 19880819 US19900631249 19901220
WO1991US09192 19911218

Probable Assignee: DRUGTECH CORP

Assignee(s): (std): WASHINGTON UNIV TECHNOLOGY ASSOCIATES INC ; UNIV WASHINGTON TECH ASS ; UNIV WASHINGTON ; SPARKS ROBERT E ; WASHINGTON UNIVER TECHNOLOGY A ; WASHINGTON UNIV TECH ASS INC

Assignee(s): MASON NORBERT S ; WASHINGTON UNIV TECHNOLOGY ASSOCIATES INC US ; OF STATE OF MISSOURI U S A CORP ; DRUGTECH CORP ; WASHINGTON UNIV TECHNOLOGY ASSOCIATES INC WUTA ; WASHINGTON UNIV TECHNOLOGY ASSOCIATES INC OF STATE OF MISSOURI U S A CORP ; WASHINGTON UNIV TECHNOLOGY ASSOCIATES INC A OF STATE OF MISSOURI U S A CORP ; WASHINGTON UNIV TECHNOLOGY ASS INC ST LOUIS MO US ; WASHINGTON UNIV TECHNOLOGY ASS ; WASHINGTON UNIV TECHNOLOGY ASSOCIATES ; WASHINGTON UNIV TECHNOLOGY ASSOCIATED INC ; WASHINGTON UNIV ; CENTER MICHAEL ; MASON NORBERT SIMON ; SPARKS ROBERT EDWARD ; WASHINGTON UNIV TECHNOLOGY ASSOCIATES INC A CORP O ; WASHINGTON UNIVER TECHNOLOGY ASSOCIATES INC WUTA ; WASHINGTON UNIVERTECHNOLOGY ASSOCIATES INC WUTA

Inventor(s): (std): SPARKS ROBERT E ; SPARKS R E ; SPARKS EDWARD ROBERT ; SPARKS ROBERT EDWARD ; ROBERT EDWARD SPARKS ; NORBERT SIMON MASON ; MICHAEL CENTER ; MASON SIMON NORBERT ; MASON NORBERT S ; MASON NORBERT ; MASON N S ; MASON NORBERT SIMON ; CENTER MICHAEL ; CENTER M

Inventor(s): MASON NORBERT S US ; CENTER MICHAEL US ; CENTER MICHAEL ST LOUIS MISSOURI 63146 US ; MASON NORBERT SIMON CLAYTON MISSOURI 63105 US ; NORBERT S MASON ; ROBERT E SPARKS ; SPARKS ROBERT EDWARD KIRKWOOD MISSOURI 63122 US ; SPARKS ROBERT E US ; ROBERT EDWARD SPARKS ET AL

Agent(s): FB RICE; FB RICE PTY LTD; BORDEN LADNER GERVAIS LLP

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

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
AT64547 E	19910715	LSGT	+	granted / extensions (spc, cpc, pte)	
AT64547 E	19920415	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	
AT64547 E	19930615	LSLE	-REN	CEASED DUE TO NON-PAYMENT OF THE ANNUAL FEE	
AT64547 E	20070311	PEXP		Calculated Patent Term Expiry	
AU198771626 A1	19871009	LSPB	+	published / reissued	
AU199191665 A1	19920722	LSPB	+	published / reissued	
AU591268 B2	19891130	LSGT	+	granted / extensions (spc, cpc, pte)	
AU591268 B2	20070304	PEXP		Calculated Patent Term Expiry	
BRPI8707635 A	19890314	LSPB	+	published / reissued	
BRPI8707635 A	19950627	LSWD	-FB19	GRANT PROCEDURE SUSPENDED (ART. 19)	
BRPI8707635 A	19960409	LSDW	-FA2	APPLICATION DEEMED WITHDRAWN (ART. 19(5))	
CA1321692 A1	19930831	LSGT	+	granted /	

				extensions (spc, cpc, pte)	
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CA1321692 A1	20100831	PEXP		Calculated Patent Term Expiry	
CA2098600 AA	19930616	LSPB	+	published / reissued	
CA2098600 AA	19971218	LSLE	-FZDE	DEAD	
CN1013479 B	19910814	LSPB	+	published / reissued	
CN1013479 B	19910814	LSES	GR02	审定 (Approved patent application)	TEXT：审定 (APPROVAL)
CN1013479 B	19920506	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN1013479 B	19920506	LSGT	+GR01	授权 (The grant of patent right)	TEXT：授权 (AUTHORIZATION)
CN1013479 B	19940119	LSLE	-C19	LAPSE OF PATENT RIGHT DUE TO NON-PAYMENT OF THE ANNUAL FEE	
CN1013479 B	19940119	LSLE	-CF01	未缴年费专利权终止 (Termination of patent right due to unpaid annual fee)	TEXT：专利权的终止未缴年费专利权终止 (ANY CESSATION TERMINATION OF PATENT RIGHT DUE TO FAILURE TO PAY ANNUAL FEE)
CN87101837 A	19871202	LSPB	+	published / reissued	
CN87101837 A	19871202	LSPB	+C06	PUBLICATION	
CN87101837 A	19871202	LSPB	PB01	公开 (The publication of application)	TEXT：公开 (DISCLOSURE)
CS8701508 A3	19921118	LSPB	+	published / reissued	
DD265336 A5	19890301	LSGT	+	granted / extensions (spc, cpc, pte)	
DD265336 A5	19990826	LSLE	-ENJ	CEASED DUE TO NON-PAYMENT OF RENEWAL FEE	
DD265336 A5	20050311	PEXP		Calculated Patent Term Expiry	
DE3770843 D1	19920716	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
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DE3770843 D1	19920716	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE3770843 D1	19920716	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE3770843 D1	19990408	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
DE3770843 D1	19990408	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
DE3770843 D1	19990408	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
DE3770843 D1	19990408	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
DK590687 A	19871111	LSPB	+	published / reissued	
DK590687 A	19921123	LSWD	-AHB	APPLICATION SHELVED DUE TO NON-PAYMENT	
EG17922 A	19910630	LSGT	+	granted / extensions (spc, cpc, pte)	
EG17922 A	20070305	PEXP		Calculated Patent Term Expiry	
EP0237345 A2	19870916	LSPB	+	published / reissued	

EP0237345 A3	19890628	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19890421
EP0237345 A3	19891102	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 19890913
EP0237345 B1	19910619	LSGT	+	granted / extensions (spc, cpc, pte)	
EP0237345 B1	19910619	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 : 19910619
EP0237345 B1	19920216	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2023892 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : B3 DESIGNATED STATE(S) :
EP0237345 B1	19920311	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT LAPSED DATE : 19920311
EP0237345 B1	19920312	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 : 19920312
EP0237345 B1	19920331	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE LAPSED DATE : 19920331
EP0237345 B1	19920331	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 : 19920331
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EP0237345 B1	19920930	LSLE	-BERE	BE: LAPSED	PARTYTYPE : OWNER REF COUNTRY CODE : EP OWNER : WASHINGTON UNIVERSITY TECHNOLOGY ASSOCIATES INC. EFFECTIVE DATE : 19920331
EP0237345 B1	19921001	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL LAPSED DATE : 19921001
EP0237345 B1	19921116	LSLE	-NLV4	NL: LAPSED OR ANULLED DUE TO NON-PAYMENT OF THE ANNUAL FEE	REF COUNTRY CODE : EP
EP0237345 B1	19941230	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : MM2A TEXT : 3002725
EP0237345 B1	19950131	LSGT	+EAL	SE: EUROPEAN PATENT IN FORCE IN SWEDEN	REF COUNTRY CODE : EP TEXT : 87302115.8
EP0237345 B1	19970303	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 19970303 YEAR OF FEE PAYMENT : 11
EP0237345 B1	19970313	LSFE	+PGFP	ANNUAL FEE PAID	COUNTRY OF REF DOCUMENT :

				TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	FR PAYMENT DATE : 19970313 YEAR OF FEE PAYMENT : 11
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EP0237345 B1	19970319	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 19970319 YEAR OF FEE PAYMENT : 11
EP0237345 B1	19970320	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 19970320 YEAR OF FEE PAYMENT : 11
EP0237345 B1	19980311	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 : 19980311
EP0237345 B1	19980312	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 : 19980312
EP0237345 B1	19980331	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 : 19980331
EP0237345 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
EP0237345 B1	19980331	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 : 19980331
EP0237345 B1	19981104	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 19980311
EP0237345 B1	19981113	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP0237345 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
EP0237345 B1	19981207	LSLE	-EUG	SE: EUROPEAN PATENT HAS LAPSED	REF COUNTRY CODE : EP TEXT : 87302115.8
EP0237345 B1	19981231	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST
EP0237345 B1	19990616	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 19990503
EP0237345 B1	20050311	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 : 20050311
EP0237345 B1	20070311	PEXP		Calculated Patent	

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EP0563302 A1	19931006	LSPB	+	published / reissued	
EP0563302 A1	19931006	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19930517
EP0563302 A1	19950510	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 19950328
EP0563302 A1	19970402	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 19961008
ES2023892 B3	19920216	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2023892 B3	20070311	PEXP		Calculated Patent Term Expiry	
FI884162 A	19880909	LSPB	+	published / reissued	
FI884162 A	20040831	LSLE	-MM	PATENT LAPSED	PARTYTYPE : OWNER OWNER : WASHINGTON UNIVERSITY TECHNOLOGY ASSOCIA
GR3002725 T3	19930125	LSGT	+	granted / extensions (spc, cpc, pte)	
GR3002725 T3	20110916	PEXP		Calculated Patent Term Expiry	
HU48522 A2	19890628	LSPB	+	published / reissued	
HU48522 A2	19900828	LSRV	DFC9	REFUSAL OF APPLICATION	
IL81760 A1	19900429	LSPB	+	published / reissued	
IN165885 A	19900203	LSPB	+	published / reissued	
IN166883 A	19900804	LSPB	+	published / reissued	
IS1499 B	19920730	LSGT	+	granted / extensions (spc, cpc, pte)	
IS1499 B6	19920730	LSGT	+	granted / extensions (spc, cpc, pte)	
IS3199 A7	19870913	LSPB	+	published / reissued	
JP1501768 T2	19890622	LSPB	+	published / reissued	
JP6507571 T2	19940901	LSPB	+	published / reissued	
KR19880701175 A	19880726	LSPB	+	published / reissued	
KR19887001175 A	19880726	LSPB	+	published / reissued	
KR19887001175 A	19941130	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR19887001175 A	19950218	LSRV	-E601	DECISION TO REFUSE APPLICATION	
NO874697 A	19871111	LSPB	+	published / reissued	
NZ219532 A	19900129	LSPB	+	published / reissued	
PL264591 A1	19880428	LSPB	+	published / reissued	
PT84438 A	19870401	LSPB	+	published / reissued	
PT84438 B	19891004	LSGT	+	granted / extensions (spc, cpc, pte)	
PT84438 B	19930129	LSLE	-MM3A	ANNULMENT OR LAPSE	TEXT : LAPSE DUE TO NON-PAYMENT OF FEES EFFECTIVE DATE : 19920930
PT84438 B	20070310	PEXP		Calculated Patent	

				Term Expiry	
US5019302 A	19910528	LSGT	+	granted / extensions (spc, cpc, pte)	
US5019302 A	19860312	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WASHINGTON UNIVERSITY TECHNOLOGY ASSOCIATES, INC., OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNORS:SPARKS, ROBERT E.; MASON, NORBERT S.; CENTER, MICHAEL; REEL/FRAME:004527/0082 EFFECTIVE DATE : 19860309
US5019302 A	19910328	LSGT	PAT1	Patented Case	
US5019302 A	19910328	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5019302 A	19940919	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5019302 A	19981119	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5019302 A	20021009	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5019302 A	20081009	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : DRUGTECH CORPORATION, DELAWARE OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:PARTICLE AND COATING TECHNOLOGIES, INC.; REEL/FRAME:021658/0226 EFFECTIVE DATE : 20070531
US5019302 A	20080528	PEXP		Calculated Patent Term Expiry	
US5100592 A	19920331	LSGT	+	granted / extensions (spc, cpc, pte)	
US5100592 A	19901220	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WASHINGTON UNIVERSITY TECHNOLOGY ASSOCIATES, INC., OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNORS:SPARKS, ROBERT E.; MASON, NORBERT S.; CENTER, MICHAEL; REEL/FRAME:005555/0859; SIGNING DATES FROM 19901207 TO 19901214
US5100592 A	19920320	LSGT	PAT1	Patented Case	
US5100592 A	19950915	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5100592 A	19990901	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5100592 A	20040331	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5100592 A	20040525	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20040331
US5100592 A	20081009	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : DRUGTECH CORPORATION, DELAWARE OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:PARTICLE AND COATING TECHNOLOGIES, INC.; REEL/FRAME:021658/0226 EFFECTIVE DATE : 20070531
US5100592 A	20180127	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US5100592 A	20180127	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US5100592 A	20101220	PEXP		Calculated Patent Term Expiry	
WO8705561 A1	19870924	LSPB	+	published / reissued	

WO8705561 A1	19880909	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 884162 COUNTRY OF REF DOCUMENT : FI
WO9211120 A1	19920709	LSPB	+	published / reissued	
WO9211120 A1	19930423	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1992903705 COUNTRY OF REF DOCUMENT : EP
WO9211120 A1	19930616	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2098600 COUNTRY OF REF DOCUMENT : CA
WO9211120 A1	19931006	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1992903705 COUNTRY OF REF DOCUMENT : EP
WO9211120 A1	19961008	LSWD	-WWW	WIPO INFORMATION: WITHDRAWN IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1992903705 COUNTRY OF REF DOCUMENT : EP
ZA8701163 A	19870930	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA8701163 A	20070217	PEXP		Calculated Patent Term Expiry	

62) Family number: 32216028 (DE202005004661U1)

Title: COMPOSITION CONTAINING TIOTROPIUM, USEFUL FOR TREATMENT OF RESPIRATORY DISEASES BY INHALATION, COMPRISES A DRY POWDER FILLED DIRECTLY INTO A SEALED CONTAINER

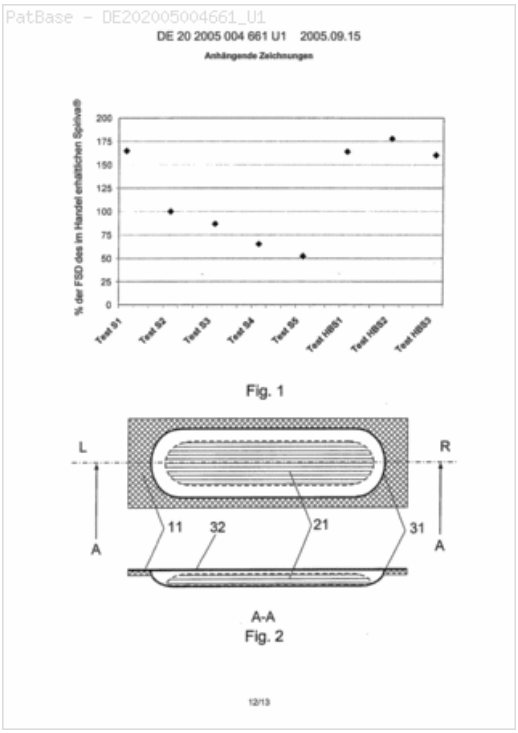
Abstract: Medical product (A) comprises a dose of tiotropium (I), as dry powder, filled directly into a container, formed from a high-security seal that prevents entry of moisture so that the original proportion of fine particles in the powder is retained. The dose of (I) is suitable for administration using a dry powder inhaler. Independent claims are also included for: (1) Pharmaceutical composition (A1) comprising (I), or its salt, and a pharmaceutical carrier (II) that is filled directly into a dry, moisture-proof package or dry, sealed container so that the original proportion of fine particles in the powder is retained; and (2) Medical product, similar to (A), or composition similar to (A1), that includes another pharmaceutical (III), separately or together with (I), and optionally (II). ACTIVITY: Antiinflammatory; Antiasthmatic. No details of tests for these activities are given. MECHANISM OF ACTION: None given.

Classifications:

International (IPC 8-9): A61J3/02 A61K31/538 A61K9/14 A61M15/00 A61P11/00 (Advanced/Invention);
A61J3/00 A61K31/5375 A61K9/14 A61M15/00 A61P11/00 (Core/Invention)

International (IPC 1-7): A61J3/02 A61K31/538 A61K9/14 A61M15/00 A61P11/00

CPC: A61J3/02 A61K9/14 A61M15/00 A61K31/439 A61P11/00



Family:

Publication number	Publication date	Application number	Application date
DE202005004661 U1	20050811	DE200520004661U	20050322

Priority:

DE200520004661U 20050322

Probable Assignee: MICRODRUG HERGISWIL AG

Assignee(s): (std)**:** MICRODRUG AG HERGISWIL ; MICRODRUG HERGISWIL AG

Legal status (INPADOC)

View legal status timeline

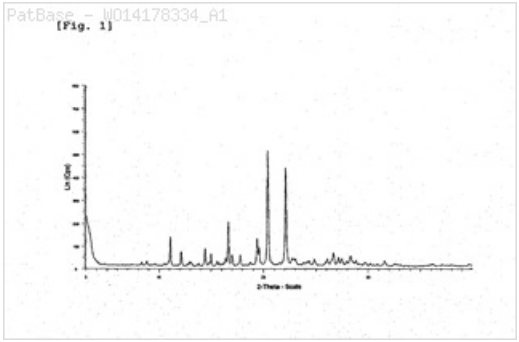
Patent	Date recorded	Event group	Code	Event	Details
DE202005004661 U1	20050811	LSGT	+	granted / extensions (spc, cpc, pte)	
DE202005004661 U1	20050915	LSGT	R207	UTILITY MODEL SPECIFICATION	EFFECTIVE DATE : 20050915
DE202005004661 U1	20060529	LSOP	-R165	REQUEST FOR CANCELLATION OR RULING FILED	
DE202005004661 U1	20060921	LSWD	-R168	UTILITY MODEL CANCELLED	EFFECTIVE DATE : 20060710
DE202005004661 U1	20150322	PEXP		Calculated Patent Term Expiry	

63) Family number: 57701028 (US2014322334A)

Title: ORAL SOLID PREPARATION COMPRISING ARIPIPRAZOLE AND METHOD FOR PRODUCING ORAL SOLID PREPARATION COMPRISING ARIPIPRAZOLE

Abstract: [Object] An object of the present invention is to provide an oral solid preparation that can be produced in a simpler manner than conventional methods, that exhibits high bioavailability and high dissolubility even in persons having low stomach acid, and that can also ensure dissolubility after being allowed to stand for a certain period of time. Another object is to provide a simple method for producing the oral solid preparation. [Means for Achieving the Object] The present invention relates to an oral solid preparation comprising, as an active ingredient, a finely milled crystal obtained by milling an aripiprazole hydrate crystal, and a pharmaceutically acceptable carrier, the finely milled crystal having a mean particle size of 15 micro m or less; and a method for producing an oral solid preparation comprising the steps of (1) milling an aripiprazole hydrate crystal into a finely milled crystal having a mean particle size of 15 micro m or less, and (2) mixing the obtained finely milled crystal with a pharmaceutically acceptable carrier.

Classifications:
International (IPC 8-9): A61J3/02 A61J3/10 A61K A61K31/496 A61K9/00 A61K9/14 A61K9/16 A61K9/20 A61K9/48 A61P25/18 A61P25/28 C07D215/227 C07D401/12 (Advanced/Invention);
A61K9/14 (Core/Invention);
A61K (Subclass/Invention)
International (IPC 1-7): A61K9/14 A61K9/20
CPC: A61J3/10 A61J3/02 A61K9/20 A61K9/1688 A61K9/0053 A61K9/2095 A61K9/2059 A61K9/14 A61K9/2018 A61P25/18 A61P25/28 A61K31/496 C07D215/227
US: 1/1 264/115 424/464 424/489 514/253.07



Family:

Publication number	Publication date	Application number	Application date
AR096131 AA	20151209	AR2014P101759	20140429
AU2014260863 AA	20151105	AU20140260863	20140418
AU2014260863 AB	20151217	AU20140260863	20140418
AU2017204483 AA	20170720	AU20170204483	20170630
AU2017204483 BB	20190404	AU20170204483	20170630
CA2910665 AA	20151026	CA20142910665	20140418
CA2910665 C	20180522	CA20142910665	20140418
CN105246461 A	20160113	CN201480030892	20140418
CN105246461 B	20180330	CN201480030892	20140418
DE602014008362 D1	20170518	DE201460008362T	20140418
EP2838513 A1	20150225	EP20140729061	20140418
EP2838513 B1	20170405	EP20140729061	20140418
EP3187173 A1	20170705	EP20170156237	20140418
ES2625613 T3	20170720	ES20140729061T	20140418
HK1206990 A1	20160122	HK20150107666	20150808
HK1206990 B	20180215	HK20150107666	20150808
HK1240141 A1	20180518	HK20170113806	20150808
ID201704273 A	20170428	ID2015P0007899	20140418
IL242084 A0	20151231	IL20140242084	20140418
JP2015516942 T2	20150618	JP20140553001T	20140418
JP5931219 B2	20160608	JP20140553001T	20140418
KR101759017 B1	20170717	KR20157033739	20140418
KR20160003136 A	20160108	KR20157033739	20140418
KR20170052704 A	20170512	KR20177011965	20140418
PH2015502435 A	20160222	PH20150502435	20151022
PH2015502435 B	20160222	PH20150502435	20151022
TH158983 A	20170104	TH20151006565	20140418
TW201521793 A	20150616	TW20140115151	20140428
TW201740947 A	20171201	TW20170127320	20140428
TWI624276 B	20180521	TW20140115151	20140428
US2014322334 AA	20141030	US20140264693	20140429
US2015093441 AA	20150402	US20140265883	20140430
US2015231076 AA	20150820	US20150701416	20150430
US2017136010 AA	20170518	US20170418595	20170127
US2017258723 AA	20170914	US20170601723	20170522
US9051268 BB	20150609	US20140264693	20140429
VN17466 A1	20171025	VN20150004576	20140418
WO14178334 A1	20141106	WO2014JP61643	20140418

Priority:

JP20130095725 20130430
EP20140729061 20140418
US20140264693 20140429
HK20150107666 20150808
AU20170204483 20170630
JP20130204546 20130930
WO2014JP61643 20140418
US20140265883 20140430
US20170418595 20170127
AU20140260863 20140418
JP20140553001 20140418
US20150701416 20150430
US20170601723 20170522

Probable Assignee: OTSUKA PHARMACEUTICAL CO LTD

Assignee(s): (std): OTSUKA PHARMACEUTICAL CO LTD ; OTSUKA PHARMA CO LTD

Assignee(s): MUKAI TADASHI ; TANIGUCHI TOSHIAKI ; YOSHIDA HARUKA ; OTSUKA PHARMACEUTICAL CO

Inventor(s): (std): HARUKA YOSHIDA ; MUKAI TADASHI ; TADASHI MUKAI ; TANIGUCHI TOSHIAKI ; TOSHIAKI TANIGUCHI ; YOSHIDA HARUKA

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; SMART AND BIGGAR; HOFFMANN EITLE; LEHMANN MARIA ISABEL; KING AND WOOD MALLESONS IP LTD; HASTINGS AND CO; DR LNDA CITRANINDA NOERHADI MA; SAEGUSA AND PARTNERS; FINNEGAN HENDERSON FARABOW GARRETT AND DUNNER LLP

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
AR096131 AA	20151209	LSPB	+	published / reissued	
AU2014260863 AA	20151105	LSPB	+	published / reissued	
AU2014260863 AA	20151217	LSRE	DA3	AMENDMENTS MADE SECTION 104	TEXT : THE NATURE OF THE AMENDMENT IS AS SHOWN IN THE STATEMENT(S) FILED 04 NOV 2015
AU2014260863 AA	20170727	LSLE	-MK5	APPLICATION LAPSED SECTION 142(2)(E) - PATENT REQUEST AND COMPL. SPECIFICATION NOT ACCEPTED	
AU2017204483 AA	20170720	LSPB	+	published / reissued	
AU2017204483 BB	20190404	LSGT	+	granted / extensions (spc, cpc, pte)	
AU2017204483 BB	20190801	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU2017204483 BB	20370630	PEXP		Calculated Patent Term Expiry	
CA2910665 AA	20151026	LSPB	+	published / reissued	
CA2910665 AA	20151221	LSES	+EEER	EXAMINATION REQUEST	EFFECTIVE DATE : 20151116
CA2910665 C	20180522	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2910665 C	20340418	PEXP		Calculated Patent Term Expiry	
CN105246461 A	20160113	LSPB	+	published / reissued	
CN105246461 A	20160113	LSPB	+C06	PUBLICATION	
CN105246461 B	20180330	LSGT	+	granted / extensions (spc, cpc, pte)	
CN105246461 B	20180330	LSGT	+GR01	PATENT GRANT	
CN105246461 B	20340418	PEXP		Calculated Patent Term Expiry	
DE602014008362 D1	20180105	LSOP	R026	OPPOSITION FILED AGAINST PATENT	
DE602014008362 D1	20180223	LSOP	R026	OPPOSITION FILED AGAINST PATENT	
EP2838513 A1	20150225	LSPB	+	published / reissued	
EP2838513 A1	20150225	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20141119
EP2838513 A1	20150527	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20150423
EP2838513 A1	20160727	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20160629
EP2838513 B1	20170405	LSGT	+	granted / extensions (spc,	

				cpc, pte)	
EP2838513 B1	20170405	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP2838513 B1	20170413	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP2838513 B1	20170415	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 881119 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20170415
EP2838513 B1	20170427	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 4
EP2838513 B1	20170503	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP2838513 B1	20170518	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602014008362 COUNTRY OF REF DOCUMENT : DE
EP2838513 B1	20170720	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2625613 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) : EFFECTIVE DATE : 20170720
EP2838513 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170420 YEAR OF FEE PAYMENT : 4
EP2838513 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170427 YEAR OF FEE PAYMENT : 4
EP2838513 B1	20170825	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : LT REF LEGAL EVENT CODE : MG4D
EP2838513 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20170516 YEAR OF FEE PAYMENT : 4
EP2838513 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20170430 YEAR OF FEE PAYMENT : 4
EP2838513 B1	20170915	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MK05 REF DOCUMENT NUMBER : 881119 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20170405
EP2838513 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
EP2838513 B1	20171031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE	COUNTRY OF REF DOCUMENT : LT NOTIFICATIONOFLAPSE : LAPSE

				[ANNOUNCED VIA 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 : 20170405
EP2838513 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
EP2838513 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
EP2838513 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
EP2838513 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
EP2838513 B1	20171031	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 : 20170705
EP2838513 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
EP2838513 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
EP2838513 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
EP2838513 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
EP2838513 B1	20171130	LSLE	-PG25	LAPSED IN A	COUNTRY OF REF DOCUMENT :

				CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	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
EP2838513 B1	20171130	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 : 20170405
EP2838513 B1	20171130	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP2838513 B1	20180105	LSOP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R026 REF DOCUMENT NUMBER : 602014008362 COUNTRY OF REF DOCUMENT : DE
EP2838513 B1	20180124	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP2838513 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
EP2838513 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
EP2838513 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
EP2838513 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
EP2838513 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
EP2838513 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
EP2838513 B1	20180214	LSOP	-26	OPPOSITION FILED	PARTYTYPE : OPPONENT OPPONENT : TEVA PHARMACEUTICAL INDUSTRIES LTD. EFFECTIVE DATE : 20180105

EP2838513 B1	20180215	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HK REF LEGAL EVENT CODE : GR REF DOCUMENT NUMBER : 1206990 COUNTRY OF REF DOCUMENT : HK
EP2838513 B1	20180223	LSOP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R026 REF DOCUMENT NUMBER : 602014008362 COUNTRY OF REF DOCUMENT : DE
EP2838513 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 : 20170430
EP2838513 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 : 20170430
EP2838513 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
EP2838513 B1	20180228	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 : 20170418
EP2838513 B1	20180315	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 5
EP2838513 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 : 20170418
EP2838513 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 : 5
EP2838513 B1	20180514	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R100 REF DOCUMENT NUMBER : 602014008362 COUNTRY OF REF DOCUMENT : DE
EP2838513 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
EP2838513 B1	20180531	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 : 20170430
EP2838513 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20180315 YEAR OF FEE PAYMENT : 5

				OFFICE TO EPO]	
EP2838513 B1	20180620	LSGT	+26D	OPPOSITION DEEMED NOT TO HAVE BEEN FILED	PARTYTYPE : OPPONENT OPPONENT : TEVA PHARMACEUTICAL INDUSTRIES LTD. EFFECTIVE DATE : 20180223
EP2838513 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180404 YEAR OF FEE PAYMENT : 5
EP2838513 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20180507 YEAR OF FEE PAYMENT : 5
EP2838513 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20180420 YEAR OF FEE PAYMENT : 5
EP2838513 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 : 20170418
EP2838513 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20190313 YEAR OF FEE PAYMENT : 6
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EP2838513 B1	20190731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20190419 YEAR OF FEE PAYMENT : 6
EP2838513 B1	20190731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20190402 YEAR OF FEE PAYMENT : 6
EP2838513 B1	20190731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20190506 YEAR OF FEE PAYMENT : 6
EP2838513 B1	20191031	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 : 20170405
EP2838513 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20190417 YEAR OF FEE PAYMENT : 6
EP2838513 B1	20191129	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 : 20170405
EP2838513 B1	20200331	LSLE	-PG25	LAPSED IN A	COUNTRY OF REF DOCUMENT :

				CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	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 : 20170405
EP2838513 B1	20200529	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 : 20170405
EP2838513 B1	20340418	PEXP		Calculated Patent Term Expiry	
EP3187173 A1	20170705	LSPB	+	published / reissued	
EP3187173 A1	20170705	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20170215
EP3187173 A1	20190515	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20190415
ES2625613 T3	20170720	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2625613 T3	20340418	PEXP		Calculated Patent Term Expiry	
HK1206990 A1	20160122	LSPB	+	published / reissued	
HK1206990 A1	20350808	PEXP		Calculated Patent Term Expiry	
HK1206990 B	20180215	LSGT	+	granted / extensions (spc, cpc, pte)	
HK1206990 B	20350808	PEXP		Calculated Patent Term Expiry	
HK1240141 A1	20180518	LSPB	+	published / reissued	
ID201704273 A	20170428	LSPB	+	published / reissued	
JP2015516942 T2	20150618	LSPB	+	published / reissued	
JP2015516942 T2	20150826	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20150825
JP2015516942 T2	20151019	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20151019
JP2015516942 T2	20160331	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2015516942 T2	20160405	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20160405
JP2015516942 T2	20160506	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20160426
JP2015516942 T2	20160513	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 5931219 COUNTRY OF REF DOCUMENT : JP
JP5931219 B2	20160608	LSGT	+	granted / extensions (spc, cpc, pte)	
JP5931219 B2	20150324	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20141030

JP5931219 B2	20160407	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP5931219 B2	20160502	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP5931219 B2	20160513	LSGT	+R150	特許証 (Patent certificate)	
JP5931219 B2	20190411	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5931219 B2	20190416	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5931219 B2	20340418	PEXP		Calculated Patent Term Expiry	
KR101759017 B1	20170717	LSGT	+	granted / extensions (spc, cpc, pte)	
KR101759017 B1	20340418	PEXP		Calculated Patent Term Expiry	
KR20160003136 A	20160108	LSPB	+	published / reissued	
KR20160003136 A	20151201	LSRE	AMND	AMENDMENT	
KR20160003136 A	20160712	LSES	A201	REQUEST FOR EXAMINATION	
KR20160003136 A	20160712	LSES	A302	REQUEST FOR ACCELERATED EXAMINATION	
KR20160003136 A	20160712	LSRE	AMND	AMENDMENT	
KR20160003136 A	20160804	LSRE	AMND	AMENDMENT	
KR20160003136 A	20160829	LSRE	AMND	AMENDMENT	
KR20160003136 A	20161018	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR20160003136 A	20170109	LSRE	AMND	AMENDMENT	
KR20160003136 A	20170330	LSRV	-E601	DECISION TO REFUSE APPLICATION	
KR20160003136 A	20170428	LSRE	AMND	AMENDMENT	
KR20160003136 A	20170519	LSGT	+X701	DECISION TO GRANT (AFTER RE-EXAMINATION)	
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TW201521793 A	20150616	LSPB	+	published / reissued	
TW201740947 A	20171201	LSPB	+	published / reissued	
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US2015093441 AA	20140716	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OTSUKA PHARMACEUTICAL CO., LTD., JAPAN OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:YOSHIDA, HARUKA; TANIGUCHI, TOSHIAKI; MUKAI, TADASHI; REEL/FRAME:033323/0134 EFFECTIVE DATE : 20140507
US2015093441 AA	20170328	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2015231076 AA	20150820	LSPB	+	published / reissued	
US2015231076 AA	20170718	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2017136010 AA	20170518	LSPB	+	published / reissued	
US2017136010 AA	20171205	LSES	-NFA2	Non Final Action Counted, Not Yet Mailed	
US2017136010 AA	20171206	LSES	NFA1	Non Final Action Mailed	
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US2017258723 AA	20170914	LSPB	+	published / reissued	
US2017258723 AA	20171128	LSES	NFA1	Non Final Action Mailed	
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US2017258723 AA	20181115	LSAL	STCV	INFORMATION ON STATUS: APPEAL PROCEDURE	TEXT : NOTICE OF APPEAL FILED
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US9051268 BB	20150520	LSGT	PAT1	Patented Case	
US9051268 BB	20170124	LSRE	CC	CERTIFICATE OF CORRECTION	
US9051268 BB	20181122	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US9051268 BB	20340429	PEXP		Calculated Patent Term Expiry	
VN17466 A1	20171025	LSGT	+	granted / extensions (spc, cpc, pte)	
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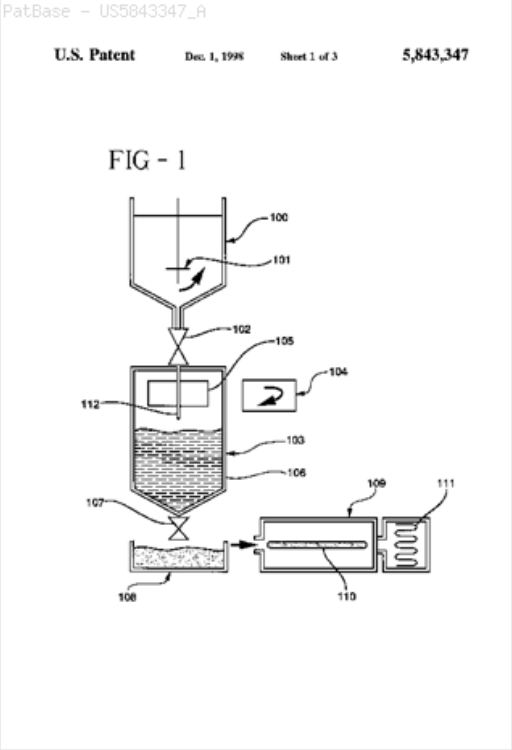
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64) Family number: 11284028 (US5843347A)

Title: Extrusion and freeze-drying method for preparing particles containing an active ingredient

Abstract: The present invention relates to a process for the preparation of particles each comprising an excipient forming a matrix and at least one active ingredient uniformly distributed in the mass of said matrix, said process, which comprises the operations of extrusion and then lyophilization, being characterized in that it comprises the steps consisting of (1.) the preparation of a homogeneous mixture from (a) at least one active ingredient, (b) a physiologically acceptable hydrophilic excipient, and (c) water to give a pasty mixture with a viscosity below 1 Pa.s, measured at room temperature (15 DEG -20 DEG C.); (2.) the extrusion of the resulting homogeneous mixture and the cutting of the extrudate to give moist particles; (3.) the freezing of the resulting particles as they fall under gravity through a stream of inert gas at a temperature below 0 DEG C.; and (4.) the freeze drying of said particles.

Classifications:
International (IPC 8-9): A23P1/02 A61J3/06 A61K9/14 A61K9/16 A61K9/19 B01J13/04 B01J2/04 B01J2/20 B29C47/00 C08J9/28 F25C1/00 F26B5/06 (Advanced/Invention);
A23P1/02 A61J3/06 A61K9/14 A61K9/16 A61K9/19 B01J2/02 B01J2/20 B29C47/00 C08J9/00 F25C1/00 F26B5/04 (Core/Invention)
International (IPC 1-7): A23P1/02 A61J3/06 A61K9/14 B01J13/02 B01J13/04 B01J2/00 B01J2/04 B01J2/18 B29C47/00 C08J9/28 F26B5/06
CPC: A61K9/1623 A61K9/1652 A61K9/1694 B01J2/04 B01J2/20 F25C1/00
European: A61K9/16H4B A61K9/16H6F A61K9/16P4 B01J2/04 B01J2/20 F25C1/00
US: 264/14 264/28 264/9



Family:

Publication number	Publication date	Application number	Application date
AT153562 E	19970615	AT19940909968T	19940315
CA2156915 AA	19950824	CA19942156915	19940315
CA2156915 C	20050111	CA19942156915	19940315
DE69403463 D1	19970703	DE19946003463	19940315
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DE69403463 T2	19980115	DE19946003463T	19940315
DK0690747 T3	19971222	DK19940909968T	19940315
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EP0690747 B1	19970528	EP19940909968	19940315
ES2105663 T3	19971016	ES19940909968T	19940315
FR2702968 A1	19940930	FR19930003316	19930323
FR2702968 B1	19950623	FR19930003316	19930323
GR3024243 T3	19971031	GR19970401883T	19970725
JP3601825 B2	20041215	JP19940520710	19940315
JP8507940 T2	19960827	JP19940520710T	19940315
US5843347 A	19981201	US19970906004	19970804
WO9421371 A1	19940929	WO1994FR00281	19940315

Priority:

FR19930003316 19930323 WO1994FR00281 19940315 US19950530293 19950919 US19970906004 19970804

Probable Assignee: LAFON LABOR

Assignee(s): (std): JACQUOT LEYDER JOELLE ; LAFON LABOR ; NGUYEN THANH TAM

Assignee(s): TEVA SANTE ; CEPHALON FRANCE ; LAFON LABORATOIRE L ; LABORATOIRE L LAFON ; LABORATOIRE L LAFON MAISONS ALFORT FR

Inventor(s): (std): JACQUOT LEYDER JOELLE ; JOELLE JACQUOT LEYDER ; NGUYEN THANH TAM ; JACQUOT LEYDER J ; JACQUOT LEYDER JOEELLE ; THANH TAM NGUYEN

Inventor(s): JACQUOT LEYDER JOEELLE F 94000 CRETEIL FR ; NGUYEN THANH TAM F 94450 LIMEIL BREVANNES FR

Agent(s): OGILVY RENAULT LLP SENCRL SRL

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

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
AT153562 E	19970615	LSGT	+	granted / extensions (spc, cpc, pte)	
AT153562 E	19971115	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	
AT153562 E	20140315	PEXP		Calculated Patent Term Expiry	
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CA2156915 AA	20010314	LSES	+EEER	EXAMINATION REQUEST	
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CA2156915 C	20140519	LSLE	-MKEX	EXPIRY	EFFECTIVE DATE : 20140317
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DE69403463 D1	19980625	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE69403463 T2	19980115	LSGT	+	granted / extensions (spc, cpc, pte)	
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DK0690747 T3	19971222	LSGT	+	granted / extensions (spc, cpc, pte)	
DK0690747 T3	20140315	PEXP		Calculated Patent Term Expiry	
EP0690747 A1	19960110	LSPB	+	published / reissued	
EP0690747 A1	19960110	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19950814
EP0690747 A1	19960626	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 19960514
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JP8507940 T2	20040820	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP8507940 T2	20040831	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20040831
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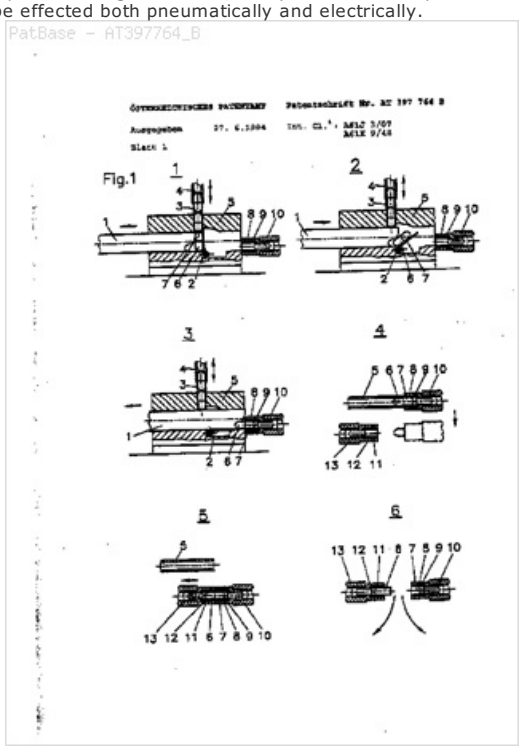
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US5843347 A	20130603	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CEPHALON FRANCE, FRANCE OLDPARTY : CHANGE OF NAME; ASSIGNOR:LABORATOIRE L. LAFON; REEL/FRAME:030530/0048 EFFECTIVE DATE : 20030212
US5843347 A	20170804	PEXP		Calculated Patent Term Expiry	
WO9421371 A1	19940929	LSPB	+	published / reissued	
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WO9421371 A1	19950824	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2156915 COUNTRY OF REF DOCUMENT : CA
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WO9421371 A1	19960110	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1994909968 COUNTRY OF REF DOCUMENT : EP
WO9421371 A1	19970528	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1994909968 COUNTRY OF REF DOCUMENT : EP
WO9421371 A1	19970804	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 1997 906004 COUNTRY OF REF DOCUMENT : US DATE OF REF DOCUMENT : 19970804 KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :

65) Family number: 5719028 (AT397764B)

Title: DEVICE FOR AUTOMATIC OPENING AND EMPTYING OF CAPSULES

Abstract: A device for automatic opening and emptying of incorrectly filled **gelatin** capsules 6, 7, which sometimes occur in the pharmaceutical industry, in order to recover their in most cases valuable content 14. The capsules 6, 7 are inserted in sequence and individually into a silicone rubber sleeve 8 (internal diameter smaller than the external diameter of the capsules 6, 7) which is cast into a metal casing 9 and which holds the capsules 6, 7 exclusively by friction. An identical sleeve 11, 12 is pushed over the second end of the capsule 6 or 7. By pulling the two sleeves 11, 12 and 8, 9 apart, the capsule halves 6, 7 are separated. After the content 14 of the capsule has been emptied into a separate container 15 by downward pivoting of the sleeves 11, 12 and 8, 9, the capsule halves 6, 7 are expelled through bores 19, 20 by means of compressed air.; All the movements and the control of the automatic device can be effected both pneumatically and electrically.

Classifications:
International (IPC 8-9): A61J3/07 (Advanced/Invention); A61J3/07 (Core/Invention)
International (IPC 1-7): A61J3/07 A61K9/48
CPC: A61J3/074
European: A61J3/07B2



Family:

Publication number	Publication date	Application number	Application date
AT151192 A	19931115	AT19920001511	19920723
AT397764 B	19940627	AT19920001511	19920723

Priority:
AT19920001511 19920723

Probable Assignee: SCHLEGEL CHRISTOPH
Assignee(s): (std)**:** SCHLEGEL CHRISTOPH ; STAMPFL ANDREAS

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT151192 A	19931115	LSPB	+	published / reissued	
AT397764 B	19940627	LSGT	+	granted / extensions (spc, cpc, pte)	
AT397764 B	19950815	LSLE	-ELJ	CEASED DUE TO NON-PAYMENT OF THE ANNUAL FEE	
AT397764 B	19971015	LSLE	-RER	CEASED AS TO PARAGRAPH 5 LIT. 3 LAW INTRODUCING PATENT TREATIES	
AT397764 B	20120723	PEXP		Calculated Patent Term Expiry	

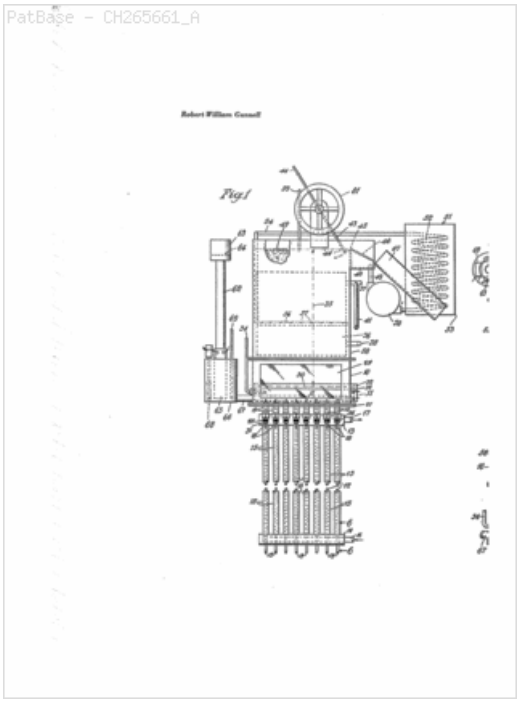
66) Family number: 24778029 (CH265661A)

Title: VERFAHREN ZUR HERSTELLUNG VON GEFUELLTEN KAPSELN UND KAPSELHERSTELLUNGSAPPARAT ZUR AUSUEBUNG DIESES VERFAHRENS. METHOD FOR PRODUCING filled capsules AND CAPSULE PRODUCTION APPARATUS FOR EXERCISE OF THAT PROCEDURE. (Machine translation)

Abstract: Source: CH265661A [DE] (Claim 1) 1. Verfahren nach Patentanspruch I, dadurch gekennzeichnet, dass man zwischen der ueb erzugfluessigkeit und der Konditionierungs- fluessigkeit eine Schicht Isolierfluessigkeit vorsieht, die mit den beiden erstgenannten Fluessigkeiten unvermisehbar ist und ein spezifisches Gewicht hat, das zwischen demjenigen der beiden erstgenannten Fluessigkeiten liegt, und dass man die Substanz auch durch die Isolierfluessigkeit hindurchfuehrt.

Machine translation: (claim 1) 1 Method according to claim I, characterized in that between the OA erzugfluessigkeit and the conditioning liquid is a layer provides insulation fluid, the unvermisehbar with the first two liquids, and has a specific gravity that is between that of the first two liquids, and that one The substance also leads through the insulation.

Classifications:
International (IPC 8-9): A61J3/07 (Advanced/Invention); A61J3/07 (Core/Invention)
International (IPC 1-7): A61J5/00
CPC: A61J3/07
European: A61J3/07



Family:

Publication number	Publication date	Application number	Application date
CH265661 A	19491215		19450518

Priority:
19440217

Probable Assignee: GUNNELL ROBERT WILLIAM
Assignee(s): (std): GUNNELL ROBERT WILLIAM
Inventor(s): (std): ROBERT WILLIAM GUNNELL
Inventor(s): WILLIAM GUNNELL ROBERT

Legal status (INPADOC)

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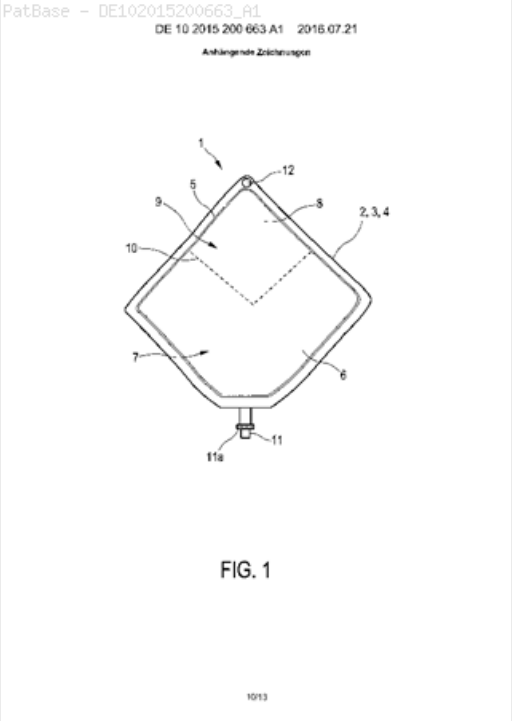
Patent	Date recorded	Event group	Code	Event	Details
CH265661 A	19491215	LSGT	+	granted / extensions (spc, cpc, pte)	
CH265661 A	19650518	PEXP		Calculated Patent Term Expiry	

67) Family number: 62964029 (DE102015200663A1)

Title: GESCHLOSSENES MEHRKAMMERBEHAELTNIS UND DIAETETISCHES KIT ZUR ANWENDUNG BEI DER ENTERALEN ERNAEHRUNG CLOSED AND MEHRKAMMERBEHAELTNIS dietary KIT FOR USE IN THE ENTERAL NUTRITION (Machine translation)

Abstract: Source: DE102015200663A1 [DE] Die Erfindung betrifft ein geschlossenes Mehrkammerbehaeltnis zur Anwendung bei der enteralen Ernaehrung, insbesondere zur Herstellung von enteralen Naehrloesungen, wobei das Mehrkammerbehaeltnis wenigstens zwei voneinander getrennte Kammern aufweist und eine erste Kammer ein Naehrstoffkonzentrat und eine zweite Kammer eine enteral verabreichbare Fluessigkeit enthaelt. Die Erfindung betrifft weiterhin ein diaetetisches Kit zur Anwendung bei der enteralen Ernaehrung. **Machine translation:** The invention relates to a closed Mehrkammerbehaeltnis for use in enteral nutrition, especially for the production of enteral nutrient solutions, said Mehrkammerbehaeltnis comprises at least two separate chambers and a first chamber and a second chamber a Naehrstoffkonzentrat contains an enteral administrable Liquid. The invention further relates to a dietetic kit for use in the enteral nutrition.

Classifications:
International (IPC 8-9): A61J1/05 A61J1/10 A61M31/00 B65D81/32 (Advanced/Invention)
CPC: A61J1/06 A61J1/10 A61J1/2024 A61J1/2031 B65D51/2892 A61J1/2093



Family:

Publication number	Publication date	Application number	Application date
DE102015200663 A1	20160721	DE201510200663	20150116

Priority:
DE201510200663 20150116

Probable Assignee: BRAUN MELSUNGEN AG
Assignee(s): (std)**:** B BRAUN MELSUNGEN AG ; BRAUN MELSUNGEN AG
Inventor(s): (std)**:** WEBER NIELS

Legal status (INPADOC)

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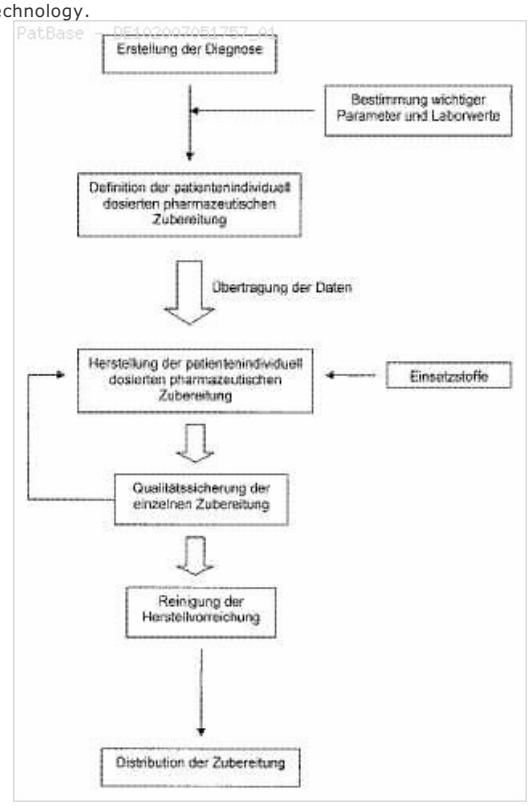
Patent	Date recorded	Event group	Code	Event	Details
DE102015200663 A1	20160721	LSPB	+	published / reissued	
DE102015200663 A1	20160111	LSES	+R012	REQUEST FOR EXAMINATION VALIDLY FILED	
DE102015200663 A1	20160815	LSES	R016	RESPONSE TO EXAMINATION COMMUNICATION	
DE102015200663 A1	20160816	LSES	R016	RESPONSE TO EXAMINATION COMMUNICATION	

68) Family number: 43211030 (DE102007051757A1)

Title: PHARMACEUTICAL FORMULATION E.G. HARD CAPSULE, PRODUCING METHOD, FOR E.G. TREATING HIV, INVOLVES DIRECTLY OR INDIRECTLY DISTRIBUTING FORMULATION BASED ON DATA, WHICH ARE REQUIRED FOR DETERMINING THERAPY AND TRANSMITTED TO PRODUCTION DEVICE

Abstract: The method involves determining therapeutic relevant parameters and laboratory values. A therapy including required active agents and required amount of the active agents is manually or automatically defined or evaluated. Data required for determining the therapy are transmitted to a production device. A pharmaceutical formulation is automatically produced based on the data. Automatic quality control of the formulation is performed based on the data. The device is cleaned automatically or semi-automatically. The formulation is directly or indirectly distributed based on the data. A package of the formulation is marked using a radio frequency identification technology.

Classifications:
International (IPC 8-9): A61J3/00 (Advanced/Invention); A61J3/00 (Core/Invention)
CPC: A61J3/00
European: A61J3/00



Family:

Publication number	Publication date	Application number	Application date
DE102007051757 A1	20090507	DE200710051757	20071030

Priority:
DE200710051757 20071030

Probable Assignee: ECKER FELIX
Assignee(s): (std): ECKER FELIX
Inventor(s): (std): ECKER FELIX

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
DE102007051757 A1	20090507	LSPB	+	published / reissued	
DE102007051757 A1	20090610	LSLI	8122	NONBINDING INTEREST IN GRANTING LICENCES DECLARED	
DE102007051757 A1	20110622	LSAS	R081	CHANGE OF APPLICANT/PATENTEE	PARTYTYPE : OWNER OWNER : ECKER, FELIX, PROF. DR., DE OLDPARTY : FORMER OWNER: ECKER, FELIX, PROF. DR., 36039 FULDA, DE EFFECTIVE DATE : 20110412
DE102007051757 A1	20111229	LSDW	-R119	APPLICATION DEEMED WITHDRAWN, OR IP RIGHT LAPSED, DUE TO NON-PAYMENT OF RENEWAL FEE	EFFECTIVE DATE : 20110502

69) Family number: 30695031 (ZA200202433A)

Title: MEDICAMENT DELIVERY DEVICE WITH MOISTURE RESISTANT COATING.

Abstract: There is described a reservoir means which means is provided with a moisture resistant coating, the reservoir means is especially adapted to contain a medicament. There is also described a medicament delivery device which comprises a medicament reservoir, a medicament delivery passage and a metering member characterised in that the device includes a surface or surfaces provided with a moisture resistant coating. The device is especially an inhaler, e.g. a dry powder inhaler. A method of treating a respiratory disorder is also described which comprises administering of a therapeutically effective amount of a pharmaceutically active agent to a patient suffering from such a disorder.

Classifications:
International (IPC 8-9): A23K1/24 A61K9/00 A61K9/72 A61M15/00 A61P11/00 B65D65/42 B65D83/14 C08G61/02 C08L65/04 C09D105/00 C09D165/04 C09D171/10 (Advanced/Invention); A61K9/00 A61K9/72 A61P11/00 C09D105/00 (Advanced/Non-invention); A23K1/00 A61K9/72 A61M15/00 A61P11/00 B65D65/38 C08G61/00 C08L65/00 C09D105/00 C09D165/00 C09D171/00 (Core/Invention); A61K9/00 (Core/Non-invention); B65D C09D (Subclass/Invention)
International (IPC 1-7): A23K1/24 A61J3/00 A61K9/72 A61M15/00 A61P11/00 B65D B65D65/42 B65D83/14 C09D105/00 C09D165/04 C09D165/04 C09D171/10
CPC: A61K9/0075 A61M15/0045 A61M15/0065 A61M2202/062 A61M2202/064 C08G61/025 C08G2261/3424 C08L65/04 C09D165/04 A61P11/00
European: A61M15/00D C08G61/02B C08L65/04 C09D165/04 K61K9/00M20B3 K61M15/00C2 K61M202/06A2 K61M202/06B M08G261/00B4A2 M08G261/3424



Family:

Publication number	Publication date	Application number	Application date
AT259868 E	20040315	AT20000966316T	20001011
AU200076757 A1	20010423	AU20000076757	20001011
AU200076757 A5	20010423	AU20000076757	20001011
AU777421 B2	20041014	AU20000076757	20001011
BRPI0014595 A	20020611	BR2000PI14595	20001011
CA2385449 AA	20020319	CA20002385449	20001011
CZ20021198 A3	20020911	CZ20020001198	20001011
DE60008425 D1	20040325	DE20006008425	20001011
DE60008425 D1	20040325	DE20006008425T	20001011
DE60008425 T2	20041202	DE20006008425T	20001011
EP1240261 A1	20020918	EP20000966316	20001011
EP1240261 B1	20040218	EP20000966316	20001011
ES2213608 T3	20040901	ES20000966316T	20001011
GB200017314 A0	20000830	GB20000017314	20000715
GB9923959 A0	19991208	GB19990023959	19991011
HU0203626 AB	20030228	HU20020003626	20001011
HU9903626 A0	19991228	HU19990003626	19991015
HU9903626 AB	20020228	HU19990003626	19991015
HU9903626 AC	20020429	HU19990003626	19991015
IL149027 A0	20021110	IL20000149027	20001011
JP2004500162 T2	20040108	JP20010530416T	20001011
MXPA02003645 A1	20030728	MX2002PA03645	20001011
NO20021681 A	20020603	NO20020001681	20020410
NO20021681 A0	20020410	NO20020001681	20020410
NO20021681 L	20020603	NO20020001681	20020410
NZ517799 A	20030926	NZ20000517799	20001011
PL354443 A1	20040112	PL20000354443	20001011
RU2002111672 A	20040127	RU20020111672	20001011
SK200200476 A5	20021008	SK20020000476	20001011
WO0127210 A1	20010419	WO2000GB03892	20001011
YU26802 A	20041125	YU20020000268	20001011
ZA200202433 A	20030722	ZA20020002433	20020326

Priority:

GB19990023959 19991011 HU19990003626 19991015 GB20000017314 20000715 WO2000GB03892 20001011

Probable Assignee: INNOVATA BIOMED LIMITED

Assignee(s): (std): DR SZAVA JENOE JANOS ; INNOVATA BIOMED LTD ; LAB PLC ; LABORATORIES PLC ; ML LAB PLC ; SZAVA JENOE JANOS ; BRAITHWAITE PHILIP

Assignee(s): SZAVA JENOE JANOS BUDAPEST ; INNOVATA LTD ; ML LABORATORIES PLC ; INNOVATA BIOMED LTD

ST ALBANS ; INNOVATA BIOMED LIMITED

Inventor(s): (std): BRAITHWAITHE PHILIP ; PHILIP BRAITHWAITE ; INDUSTRIAL ESTATE ; DR SZAVA JENOE JANOS ; BRAITHWAITE PHILIP

Agent(s): DAVIES COLLISON CAVE PTY LTD; LONG AND CAMERON

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
AT259868 E	20040315	LSGT	+	granted / extensions (spc, cpc, pte)	
AT259868 E	20040815	LSLE	-RER	CEASED AS TO PARAGRAPH 5 LIT. 3 LAW INTRODUCING PATENT TREATIES	
AT259868 E	20201011	PEXP		Calculated Patent Term Expiry	
AU200076757 A1	20010423	LSPB	+	published / reissued	
AU777421 B2	20041014	LSGT	+	granted / extensions (spc, cpc, pte)	
AU777421 B2	20201011	PEXP		Calculated Patent Term Expiry	
BRPI0014595 A	20020611	LSPB	+	published / reissued	
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CA2385449 AA	20020319	LSPB	+	published / reissued	
CA2385449 AA	20061011	LSLE	-FZDE	DEAD	
CZ20021198 A3	20020911	LSPB	+	published / reissued	
DE60008425 D1	20060518	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE60008425 D1	20060518	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
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DE60008425 T2	20041202	LSGT	+	granted / extensions (spc, cpc, pte)	
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DE60008425 T2	20201011	PEXP		Calculated Patent Term Expiry	
EP1240261 A1	20020918	LSPB	+	published / reissued	
EP1240261 A1	20020918	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20020315
EP1240261 A1	20030122	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20021205
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EP1240261 B1	20040218	LSGT	+	granted / extensions (spc, cpc, pte)	
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					LAPSED DATE : 20040218
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EP1240261 B1	20040324	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
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EP1240261 B1	20040518	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 : 20040518
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				INFORMATION FROM NATIONAL OFFICE TO EPO]	TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20040518
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EP1240261 B1	20040831	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP1240261 B1	20040901	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2213608 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP1240261 B1	20040921	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20040921 YEAR OF FEE PAYMENT : 5
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EP1240261 B1	20041011	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 : 20041011
EP1240261 B1	20041012	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20041012 YEAR OF FEE PAYMENT : 5
EP1240261 B1	20041020	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20041020 YEAR OF FEE PAYMENT : 5
EP1240261 B1	20041031	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 : 20041031
EP1240261 B1	20041115	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20041115 YEAR OF FEE PAYMENT : 5
EP1240261 B1	20050209	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20041119
EP1240261 B1	20050727	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP1240261 B1	20051011	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 : 20051011
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MXPA02003645 A1	20030728	LSPB	+	published / reissued	
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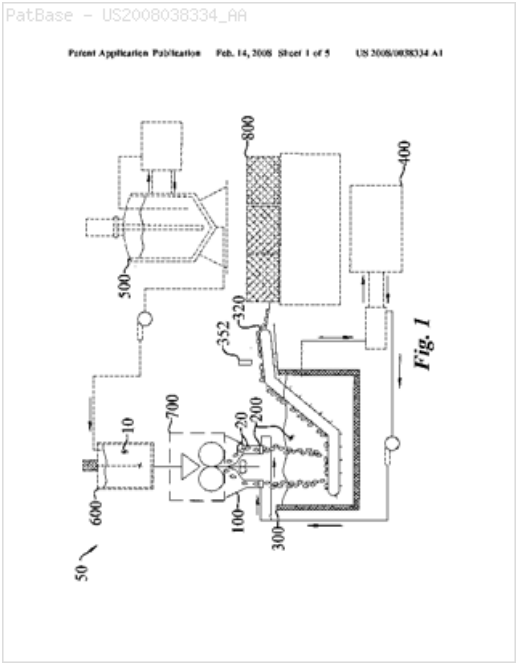
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YU26802 A	20041125	LSPB	+	published / reissued	
ZA200202433 A	20030722	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA200202433 A	20220325	PEXP		Calculated Patent Term Expiry	

70) Family number: 41475032 (US2008038334A)

Title: METHOD FOR PRODUCING AND A SYSTEM FOR COOLING A HOT-FILLED **SOFTGEL** CAPSULE

Abstract: A system for producing a hot-filled **softgel** capsule utilizes a chilled liquid. The chilled liquid is routed through a chilled liquid conveyor tray into a chilled liquid bath. The chilled liquid conveyor tray directs the flowing chilled liquid into a flowing chilled liquid layer. **Softgel** capsules having a heated fill material are deposited in the flowing chilled liquid layer. The chilled liquid layer cools the capsule by transferring heat from the capsule to the chilled liquid. The flowing chilled liquid layer transports the capsule out of the chilled liquid conveyor tray into a chilled liquid bath. A capsule transfer conveyor transports the capsule out of the chilled liquid bath to a chilled liquid removal device. The chilled liquid removal device removes the chilled liquid from the capsule.

Classifications:
International (IPC 8-9): A61J A61J3/06 A61J3/07 A61K35/00 A61K9/20 A61K9/42 A61K9/48 A61K9/64 B01J13/00 B01J13/02 B29C33/02 B29C39/10 (Advanced/Invention);
A23G3/54 A61K47/42 A61K9/48 (Advanced/Non-invention);
A61J3/00 A61J3/06 A61J3/07 A61K9/20 A61K9/48 A61K9/52 B01J13/00 B01J13/02 B29C39/10 (Core/Invention);
A61K47/42 A61K9/48 (Core/Non-invention)
International (IPC 1-7): A61J3/07 A61K35/00 A61K9/42 A61K9/48 B29C33/02
CPC: A61J3/07 A61J2200/44
European: A61J3/07 K61J200/44
US: 264/4 264/4.4 264/4.400P 264/4S 424/456 424/456P 425/5 425/5S



Family:

Publication number	Publication date	Application number	Application date
AR062290 AA	20081029	AR2007P103505	20070808
AU2007203660 AA	20080228	AU20070203660	20070806
AU2007203660 BB	20130530	AU20070203660	20070806
BRPI0705865 A2	20081125	BR2007PI05865	20070807
BRPI0705865 B1	20191210	BR2007PI05865	20070807
CA2596104 AA	20080208	CA20072596104	20070731
CA2596104 C	20160614	CA20072596104	20070731
CN101239022 A	20080813	CN200710149446	20070808
CN101239022 B	20130717	CN200710149446	20070808
DE602007044950 D1	20160407	DE200760044950T	20070806
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EP1897525 A3	20090513	EP20070113891	20070806
EP1897525 B1	20160224	EP20070113891	20070806
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JP4890379 B2	20120307	JP20070205639	20070807
MX2007009462 A1	20090204	MX20070009462	20070806
US2008038334 AA	20080214	US20060500719	20060808
US2010219543 AA	20100902	US20100777679	20100511

Priority:

US20060500719 20060808 CA20072596104 20070731 EP20070113891 20070806
US20100777679 20100511

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Inventor(s): GLAWSON RICHARD BEACHWOOD ; ZAZULA JOHN MORRIS PLAINS ; ZIELINSKI RUEBEN 0 BELLE MEAD

Agent(s): SPRUSON AND FERGUSON; SMART AND BIGGAR; DUNLEAVY KEVIN JAMES; WILLIAMS DAVIS HILL AND CO; FITZPATRICK CELLA CATALENT; FITZPATRICK CELLA (CATALENT)

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 MK MT NL PL PT RO RS SE SI SK TR YU

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
AR062290 AA	20081029	LSPB	+	published / reissued	
AR062290 AA	20141203	LSWD	-FA	ABANDONMENT OR WITHDRAWAL	
AR062290 AA	20160219	LSGT	+FG	GRANT, REGISTRATION	
AU2007203660 AA	20080228	LSPB	+	published / reissued	
AU2007203660 BB	20130530	LSGT	+	granted / extensions (spc, cpc, pte)	
AU2007203660 BB	20130926	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU2007203660 BB	20270806	PEXP		Calculated Patent Term Expiry	
BRPI0705865 A2	20081125	LSPB	B03A	PUBLICATION OF AN APPLICATION: PUBLICATION OF A PATENT APPLICATION OR OF A CERTIFICATE OF ADDITION OF INVENTION	
BRPI0705865 A2	20171212	LSES	B07D	TECHNICAL EXAMINATION (OPINION) RELATED TO ARTICLE 229 OF INDUSTRIAL PROPERTY LAW	
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CN101239022 A	20080813	LSPB	+C06	PUBLICATION	
CN101239022 A	20130710	LSRE	C53	CORRECTION OF PATENT FOR INVENTION OR PATENT APPLICATION	

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EP1897525 A2	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20160802 YEAR OF FEE PAYMENT : 10
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EP1897525 A3	20111207	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : R.P. SCHERER TECHNOLOGIES, LLC
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EP1897525 A3	20130626	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : R.P. SCHERER TECHNOLOGIES, LLC
EP1897525 A3	20150909	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20150812
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EP1897525 B1	20161031	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 : 20160224
EP1897525 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 : 20160224
EP1897525 B1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : IS PAYMENT DATE : 20160707 YEAR OF FEE PAYMENT : 10

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EP1897525 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 : 20160224
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EP1897525 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 : 20160224
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EP1897525 B1	20170331	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP1897525 B1	20170428	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 : 20160831
EP1897525 B1	20170428	LSLE	-PG25	LAPSED IN A	COUNTRY OF REF DOCUMENT : CH

				CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20160831
EP1897525 B1	20170531	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP1897525 B1	20170623	LSWD	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HK REF LEGAL EVENT CODE : WD REF DOCUMENT NUMBER : 1118700 COUNTRY OF REF DOCUMENT : HK
EP1897525 B1	20170714	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 11
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EP1897525 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 : 11
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EP1897525 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 : 20160224
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EP1897525 B1	20270806	PEXP		Calculated Patent Term Expiry	
HK1118700 A1	20090220	LSPB	+	published / reissued	
HK1118700 A3	20090220	LSPB	+	published / reissued	
JP2008049154 A2	20080306	LSPB	+	published / reissued	
JP2008049154 A2	20081225	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20081224
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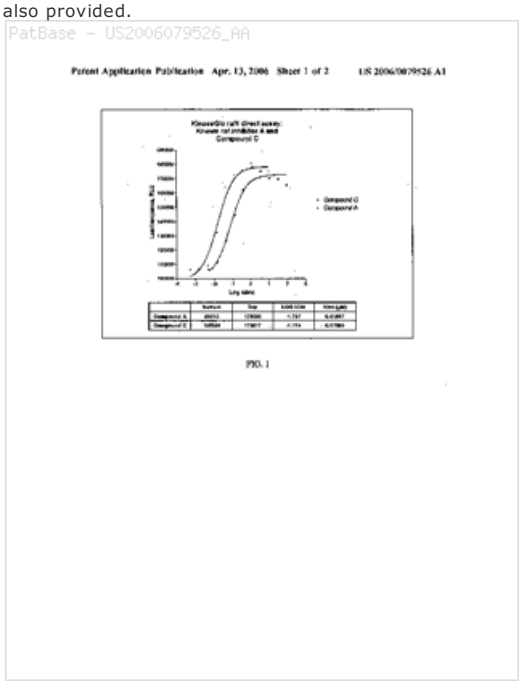
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JP2008049154 A2	20111116	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20111115
JP2008049154 A2	20111117	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01
JP2008049154 A2	20111222	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20111214
JP2008049154 A2	20111222	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP2008049154 A2	20111222	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 4890379 COUNTRY OF REF DOCUMENT : JP
JP2008049154 A2	20111226	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP4890379 B2	20120307	LSGT	+	granted / extensions (spc, cpc, pte)	
JP4890379 B2	20111220	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP4890379 B2	20141204	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4890379 B2	20141209	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4890379 B2	20151203	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4890379 B2	20151208	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4890379 B2	20161201	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4890379 B2	20161206	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4890379 B2	20171130	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4890379 B2	20171205	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4890379 B2	20181129	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4890379 B2	20181204	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4890379 B2	20191128	LSFE	R20	特許料納付書 (Patent fee payment form)	EFFECTIVE DATE : 20191127
JP4890379 B2	20191203	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250

JP4890379 B2	20270807	PEXP		Calculated Patent Term Expiry	
MX2007009462 A1	20090204	LSPB	+	published / reissued	
MX2007009462 A1	20110908	LSAS	HC	CHANGE OF COMPANY NAME OR JURIDICAL STATUS	
MX2007009462 A1	20110908	LSAS	HC	CHANGE OF COMPANY NAME OR JURIDICAL STATUS	PARTYTYPE : OWNER OWNER : CONVATEC TECHNOLOGIES INC.*
MX2007009462 A1	20150205	LSGT	+FG	GRANT OR REGISTRATION	
US2008038334 AA	20080214	LSPB	+	published / reissued	
US2008038334 AA	20061206	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : R. P. SCHERER TECHNOLOGIES, INC., NEVADA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ZAZULA, JOHN; ZIELINSKI, REUBEN; GLAWSON, RICHARD; REEL/FRAME:018608/0160 EFFECTIVE DATE : 20060807
US2008038334 AA	20100729	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2010219543 AA	20100902	LSPB	+	published / reissued	
US2010219543 AA	20150930	LSES	NFA1	Non Final Action Mailed	
US2010219543 AA	20170501	LSES	-NFA2	Non Final Action Counted, Not Yet Mailed	
US2010219543 AA	20170525	LSES	NFA1	Non Final Action Mailed	
US2010219543 AA	20180719	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	

71) Family number: 32655032 (US2006079526A)

Title: HETEROCYCLIC COMPOUNDS AND METHODS OF USE

Abstract: Heterocyclic compounds derived from benzotriazine, triazines, triazoles and oxadiazoles are disclosed. The methods of synthesis and of use of such heterocyclic compounds are also provided.



Classifications:
International (IPC 8-9): A61J1/05 A61K A61K31/35 A61K31/4192 A61K31/4196 A61K31/44 A61K31/4427 A61K31/4439 A61K31/495 A61K31/501 A61K31/506 A61K31/53 A61K31/5377 A61K39/395 A61K45/00 A61K45/06 A61P A61P1/04 A61P1/16 A61P11/00 A61P13/08 A61P13/10 A61P13/12 A61P15/00 A61P17/00 A61P17/06 A61P19/00 A61P19/02 A61P21/00 A61P25/00 A61P27/02 A61P29/00 A61P31/12 A61P35/00 A61P35/02 A61P43/00 C07D C07D213/02 C07D213/65 C07D237/02 C07D239/48 C07D241/02 C07D249/14 C07D253/06 C07D253/08 C07D253/10 C07D271/113 C07D401/12 C07D401/14 C07D403/12 C07D403/14 C07D409/14 C07D413/12 C07D413/14 C07D417/12 C07D417/14 (Advanced/Invention);
A61K31/4245 A61K31/506 A61P19/02 A61P35/00 (Advanced/Non-invention);
A61K31/00 A61K31/4192 A61K31/44 A61K31/4427 A61K31/495 A61K31/506 A61K31/53 A61K31/5375 A61K45/00 A61P1/00 A61P11/00 A61P13/00 A61P15/00 A61P17/00 A61P19/00 A61P21/00 A61P25/00 A61P27/00 A61P29/00 A61P31/00 A61P35/00 A61P43/00 C07D213/00 C07D237/00 C07D241/00 C07D253/00 C07D401/00 C07D403/00 C07D409/00 C07D413/00 (Core/Invention);
A61P19/00 A61P35/00 (Core/Non-invention);
C07D (Subclass/Invention)
International (IPC 1-7): A61K19/02 A61K31/44 A61K31/495 A61K31/506 A61K31/53 A61P31/12 A61P35/00 C07D213/02 C07D237/02 C07D241/02 C07D253/10
CPC: A61K31/4439 A61K31/501 A61K31/506 A61K45/06 A61P1/04 A61P1/16 A61P11/00 A61P13/08 A61P13/10 A61P13/12 A61P15/00 A61P17/00 A61P17/06 A61P19/00 A61P19/02 A61P21/00 C07D213/65 C07D239/48 C07D253/06 C07D271/113 C07D401/12 C07D403/12 C07D409/14 C07D413/12 C07D413/14 A61P25/00 A61P27/02 A61P29/00 A61P31/12 A61P35/00 A61P35/02 A61P43/00
European: C07D213/65 C07D239/48 C07D253/06 C07D271/113 C07D401/12 C07D403/12 C07D409/14 C07D413/12 C07D413/14
US: 424/130.1 424/130.100P 424/133.1 424/649 514/110 514/231.5 514/234.2 514/234.200P 514/242 514/243 514/243S 514/249 514/252.05 514/252.050S 514/252.13 514/252.14 514/252.18 514/266.4 514/269 514/269S 514/27 514/272 514/272S 514/274 514/274S 514/275 514/34 514/340 514/340S 514/364 514/383 514/383S 514/384 514/449 514/49 544/111 544/112 544/112S 544/114 544/183 544/183S 544/238 544/238S 544/298 544/298S 544/310 544/310S 544/311 544/312 544/319 544/319S 544/321 544/321S 544/323 544/359 546/192 546/193 546/268.1 546/269.1 546/272.4 546/272.400S 548/131 548/132 548/262.2 548/264.8 548/264.800S 604/403 604/403S

Family:

Publication number	Publication date	Application number	Application date
AU2005276974 AA	20060302	AU20050276974	20050824
AU2005276974 BB	20120802	AU20050276974	20050824
AU2012244331 AA	20121122	AU20120244331	20121101
CA2578283 AA	20070222	CA20052578283	20050824
CN101044125 A	20070926	CN200580035918	20050824
CN101654452 A	20100224	CN200910170703	20050824
EP1799656 A1	20070627	EP20050792421	20050824
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HK1141520 A1	20101112	HK20100107935	20100819
IL181524 A0	20070704	IL20070181524	20070222
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IN02041DN2007 A	20070817	IN2007DN02041	20070315
JP2008510839 T2	20080410	JP20070530214T	20050824
JP2012167111 A2	20120906	JP20120104357	20120501
JP5275628 B2	20130828	JP20070530214T	20050824
MX2007002208 A1	20070508	MX20070002208	20050824
NZ553492 A	20101126	NZ20050553492	20050824
NZ588896 A	20120525	NZ20050588896	20050824
PL382308 A1	20070820	PL20050382308	20050824
RU2007110934 A	20081010	RU20070110934	20050824
RU2468021 C2	20121127	RU20070110934	20050824
US2006079526 AA	20060413	US20050212064	20050824
US2010330069 AA	20101230	US20100684312	20100108
US2012220584 AA	20120830	US20110243924	20110923
US2013243754 AA	20130919	US20120722858	20121220
US7652051 BB	20100126	US20050212064	20050824
US8084618 BB	20111227	US20100684312	20100108
US8372971 BB	20130212	US20110243924	20110923
WO06024034 A1	20060302	WO2005US30614	20050824

Priority:

US20040604298 20040825 US20040604298P 20040825 US20050696168P 20050701
AU20050276974 20050824 EP20050792421 20050824 NZ20050553492 20050824
JP20070530214 20050824 US20050212064 20050824 JP20070530214T 20050824
WO2005US30614 20050824 WO2005US30614 20050824 US20100684312 20100108
US20110243924 20110923 AU20120244331 20121101 US20120722858 20121220

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TARGEDZHEN INK

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Inventor(s): WRASIDLO WOLFGANG DNEPROVSKAIA ELENA ; VRASIDLO VOL'FGANG

Agent(s): FREEHILLS PATENT AND TRADE MARK ATTORNEYS; FREEHILLS PATENT ATTORNEYS; HERBERT SMITH FREEHILLS; FPA PATENT ATTORNEYS PTY LTD; MBM INTELLECTUAL PROPERTY LAW LLP; COLES ANDREA BIRGIT; ORIENTAL INTELLECTUAL PROPERTY SERVICES CO; REINHOLD COHN AND PARTNERS; SHIMIZU HATSUSHI; DLA PIPER RUDNICK GRAY CARY US LLP; BIPAR SCIENCES INC C O MORRISON FOERSTER; GOODWIN PROCTER LLP; MORRISON AND FOERSTER LLP

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
AU2005276974 AA	20060302	LSPB	+	published / reissued	
AU2005276974 BB	20120802	LSGT	+	granted / extensions (spc, cpc, pte)	
AU2005276974 BB	20121129	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU2005276974 BB	20150319	LSLE	-MK14	PATENT CEASED SECTION 143(A) (ANNUAL FEES NOT PAID) OR EXPIRED	
AU2005276974 BB	20250824	PEXP		Calculated Patent Term Expiry	
AU2012244331 AA	20121122	LSPB	+	published / reissued	
AU2012244331 AA	20150319	LSLE	-MK4	APPLICATION LAPSED SECTION 142(2)(D) - NO CONTINUATION FEE PAID FOR THE APPLICATION	
CA2578283 AA	20070222	LSPB	+	published / reissued	
CA2578283 AA	20100823	LSES	+EEER	EXAMINATION REQUEST	
CA2578283 AA	20151001	LSLE	-FZDE	DEAD	EFFECTIVE DATE : 20150806
CN101044125 A	20070926	LSPB	+	published / reissued	
CN101044125 A	20070926	LSPB	+C06	PUBLICATION	
CN101044125 A	20100825	LSDW	-C02	DEEMED WITHDRAWAL OF PATENT APPLICATION AFTER PUBLICATION (PATENT LAW 2001)	
CN101654452 A	20100224	LSPB	+	published / reissued	
CN101654452 A	20100224	LSPB	+C06	PUBLICATION	
CN101654452 A	20130213	LSRE	C53	CORRECTION OF PATENT FOR INVENTION OR PATENT APPLICATION	
CN101654452 A	20140702	LSDW	-C02	DEEMED WITHDRAWAL OF PATENT APPLICATION AFTER PUBLICATION (PATENT LAW 2001)	
EP1799656 A1	20070627	LSPB	+	published / reissued	
EP1799656 A1	20070627	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20070319
EP1799656 A4	20090902	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	EFFECTIVE DATE : 20090805

EP1799656 A4	20091202	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20091103
EP1799656 A4	20140305	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : TARGEGEN, INC.
EP1799656 A4	20140806	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20140102
EP2532653 A1	20121212	LSPB	+	published / reissued	
EP2532653 A1	20140101	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20130613
HK1141520 A1	20101112	LSPB	+	published / reissued	
IL181524 A1	20130430	LSPB	+	published / reissued	
IL181524 A1	20130829	LSGT	+FF	PATENT GRANTED	
IL181524 A1	20131031	LSFE	+KB	PATENT RENEWED	
IL181524 A1	20160421	LSLE	-MM9K	PATENT NOT IN FORCE DUE TO NON-PAYMENT OF RENEWAL FEES	
IN02041DN2007 A	20070817	LSPB	+	published / reissued	
JP2008510839 T2	20080410	LSPB	+	published / reissued	
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JP2008510839 T2	20111101	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20111031
JP2008510839 T2	20120502	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20120501
JP2008510839 T2	20120706	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20120705
JP2008510839 T2	20121227	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20121226
JP2008510839 T2	20130412	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2008510839 T2	20130418	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20130417
JP2008510839 T2	20130523	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20130516
JP2008510839 T2	20130524	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP2012167111 A2	20120906	LSPB	+	published / reissued	
JP2012167111 A2	20120531	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20120530
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JP2012167111 A2	20120925	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20120905
JP2012167111 A2	20131212	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20131211
JP2012167111 A2	20140509	LSRV	-A02	DECISION OF	TEXT : JAPANESE INTERMEDIATE

				REFUSAL	CODE: A02 EFFECTIVE DATE : 20140508
JP5275628 B2	20130828	LSGT	+	granted / extensions (spc, cpc, pte)	
JP5275628 B2	20130425	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP5275628 B2	20130521	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP5275628 B2	20160524	LSLE	-LAPS	CANCELLATION BECAUSE OF NO PAYMENT OF ANNUAL FEES	
JP5275628 B2	20250824	PEXP		Calculated Patent Term Expiry	
MX2007002208 A1	20070508	LSPB	+	published / reissued	
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NZ553492 A	20101126	LSPB	+	published / reissued	
NZ553492 A	20110331	LSGT	+PSEA	PATENT SEALED	
NZ553492 A	20110429	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	
NZ553492 A	20160226	LSLE	-LAPS	PATENT LAPSED	
NZ588896 A	20120525	LSPB	+	published / reissued	
NZ588896 A	20120928	LSGT	+PSEA	PATENT SEALED	
NZ588896 A	20121130	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	
NZ588896 A	20160226	LSLE	-LAPS	PATENT LAPSED	
PL382308 A1	20070820	LSPB	+	published / reissued	
PL382308 A1	20121130	LSRV	-REFS	DECISIONS ON REFUSAL TO GRANT PATENTS (TAKEN AFTER THE PUBLICATION OF THE PARTICULARS OF THE APPLICATIONS)	
RU2007110934 A	20081010	LSPB	+	published / reissued	
RU2007110934 A	20100120	LSWD	-FA92	ACKNOWLEDGEMENT OF APPLICATION WITHDRAWN (LACK OF SUPPLEMENTARY MATERIALS SUBMITTED)	EFFECTIVE DATE : 20091201
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RU2007110934 A	20110727	LSRE	+FZ9A	APPLICATION NOT WITHDRAWN (CORRECTION OF THE NOTICE OF WITHDRAWAL)	EFFECTIVE DATE : 20110616
RU2468021 C2	20121127	LSGT	+	granted / extensions (spc, cpc, pte)	
RU2468021 C2	20150627	LSLE	-MM4A	THE PATENT IS INVALID DUE TO NON-PAYMENT OF FEES	EFFECTIVE DATE : 20140825
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US2006079526 AA	20100106	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2010330069 AA	20101230	LSPB	+	published / reissued	
US2010330069 AA	20111207	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2012220584 AA	20120830	LSPB	+	published / reissued	
US2012220584 AA	20130123	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2013243754 AA	20130919	LSPB	+	published / reissued	
US2013243754 AA	20130306	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : TARGEGEN, INC., NEW JERSEY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:WRASIDLO, WOLFGANG; DNEPROVSKAIA, ELENA; SIGNING DATES FROM 20070515 TO 20070517; REEL/FRAME:029936/0167
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US7652051 BB	20100126	LSGT	+	granted / extensions (spc, cpc, pte)	
US7652051 BB	20100106	LSGT	PAT1	Patented Case	
US7652051 BB	20100406	LSRE	CC	CERTIFICATE OF CORRECTION	
US7652051 BB	20110215	LSRE	CC	CERTIFICATE OF CORRECTION	
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US7652051 BB	20271202	PEXP		Calculated Patent Term Expiry (PTA 830 days)	
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US8372971 BB	20111021	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : TARGEGEN, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:WRASIDLO, WOLFANG; DNEPROVSKAIA, ELENA; SIGNING DATES FROM 20070515 TO 20070517; REEL/FRAME:027103/0022
US8372971 BB	20130123	LSGT	PAT1	Patented Case	

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US8372971 BB	20200730	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US8372971 BB	20310923	PEXP		Calculated Patent Term Expiry	
WO06024034 A1	20060302	LSPB	+	published / reissued	
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WO06024034 A1	20070222	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 181524 COUNTRY OF REF DOCUMENT : IL
WO06024034 A1	20070223	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : MX/A/2007/002208 COUNTRY OF REF DOCUMENT : MX
WO06024034 A1	20070223	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 382308 COUNTRY OF REF DOCUMENT : PL
WO06024034 A1	20070226	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2007530214 COUNTRY OF REF DOCUMENT : JP
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WO06024034 A1	20070319	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2005792421 COUNTRY OF REF DOCUMENT : EP
WO06024034 A1	20070326	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2007110934 COUNTRY OF REF DOCUMENT : RU KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO06024034 A1	20070329	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2005276974 COUNTRY OF REF DOCUMENT : AU DATE OF REF DOCUMENT : 20050824 KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO06024034 A1	20070329	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2005276974 COUNTRY OF REF DOCUMENT : AU
WO06024034 A1	20070419	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 200580035918.9 COUNTRY OF REF DOCUMENT : CN
WO06024034 A1	20070627	LSPB	+WWP	WIPO	REF DOCUMENT NUMBER :

INFORMATION:	2005792421
PUBLISHED IN	COUNTRY OF REF DOCUMENT :
NATIONAL OFFICE	EP

72) Family number: 31830032 (US2005123527A)

Title: DRIED BIOTHERAPEUTIC COMPOSITION, USES, AND DEVICE AND METHODS FOR ADMINISTRATION THEREOF

Abstract: A biotherapeutic composition containing rapidly activatable bacteria in a dry form, a device for administering such a composition and methods of treatment thereof are disclosed. A method for preparing the biotherapeutic composition itself, as well as a method for preparing the bacteria for such a composition is also disclosed.

Classifications:

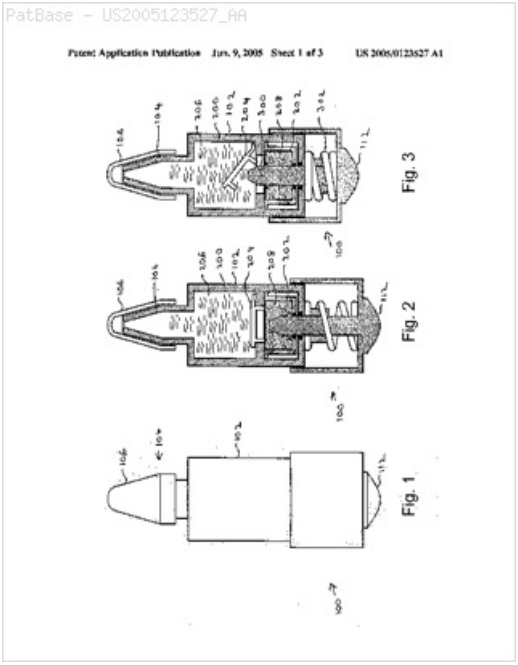
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A61J1/20 A61J7/00 (Advanced/Non-invention);
A23K1/00 A61J1/00 A61J1/05 A61J1/10 A61J1/14 A61J7/00 A61K35/66 A61K36/00 A61K47/00 A61K47/02 A61K47/10 A61K47/14 A61K47/26 A61K47/34 A61K47/36 A61K47/38 A61K47/42 A61K47/46 A61K9/00 A61K9/08 A61K9/10 A61K9/107 A61K9/14 A61K9/16 A61K9/19 A61K9/20 A61K9/22 A61M31/00 A61M37/00 A61M5/20 A61M5/28 A61M5/315 A61P1/00 A61P31/00 A61P37/00 B01F11/00 B65D25/04 C12N1/20 (Core/Invention);
A61J1/14 (Core/Non-invention);
A61K (Subclass/Invention)

International (IPC 1-7): A61K A61K0/00 A61K8/18 A61K9/22

CPC: B65D81/3222 B65D51/2835 B65D51/2864 A61J1/2055 A61J1/065 A61J1/2027 A61J1/2041 A61J1/2093 A61J7/0053 A61K9/0095 A61K9/19 A61K35/74 A61K35/741 Y02A50/473 Y02A50/475 Y02A50/481 A61P1/04 A61P1/06 A61P1/12 A61P31/04 A61P37/00

European: A61J1/06C A61J7/00D10 A61K35/74 A61K35/74A A61K9/00Z6 A61K9/19 K61J1/20A4B K61J1/20A4F K61J1/20A6B K61J1/20D

US: 424/93.4 424/93.400 424/93.45 424/93.450 424/93.450P 435/252.1 435/252.100 604/500 604/890.1 604/890.100 604/890.100S



Family:

Publication number	Publication date	Application number	Application date
AU2006201325 AA	20060427	AU20060201325	20060330
BRPI0415164 A	20070522	BR2004PI15164	20040930
CA2540301 AA	20060327	CA20042540301	20040930
CA2646511 AA	20080929	CA20072646511	20070329
CN101415389 A	20090422	CN200480035552	20040930
EP1667649 A2	20060614	EP20040789433	20040930
EP1667649 A4	20110706	EP20040789433	20040930
HK1092374 A1	20070209	HK20060113091	20061129
HK1092374 A3	20070209	HK20060113091	20061129
IL174667 A0	20060820	IL20040174667	20040930
IN01483CN2006 A	20070629	IN2006CN01483	20060501
JP2007518463 T2	20070712	JP20060534135T	20040930
KR20060109452 A	20061020	KR20067008483	20040930
MXPA06003704 A1	20060620	MX2006PA03704	20040930
RU2006114790 A	20071120	RU20060114790	20040930
US2005123527 AA	20050609	US20040953770	20040930
US2007009490 AA	20070111	US20060392654	20060330
WO05034861 A2	20050421	WO2004US32327	20040930
WO05034861 A3	20090723	WO2004US32327	20040930
WO08051283 A2	20080502	WO2007US07849	20070329
WO08051283 A3	20080619	WO2007US07849	20070329

Priority:

AU20010079383 20011012
US20030507503P 20031002
US20030507503 20031002
US20040953770 20040930
WO2004US32327 20040930
AU20060201325 20060330
US20060392654 20060330
WO2007US07849 20070329

Probable Assignee: BIO BALANCE CORP

Assignee(s): (std): ANTHONY E CONTE ; BIO BALANCE CORP ; BIOBALANCE LLC ; CONTE ANTHONY E ; DAVID C KATZ ; DILLINGHAM RICHARD L ; KATZ DAVID C ; RICHARD L DILLINGHAM

Inventor(s): (std): ANTHONY E CONTE ; CONTE ANTHONY E ; DAVID C KATZ ; DILLINGHAM RICHARD L ; KATZ DAVID C ; RICHARD L DILLINGHAM

Inventor(s): KATZ DAVID ; DILLINGHAM RICHARD ; CONTE ANTHONY

Agent(s): CULLENS PATENT AND TRADE MARK ATTORNEYS; CULLENS PTY LTD; SPRUSON AND FERGUSON; OGILVY RENAULT LLP SENCRL SRL; INTEGRAL IP; LIU SHEN AND ASSOCIATES; MARTIN MOYNIHAN, C/O ANTHONY CASTORINA; MARTIN MOYNIHAN C O ANTHONY CASTORINA; MARTIN D MOYNIHAN PRTSI INC; MOYNIHAN MARTIN ET AL

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 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 YU ZA ZM ZW

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
AU2006201325 AA	20060427	LSPB	+	published / reissued	
AU2006201325 AA	20100422	LSLE	-MK4	APPLICATION LAPSED SECTION 142(2)(D) - NO CONTINUATION FEE PAID FOR THE APPLICATION	
BRPI0415164 A	20070522	LSPB	+	published / reissued	
BRPI0415164 A	20120515	LSFE	-B08F	APPLICATION FEES: DISMISSAL - ARTICLE 86 OF INDUSTRIAL PROPERTY LAW	TEXT : REFERENTE AS 5A, 6A E 7A ANUIDADES.
BRPI0415164 A	20121009	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 2158 DE 15/05/2012.
CA2540301 AA	20060327	LSPB	+	published / reissued	
CA2540301 AA	20090901	LSES	+EEER	EXAMINATION REQUEST	
CA2540301 AA	20121001	LSLE	-FZDE	DEAD	
CA2646511 AA	20080929	LSPB	+	published / reissued	
CA2646511 AA	20130528	LSLE	-FZDE	DEAD	EFFECTIVE DATE : 20130402
CN101415389 A	20090422	LSPB	+	published / reissued	
CN101415389 A	20090422	LSPB	+C06	PUBLICATION	
CN101415389 A	20111228	LSDW	-C02	DEEMED WITHDRAWAL OF PATENT APPLICATION AFTER PUBLICATION (PATENT LAW 2001)	
EP1667649 A2	20060614	LSPB	+	published / reissued	
EP1667649 A2	20060614	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20060327
EP1667649 A4	20110706	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	EFFECTIVE DATE : 20110606
EP1667649 A4	20120229	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20110905
HK1092374 A1	20070209	LSPB	+	published / reissued	
HK1092374 A3	20070209	LSPB	+	published / reissued	
IN01483CN2006 A	20070629	LSPB	+	published / reissued	
JP2007518463 T2	20070712	LSPB	+	published / reissued	
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				REFUSAL	CODE: A02 EFFECTIVE DATE : 20110107
KR20060109452 A	20061020	LSPB	+	published / reissued	
KR20060109452 A	20100105	LSDW	-WITN	WITHDRAWAL DUE TO NO REQUEST FOR EXAMINATION	
MXPA06003704 A1	20060620	LSPB	+	published / reissued	
RU2006114790 A	20071120	LSPB	+	published / reissued	
RU2006114790 A	20090520	LSWD	-FA92	ACKNOWLEDGEMENT OF APPLICATION WITHDRAWN (LACK OF SUPPLEMENTARY MATERIALS SUBMITTED)	EFFECTIVE DATE : 20090323
US2005123527 AA	20050609	LSPB	+	published / reissued	
US2005123527 AA	20050215	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BIO BALANCE CORPORATION, THE, NEW YORK OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:CONTE, ANTHONY E.; KATZ, DAVID C.; DILLINGHAM, RICHARD L.; REEL/FRAME:016288/0796; SIGNING DATES FROM 20041028 TO 20041102
US2005123527 AA	20110815	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
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US2007009490 AA	20060918	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : THE BIO BALANCE CORPORATION, NEW YORK OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:CONTE, ANTHONY E.; KATZ, DAVID C.; DILLINGHAM, RICHARD L.; REEL/FRAME:018264/0446; SIGNING DATES FROM 20060411 TO 20060907
US2007009490 AA	20110815	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
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WO05034861 A2	20060614	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2004789433 COUNTRY OF REF DOCUMENT : EP
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WO08051283 A3	20080929	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2646511 COUNTRY OF REF DOCUMENT : CA
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73) Family number: 15433032 (US6221377B)

Title: ADMINISTRATION MEDIA FOR ANALGESIC, ANTI-INFLAMMATORY AND ANTI-PYRETIC DRUGS CONTAINING NITROUS OXIDE AND PHARMACEUTICAL COMPOSITIONS CONTAINING SUCH MEDIA AND DRUGS

Abstract: Administration mediums comprising solutions of nitrous oxide in water, alcohols, ethers or oils, and optionally including essential fatty acids or C_1 -C_6 alkyl esters thereof enhance the action of analgesic, anti-inflammatory and anti-pyretic drugs. The drugs may be combined with the medium into a pharmaceutical composition or may be taken orally by swallowing the drug with the aid of the medium.

Classifications:
International (IPC 8-9): A61K31/00 A61K31/335 A61K31/38 A61K31/381 A61K31/40 A61K31/403 A61K31/4035 A61K31/425 A61K31/426 A61K31/428 A61K31/44 A61K31/4427 A61K31/4433 A61K31/485 A61K33/00 A61K45/00 A61K45/06 A61K47/04 A61P25/00 A61P25/04 A61P29/00 (Advanced/Invention);
A61K31/00 A61K31/335 A61K31/38 A61K31/381 A61K31/40 A61K31/403 A61K31/425 A61K31/426 A61K31/428 A61K31/44 A61K31/4427 A61K31/485 A61K45/00 A61P25/00 A61P29/00 (Advanced/Non-invention);
A61K31/00 A61K31/335 A61K31/38 A61K31/381 A61K31/40 A61K31/403 A61K31/425 A61K31/426 A61K31/428 A61K31/44 A61K31/4427 A61K31/485 A61K33/00 A61K45/00 A61K47/02 A61P25/00 A61P29/00 (Core/Invention);
A61J A61K C01B C07C C07G (Subclass/Invention)
International (IPC 1-7): A61F1/300 A61F13/00 A61J A61K A61K31/335 A61K31/381 A61K31/40 A61K31/403 A61K31/4035 A61K31/426 A61K31/428 A61K31/44 A61K31/4433 A61K31/485 A61K33/00 A61K45/00 A61K45/06 A61K47/04 A61P23/00 A61P25/00 A61P25/04 A61P29/00 A61P43/00 C01B C07C C07G
CPC: A61K33/00 A61K45/06 A61P23/00 A61P25/00 A61P25/04 A61P29/00 A61P43/00
European: A61K33/00 A61K45/06
US: 424/434 514/177 514/212.01 514/291 514/307 514/315 514/352 514/365 514/374 514/410 514/412 514/415 514/418 514/419 514/423 514/428 514/430 514/450 514/539 514/558 514/567 514/569 514/570

Family:

Publication number	Publication date	Application number	Application date
AT334689 E	20060815	AT19960939247T	19961113
AU199676371 A1	19970605	AU19960076371	19961113
AU730495 B2	20010308	AU19960076371	19961113
BRPI9611523 A	19991228	BR1996PI11523	19961113
CA2237306 AA	19980511	CA19962237306	19961113
CA2237306 C	20081007	CA19962237306	19961113
CN1102852 C	20030312	CN19961099192	19961113
CN1205641 A	19990120	CN19961099192	19961113
DE69636413 D1	20060914	DE19966036413	19961113
DE69636413 D1	20060914	DE19966036413T	19961113
DE69636413 T2	20070329	DE19966036413T	19961113
EP0866713 A1	19980930	EP19960939247	19961113
EP0866713 B1	20060802	EP19960939247	19961113
JP2000500449 T2	20000118	JP19970518711T	19961113
NO982161 A	19980702	NO19980002161	19980512
NO982161 A0	19980512	NO19980002161	19980512
NO982161 L	19980702	NO19980002161	19980512
NZ322588 A	19990128	NZ19960322588	19961113
PT866713 T	20061229	PT19960939247T	19961113
US6221377 BA	20010424	US19980068543	19980513
WO9717978 A1	19970522	WO1996IB01366	19961113
ZA9609474 A	19970602	ZA19960009474	19961112

Priority:
ZA19950009609 19951113 ZA19960009474 19961112 WO1996IB01366 19961113

Probable Assignee: NORTH WEST UNIV

Assignee(s): (std): MEYER PETRUS JOHANNES ; NORTH WEST UNIV ; PITMY INT N V ; PITMY INT NV ; PITMY INTERNATIONAL NV ; PITMY INTERNAT N V ; PITMY INTERNATIONAL N V ; UNIV NORTHWEST

Assignee(s): PITMY INT ; NORTH WEST UNIVERSITY

Inventor(s): (std): MEYER JOHANNES ; MEYER P J ; MEYER PETRUS JOHANNES ; PETRUS JOHANNES MEYER ; P J MEYER ; PJ MEYER

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; R WILLIAM WRAY AND ASSOCIATES; ARENT FOX KINTNER PLOTKIN AND KAHN PLLC

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)

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Patent	Date recorded	Event group	Code	Event	Details
AT334689 E	20060815	LSGT	+	granted / extensions (spc, cpc, pte)	
AT334689 E	20070415	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	REF DOCUMENT NUMBER : 0866713 COUNTRY OF REF DOCUMENT : EP
AT334689 E	20161113	PEXP		Calculated Patent Term Expiry	
AU199676371 A1	19970605	LSPB	+	published / reissued	

AU730495 B2	20010308	LSGT	+	granted / extensions (spc, cpc, pte)	
AU730495 B2	20010705	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU730495 B2	20161113	PEXP		Calculated Patent Term Expiry	
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BRPI9611523 A	20040914	LSES	B07A	TECHNICAL EXAMINATION (OPINION): PUBLICATION OF TECHNICAL EXAMINATION (OPINION)	
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BRPI9611523 A	20061219	LSRV	B09B	DECISION: REFUSAL	TEXT : DE ACORDO COM O ARTIGO 37, INDEFIRO O PRESENTE PEDIDO, TENDO POR BASE O ARTIGO 8O COMBINADO COM O ARTIGO 13, E ARTIGOS 24 E 25 DA LPI 9279 DE 14/05/96.
CA2237306 AA	19980511	LSPB	+	published / reissued	
CA2237306 AA	20010523	LSES	+EEER	EXAMINATION REQUEST	
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EP0866713 A1	20060831	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP0866713 A1	20060906	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
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EP0866713 A1	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
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EP0866713 B1	20060802	LSGT	+	granted / extensions (spc, cpc, pte)	
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EP0866713 B1	20161113	PEXP		Calculated Patent Term Expiry	
JP2000500449 T2	20000118	LSPB	+	published / reissued	
NO982161 A	19980702	LSPB	+	published / reissued	
NO982161 A	20031201	LSRV	-FC2A	WITHDRAWAL, REJECTION OR DISMISSAL OF LAID OPEN PATENT APPLICATION	
NZ322588 A	19990128	LSPB	+	published /	

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US6221377 BA	20010405	LSGT	PAT1	Patented Case	
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US6221377 BA	20040928	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
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WO9717978 A1	19961113	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 96199192.5 COUNTRY OF REF DOCUMENT : CN
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WO9717978 A1	19980930	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1996939247 COUNTRY OF REF DOCUMENT : EP
WO9717978 A1	20060802	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1996939247 COUNTRY OF REF DOCUMENT : EP
ZA9609474 A	19970602	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA9609474 A	20161111	PEXP		Calculated Patent Term Expiry	

74) Family number: 31458033 (US2007190154A)

Title: METHOD FOR THE PRODUCTION OF EMULSION-BASED MICRO PARTICLES

Abstract: The apparatus and methods of the present invention are of use for the production of emulsion-based microparticles containing a biological or chemical agent. In particular, the apparatus provides a vessel; packing material situated inside such vessel and may further provide material capable of insertion into both ends of said vessel for enclosure of the packing material. In a particular embodiment, the apparatus is a packed bed apparatus. The methods include production of emulsion based microparticles containing a biological or chemical agent. The usefulness of the present invention is that the apparatus and methods of the present invention provide for a low-shear, non-turbulent, production of emulsion-based microparticles that provides a narrow, reproducible, particle size distribution, capable of use with both large and small volumes that is capable of being conveniently scaled up while providing predictable emulsion properties.

Classifications:

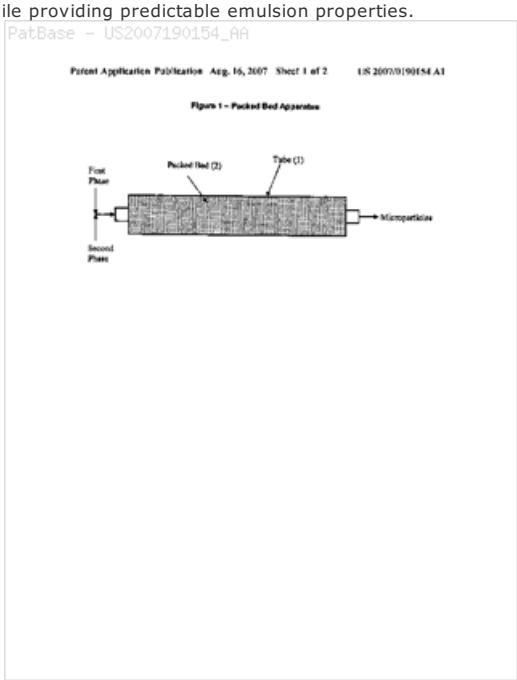
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A61K31/465 A61K31/56 A61K31/565 A61K38/00 A61K38/22 A61K38/28 A61K45/00 A61K47/32 A61K47/34 A61K47/42 A61K9/10 A61K9/107 B01F17/30 B01F17/52 B01F3/08 B01J13/00 B29C39/10 (Core/Invention);
C08F (Subclass/Invention)

International (IPC 1-7): A61K9/16 B01J13/06 C08F C08F2/00

CPC: B29C39/10 A01N25/28 B01J13/04 C09B67/0097 C11D3/505 A61K38/28 A61K38/38 A61K9/1617 A61K9/1641 A61P25/08 A61P25/18 A61P25/20 A61P29/00 A61P31/00 A61P31/10 A61P31/12 A61P33/06 A61K47/60 B01F3/0807 B01F5/0696 A61P3/10 A61P5/00 A61P7/02 A61P7/04 A61P9/00 A61P9/12 A61P37/02 A61P37/04 A61P37/06 A61P39/02 A61P39/06 A61P43/00 A61K9/1635 A61K9/1647 A61K9/1694 A61K31/565 B01J2/06 C08J3/14

European: A61K31/565 A61K9/16H6B A61K9/16H6D4 A61K9/16P4 B01F3/08C B01F5/06F4G2 B01J2/06 C08J3/14

US: 264/4 264/4S 264/5 264/5S 424/489 424/489P 424/85.1 424/85.100S 424/85.2 424/85.200S 514/12 514/13.7 514/13.700S 514/15.2 514/15.7 514/15.700S 514/16.4 514/16.400S 514/17.5 514/17.500S 514/18.3 514/18.300S 514/182 514/2.4 514/2.400S 514/3.3 514/3.300S 514/3.7 514/3.700S 514/44 514/44.00RS 514/44R 514/5.9 514/6.9 514/6.900S 514/7.9 514/7.900S



Family:

Publication number	Publication date	Application number	Application date
AU2004253853 AA	20050113	AU20040253853	20040412
AU2004253853 BB	20100401	AU20040253853	20040412
BRPI0409032 A	20060502	BR2004PI09032	20040412
CA2516107 AA	20050815	CA20042516107	20040412
CA2516107 C	20131224	CA20042516107	20040412
CN101410174 A	20090415	CN200480008408	20040412
CN101410174 B	20110406	CN200480008408	20040412
CN102166192 A	20110831	CN201110028030	20040412
CN102166192 B	20130925	CN201110028030	20040412
DE602004042362 D1	20130801	DE200460042362T	20040412
EP1615959 A2	20060118	EP20040750117	20040412
EP1615959 A4	20091125	EP20040750117	20040412
EP1615959 B1	20130605	EP20040750117	20040412
EP2548550 A1	20130123	EP20120159499	20040412
ES2427092 T3	20131028	ES20040750117T	20040412
IN04743DN2005 A	20070817	IN2005DN04743	20051018
IN240212 B	20100507	IN2005DN04743	20051018
JP2007515392 T2	20070614	JP20060532408T	20040412
JP2010120948 A2	20100603	JP20090296315	20091225
JP2013136591 A2	20130711	JP20130013176	20130128
JP5377277 B2	20131225	JP20090296315	20091225
PT1615959 T	20130829	PT20040750117T	20040412
US2007190154 AA	20070816	US20040553003	20040412
US2007207211 AA	20070906	US20070799700	20070501
US2015072928 AA	20150312	US20140541328	20141114
US8916196 BB	20141223	US20040553003	20040412
US10272044 BB	20190430	US20140541328	20141114
WO05003180 A2	20050113	WO2004US11485	20040412
WO05003180 A3	20090402	WO2004US11485	20040412

Priority:

US20030461860 20030410 US20030461860P 20030410 EP20040750117 20040412
JP20060532408 20040412 US20040553003 20040412 JP20090296315 20040412
WO2004US11485 20040412 US20060553003 20060815 US20070799700 20070501
US20140541328 20141114

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PHARMACEUTICALS INC1716 HEATH PARKWAYFORT COLLINSCO80522US ; EVONIK CORP299 JEFFERSON ROADPARSIPPANYNJ07054US ; BROOKWOOD PHARMACEUTICALS INC756 TOM MARTIN DRIVEBIRMINGHAMAL35211US ; SURMODICS SMP INC ; SURMODICS SMP INC9924 WEST 74TH STREETEDEN PRAIRIEMN55344US ; SILICON VALLEY BANK ; EVONIK PARSIPPANY CORP ; BROOKWOOD PHARMACEUTICALS INC ; EHUD ZEIGERSON

Inventor(s): (std): EHUD ZEIGERSON ; ZEIGERSON EHUD

Inventor(s): ZEIGERSON EHUD FORT COLLINS ; ZEIGERSON EHUDUS

Agent(s): SPRUSON AND FERGUSON; DAVIES COLLISON CAVE; OGILVY RENAULT LLP SENCRL SRL; MARKS AND CLERK; NORTON ROSE CANADA SENCRL SRL LLP; GOLDING LOUISE ANN; Golding Louise Ann; LEHMANN MARIA ISABEL; MCCALLUM LAW FIRM P C; LINDA S; JASON S; LI LINDA S; NGUL JASON S; LAU BERNARD; MCCALLUM JENNIFER M

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
AU2004253853 AA	20050113	LSPB	+	published / reissued	
AU2004253853 BB	20100401	LSGT	+	granted / extensions (spc, cpc, pte)	
AU2004253853 BB	20100729	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU2004253853 BB	20150319	LSAS	PC	ASSIGNMENT REGISTERED	PARTYTYPE : OWNER OWNER : EVONIK CORPORATION OLDPARTY : FORMER OWNER WAS: PR PHARMACEUTICALS
AU2004253853 BB	20240412	PEXP		Calculated Patent Term Expiry	
BRPI0409032 A	20060502	LSPB	+	published / reissued	
BRPI0409032 A	20161206	LSES	B07D	TECHNICAL EXAMINATION (OPINION) RELATED TO ARTICLE 229 OF INDUSTRIAL PROPERTY LAW	
BRPI0409032 A	20170425	LSAS	B25C	REQUIREMENT RELATED TO REQUESTED TRANSFER OF RIGHTS	PARTYTYPE : OWNER OWNER : PR PHARMACEUTICALS (US) , EHUD ZEIGERSON (US)
BRPI0409032 A	20170815	LSAS	B25B	REQUESTED TRANSFER OF RIGHTS REJECTED	PARTYTYPE : OWNER OWNER : PR PHARMACEUTICALS (US) , EHUD ZEIGERSON (US)
BRPI0409032 A	20171017	LSAS	B25F	ENTRY OF CHANGE OF NAME AND/OR HEADQUARTER AND TRANSFER OF APPLICATION, PATENT AND CERTIF. OF ADDITION OF INVENTION: CHANGE OF NAME ON REQUIREMENT	PARTYTYPE : OWNER OWNER : PR PHARMACEUTICALS (US) , EHUD ZEIGERSON (US)
BRPI0409032 A	20180116	LSAS	B25E	REQUESTED CHANGE OF NAME OF APPLICANT REJECTED	PARTYTYPE : OWNER OWNER : PR PHARMACEUTICALS (US) , EHUD ZEIGERSON (US)
BRPI0409032 A	20180206	LSAL	B12F	APPEAL: OTHER APPEALS	
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BRPI0409032 A	20200616	LSFE	-B08F	APPLICATION FEES: DISMISSAL - ARTICLE 86 OF INDUSTRIAL PROPERTY LAW	TEXT : REFERENTE A 16A ANUIDADE
BRPI0409032 A	20200804	LSFE	B08H	APPLICATION FEES: DECISION CANCELLED	TEXT : ANULADA A PUBLICACAO CODIGO 8.6 NA RPI NO 2580 DE 16/06/2020.

CA2516107 AA	20050815	LSPB	+	published / reissued	
CA2516107 AA	20090403	LSES	+EEER	EXAMINATION REQUEST	
CA2516107 C	20131224	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2516107 C	20240412	PEXP		Calculated Patent Term Expiry	
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CN101410174 A	20090415	LSPB	+C06	PUBLICATION	
CN101410174 B	20110406	LSGT	+	granted / extensions (spc, cpc, pte)	
CN101410174 B	20110406	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN101410174 B	20131016	LSAS	ASS	SUCCESSION OR ASSIGNMENT OF PATENT RIGHT	PARTYTYPE : OWNER OWNER : BROOKWOOD PHARMACEUTICALS INC. OLDPARTY : FORMER OWNER: PR PHARMACEUTICALS, INC. EFFECTIVE DATE : 20130916
CN101410174 B	20131016	LSAS	ASS	SUCCESSION OR ASSIGNMENT OF PATENT RIGHT	PARTYTYPE : OWNER OWNER : EVONIK LTD. OLDPARTY : FORMER OWNER: SURMODICS SMP INC. EFFECTIVE DATE : 20130916
CN101410174 B	20131016	LSAS	C41	TRANSFER OF PATENT APPLICATION OR PATENT RIGHT OR UTILITY MODEL	
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CN102166192 A	20110831	LSPB	+C06	PUBLICATION	
CN102166192 B	20130925	LSGT	+	granted / extensions (spc, cpc, pte)	
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EP1615959 A2	20060118	LSPB	+	published / reissued	
EP1615959 A2	20060118	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20051103
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EP1615959 A4	20120808	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : SURMODICS PHARMACEUTICALS, INC.
EP1615959 A4	20130529	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : EVONIK CORPORATION
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				[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 : 20130605
EP1615959 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 FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20130605
EP1615959 B1	20140514	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20140306
EP1615959 B1	20140618	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 602004042362 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20140306
EP1615959 B1	20141128	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 : 20140412
EP1615959 B1	20141128	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 : 20130605
EP1615959 B1	20160421	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 13
EP1615959 B1	20160630	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 : 20130605
EP1615959 B1	20160729	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 : 20130605
EP1615959 B1	20160729	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 : 20040412
EP1615959 B1	20170419	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 14
EP1615959 B1	20170630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20170419 YEAR OF FEE PAYMENT : 14
EP1615959 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : GB

				[ANNOUNCED FROM NATIONAL OFFICE TO EPO]	PAYMENT DATE : 20170419 YEAR OF FEE PAYMENT : 14
EP1615959 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20170419 YEAR OF FEE PAYMENT : 14
EP1615959 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20170421 YEAR OF FEE PAYMENT : 14
EP1615959 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170419 YEAR OF FEE PAYMENT : 14
EP1615959 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170419 YEAR OF FEE PAYMENT : 14
EP1615959 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20170424 YEAR OF FEE PAYMENT : 14
EP1615959 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20170410 YEAR OF FEE PAYMENT : 14
EP1615959 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20170419 YEAR OF FEE PAYMENT : 14
EP1615959 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20170510 YEAR OF FEE PAYMENT : 14
EP1615959 B1	20180420	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 15
EP1615959 B1	20180629	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20180418 YEAR OF FEE PAYMENT : 15
EP1615959 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20180525 YEAR OF FEE PAYMENT : 15
EP1615959 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20180419 YEAR OF FEE PAYMENT : 15
EP1615959 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20180409 YEAR OF FEE PAYMENT : 15
EP1615959 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20180424 YEAR OF FEE PAYMENT : 15
EP1615959 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180420 YEAR OF FEE PAYMENT : 15
EP1615959 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20180420 YEAR OF FEE PAYMENT : 15
EP1615959 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20180423 YEAR OF FEE PAYMENT : 15
EP1615959 B1	20180928	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20180418

				NATIONAL OFFICE TO EPO]	YEAR OF FEE PAYMENT : 15
EP1615959 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20180418 YEAR OF FEE PAYMENT : 15
EP1615959 B1	20190628	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20190418 YEAR OF FEE PAYMENT : 16
EP1615959 B1	20190731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20190429 YEAR OF FEE PAYMENT : 16
EP1615959 B1	20190731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20190404 YEAR OF FEE PAYMENT : 16
EP1615959 B1	20190731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20190521 YEAR OF FEE PAYMENT : 16
EP1615959 B1	20190731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20190418 YEAR OF FEE PAYMENT : 16
EP1615959 B1	20190731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20190418 YEAR OF FEE PAYMENT : 16
EP1615959 B1	20190830	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20190418 YEAR OF FEE PAYMENT : 16
EP1615959 B1	20190830	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20190418 YEAR OF FEE PAYMENT : 16
EP1615959 B1	20190930	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20190418 YEAR OF FEE PAYMENT : 16
EP1615959 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20190418 YEAR OF FEE PAYMENT : 16
EP1615959 B1	20240412	PEXP		Calculated Patent Term Expiry	
EP2548550 A1	20130123	LSPB	+	published / reissued	
EP2548550 A1	20130828	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20130723
EP2548550 A1	20130828	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : EVONIK CORPORATION
EP2548550 A1	20130918	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20130820
EP2548550 A1	20160518	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20151215
ES2427092 T3	20131028	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2427092 T3	20240412	PEXP		Calculated Patent Term Expiry	
IN04743DN2005 A	20070817	LSPB	+	published / reissued	
IN240212 B	20100507	LSGT	+	granted / extensions (spc, cpc, pte)	
IN240212 B	20251018	PEXP		Calculated Patent Term Expiry	
JP2007515392 T2	20070614	LSPB	+	published / reissued	
JP2007515392 T2	20090903	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20090902

JP2007515392 T2	20091226	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20091225
JP2007515392 T2	20100405	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20100402
JP2010120948 A2	20100603	LSPB	+	published / reissued	
JP2010120948 A2	20100727	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20100726
JP2010120948 A2	20120903	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20120831
JP2010120948 A2	20130129	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20130128
JP2010120948 A2	20130305	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20130304
JP2010120948 A2	20130627	LSAS	A711	NOTIFICATION OF CHANGE IN APPLICANT	TEXT : JAPANESE INTERMEDIATE CODE: A711 EFFECTIVE DATE : 20130626
JP2010120948 A2	20130702	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20130701
JP2010120948 A2	20130801	LSAL	A911	TRANSFER OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A911 EFFECTIVE DATE : 20130731
JP2010120948 A2	20130819	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2010120948 A2	20130827	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20130826
JP2010120948 A2	20131003	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20130924
JP2010120948 A2	20131004	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP2010120948 A2	20131004	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 5377277 COUNTRY OF REF DOCUMENT : JP
JP2013136591 A2	20130711	LSPB	+	published / reissued	
JP2013136591 A2	20130627	LSAS	A711	NOTIFICATION OF CHANGE IN APPLICANT	TEXT : JAPANESE INTERMEDIATE CODE: A711 EFFECTIVE DATE : 20130626
JP2013136591 A2	20140318	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20140317
JP2013136591 A2	20140612	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20140611
JP2013136591 A2	20140812	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20140811
JP2013136591 A2	20141209	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20141208
JP2013136591 A2	20141217	LSAL	A911	TRANSFER OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A911 EFFECTIVE DATE : 20141216

JP2013136591 A2	20150119	LSAL	-A912	REMOVAL OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A912 EFFECTIVE DATE : 20150116
JP5377277 B2	20131225	LSGT	+	granted / extensions (spc, cpc, pte)	
JP5377277 B2	20130829	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP5377277 B2	20131001	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP5377277 B2	20160929	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5377277 B2	20161004	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5377277 B2	20170928	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5377277 B2	20171003	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5377277 B2	20180927	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5377277 B2	20181002	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5377277 B2	20190926	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5377277 B2	20191001	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5377277 B2	20291225	PEXP		Calculated Patent Term Expiry	
PT1615959 T	20130829	LSGT	+	granted / extensions (spc, cpc, pte)	
PT1615959 T	20240412	PEXP		Calculated Patent Term Expiry	
US10272044 BB	20190430	LSGT	+	granted / extensions (spc, cpc, pte)	
US10272044 BB	20190410	LSGT	PAT1	Patented Case	
US10272044 BB	20361009	PEXP		Calculated Patent Term Expiry (PTA 695 days and a terminal disclaimer has been filed)	
US2007190154 AA	20070816	LSPB	+	published / reissued	
US2007190154 AA	20080114	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, CALIFORNIA OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:PR PHARMACEUTICALS, INC.; REEL/FRAME:020353/0884 EFFECTIVE DATE : 20080114
US2007190154 AA	20080114	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK,CALIFORNIA OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:PR PHARMACEUTICALS, INC.; REEL/FRAME:020353/0884 EFFECTIVE DATE : 20080114
US2007190154 AA	20081107	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PR PHARMACEUTICALS INC., COLORADO OLDPARTY : RELEASE; ASSIGNOR:SILICON VALLEY BANK; REEL/FRAME:021794/0979 EFFECTIVE DATE : 20081105
US2007190154 AA	20081121	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PR PHARMACEUTICALS, INC., COLORADO OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:BROOKWOOD PHARMACEUTICALS, INC.; REEL/FRAME:021861/0519 EFFECTIVE DATE : 20081104
US2007190154 AA	20081124	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BROOKWOOD

					PHARMACEUTICALS, INC., ALABAMA OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE ASSIGNOR AND ASSIGNEE PREVIOUSLY RECORDED ON REEL 021861 FRAME 0519; ASSIGNOR:PR PHARMACEUTICALS, INC.; REEL/FRAME:021876/0528 EFFECTIVE DATE : 20081104
US2007190154 AA	20081124	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BROOKWOOD PHARMACEUTICALS, INC., ALABAMA OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE ASSIGNOR AND; ASSIGNOR:PR PHARMACEUTICALS, INC.; REEL/FRAME:021876/0528 EFFECTIVE DATE : 20081104
US2007190154 AA	20090625	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BROOKWOOD PHARMACEUTICALS, INC., ALABAMA OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE SERIAL NUMBER 60/489401 AND TITLE PREVIOUSLY RECORDED ON REEL 021876 FRAME 0528; ASSIGNOR:PR PHARMACEUTICALS, INC.; REEL/FRAME:023018/0114 EFFECTIVE DATE : 20081104
US2007190154 AA	20090625	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BROOKWOOD PHARMACEUTICALS, INC., ALABAMA OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE SERIAL NUMBER; ASSIGNOR:PR PHARMACEUTICALS, INC.; REEL/FRAME:023018/0114 EFFECTIVE DATE : 20081104
US2007190154 AA	20130228	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : EVONIK CORPORATION, NEW JERSEY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:SURMODICS PHARMACEUTICALS, INC.; REEL/FRAME:029897/0478 EFFECTIVE DATE : 20130221
US2007190154 AA	20130531	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SURMODICS PHARMACEUTICALS, INC., MINNESOTA OLDPARTY : CHANGE OF NAME; ASSIGNOR:BROOKWOOD PHARMACEUTICALS, INC.; REEL/FRAME:030518/0809 EFFECTIVE DATE : 20090220
US2007190154 AA	20141203	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2007207211 AA	20070906	LSPB	+	published / reissued	
US2007207211 AA	20080228	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SILICON VALLEY BANK, CALIFORNIA OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE TO REMOVE THE INCORRECT PATENT APPLICATION NUMBER 10/799,700 AND ADD THE CORRECT PATENT APPLICATION NUMBER 11/799,700 PREVIOUSLY RECORDED ON REEL 020353 FRAME 0884. ASSIGNOR(S) HEREBY CONFIRMS THE SECURITY AGREEMENT.; ASSIGNOR:PR PHARMACEUTICALS, INC.; REEL/FRAME:020583/0680 EFFECTIVE DATE : 20080114
US2007207211 AA	20081107	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PR PHARMACEUTICALS INC.,

					COLORADO OLDPARTY : RELEASE; ASSIGNOR:SILICON VALLEY BANK; REEL/FRAME:021803/0824 EFFECTIVE DATE : 20081105
US2007207211 AA	20081121	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PR PHARMACEUTICALS, INC., COLORADO OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:BROOKWOOD PHARMACEUTICALS, INC.; REEL/FRAME:021861/0519 EFFECTIVE DATE : 20081104
US2007207211 AA	20081124	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BROOKWOOD PHARMACEUTICALS, INC., ALABAMA OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE ASSIGNOR AND ASSIGNEE PREVIOUSLY RECORDED ON REEL 021861 FRAME 0519; ASSIGNOR:PR PHARMACEUTICALS, INC.; REEL/FRAME:021876/0528 EFFECTIVE DATE : 20081104
US2007207211 AA	20081124	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BROOKWOOD PHARMACEUTICALS, INC., ALABAMA OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE ASSIGNOR AND; ASSIGNOR:PR PHARMACEUTICALS, INC.; REEL/FRAME:021876/0528 EFFECTIVE DATE : 20081104
US2007207211 AA	20130531	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SURMODICS PHARMACEUTICALS, INC., MINNESOTA OLDPARTY : CHANGE OF NAME; ASSIGNOR:BROOKWOOD PHARMACEUTICALS, INC.; REEL/FRAME:030518/0899 EFFECTIVE DATE : 20090220
US2007207211 AA	20130531	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : EVONIK CORPORATION, NEW JERSEY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:SURMODICS SMP, INC.; REEL/FRAME:030519/0001 EFFECTIVE DATE : 20130409
US2007207211 AA	20130531	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SURMODICS SMP, INC., MINNESOTA OLDPARTY : CHANGE OF NAME; ASSIGNOR:SURMODICS PHARMACEUTICALS, INC.; REEL/FRAME:030518/0945 EFFECTIVE DATE : 20120723
US2007207211 AA	20130610	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PR PHARMACEUTICALS, INC., COLORADO OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ZEIGERSON, EHUD; REEL/FRAME:030577/0496 EFFECTIVE DATE : 20031008
US2007207211 AA	20151019	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2015072928 AA	20150312	LSPB	+	published / reissued	
US2015072928 AA	20170130	LSAL	EAA1	Examiner's Answer to Appeal Brief Mailed	
US2015072928 AA	20170130	LSAL	EAA1	Examiner's Answer to Appeal Brief Mailed	
US2015072928 AA	20170530	LSAL	APL3	Appeal Ready for Review	

US2015072928 AA	20170602	LSAL	APL5	On Appeal -- Awaiting Decision by the Board of Appeals	
US2015072928 AA	20181228	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2015072928 AA	20190312	LSFE	+PPV1	Publications -- Issue Fee Payment Verified	
US2015072928 AA	20190410	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US8916196 BB	20141223	LSGT	+	granted / extensions (spc, cpc, pte)	
US8916196 BB	20051011	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PR PHARMACEUTICALS, COLORADO OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ZEIGERSON, EHUD; REEL/FRAME:017890/0674 EFFECTIVE DATE : 20031008
US8916196 BB	20060714	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PR PHARMACEUTICALS, INC., COLORADO OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ZEIGERSON, EHUD; REEL/FRAME:017933/0429 EFFECTIVE DATE : 20031008
US8916196 BB	20141203	LSGT	PAT1	Patented Case	
US8916196 BB	20180614	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8916196 BB	20270712	PEXP		Calculated Patent Term Expiry (PTA 1186 days)	
WO05003180 A2	20050113	LSPB	+	published / reissued	
WO05003180 A2	20050815	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2516107 COUNTRY OF REF DOCUMENT : CA
WO05003180 A2	20050830	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2006532408 COUNTRY OF REF DOCUMENT : JP
WO05003180 A2	20050927	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 20048084088 COUNTRY OF REF DOCUMENT : CN
WO05003180 A2	20051005	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2004253853 COUNTRY OF REF DOCUMENT : AU
WO05003180 A2	20051011	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE	REF COUNTRY CODE : DE
WO05003180 A2	20051018	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 4743/DELNP/2005 COUNTRY OF REF DOCUMENT : IN
WO05003180 A2	20051027	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2004253853 COUNTRY OF REF DOCUMENT : AU DATE OF REF DOCUMENT : 20040412 KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO05003180 A2	20051027	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2004253853 COUNTRY OF REF DOCUMENT : AU
WO05003180 A2	20051103	LSNP	+WWE	WIPO INFORMATION:	REF DOCUMENT NUMBER : 2004750117

				ENTRY INTO NATIONAL PHASE	COUNTRY OF REF DOCUMENT : EP
WO05003180 A2	20060118	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2004750117 COUNTRY OF REF DOCUMENT : EP
WO05003180 A2	20060502	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : PI0409032 COUNTRY OF REF DOCUMENT : BR
WO05003180 A2	20060815	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 10553003 COUNTRY OF REF DOCUMENT : US
WO05003180 A2	20060815	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2007190154 COUNTRY OF REF DOCUMENT : US
WO05003180 A2	20070816	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 10553003 COUNTRY OF REF DOCUMENT : US

75) Family number: 41950034 (US2010216705A)

Title: HUMAN GROWTH HORMONE FORMULATIONS

Abstract: Formulations containing complexed human growth hormone crystals are described. Also described are needleless injection systems for crystalline proteins.

Classifications:
International (IPC 8-9): A61B19/02 A61J1/05 A61J1/06 A61J7/00 A61K A61K38/27 A61K47/04 A61K47/10 A61K47/12 A61K47/18 A61K47/22 A61K47/34 A61K47/48 A61K9/10 A61K9/19 A61M5/178 A61M5/24 A61M5/30 A61P5/00 A61P5/06
C07K14/61 (Advanced/Invention);
A61J1/05 A61J7/00 A61K38/27 A61K47/02 A61K47/10 A61K47/12 A61K47/16 A61K47/22 A61K47/34 A61K9/10 A61K9/19 A61M5/178 A61M5/30 A61P5/00 (Core/Invention)
International (IPC 1-7): A61K38/27 A61K9/10
CPC: A61K47/645 A61K47/6921 A61P5/00 A61P5/06 A61K9/0019 A61K9/0021 A61K38/27 A61K47/34 C07K14/61
European: A61K38/27 A61K47/48R2T A61K47/48W8 A61K9/00M5 C07K14/61 K61K47/34 K61K9/00M5B
US: 206/438 206/438S 514/1.1 514/1.100P 514/1.2 514/1.200S 514/11.4 514/11.400P 514/12 514/5.1 530/397 530/399

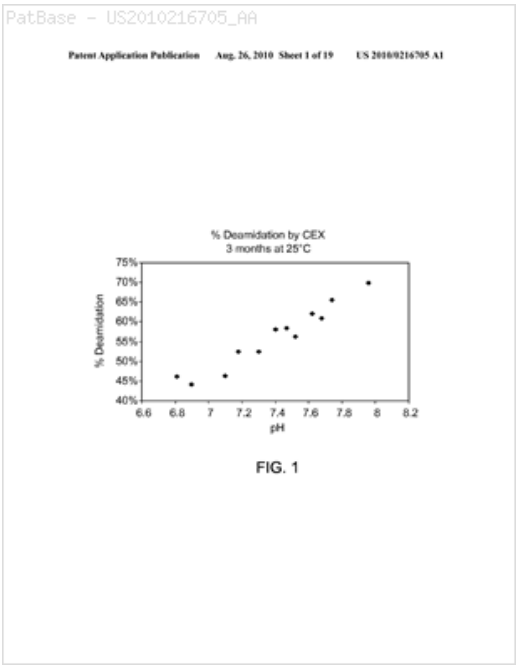


FIG. 1

Family:

Publication number	Publication date	Application number	Application date
AU2007333959 AA	20080626	AU20070333959	20071213
CA2672284 AA	20090610	CA20072672284	20071213
CA2672284 C	20140826	CA20072672284	20071213
DE602007040917 D1	20150513	DE200760040917T	20071213
DK2486916 T3	20150615	DK20110010051T	20071213
DK2486916 T3	20150615	DK20070010051T	20071213
EP2120869 A2	20091125	EP20070869230	20071213
EP2486916 A1	20120815	EP20110010051	20071213
EP2486916 A8	20130327	EP20110010051	20071213
EP2486916 B1	20150401	EP20110010051	20071213
HK1136977 A1	20100716	HK20100104951	20100520
IN02307KN2009 A	20090710	IN2009KN02307	20090622
JP2010513309 T2	20100430	JP20090541592T	20071213
JP2015214573 A2	20151203	JP20150153650	20150803
JP6106722 B2	20170405	JP20150153650	20150803
US2010216705 AA	20100826	US20070519720	20071213
US2012088724 AA	20120412	US20110270136	20111010
US8071544 BB	20111206	US20070519720	20071213
WO08076819 A2	20080626	WO2007US87417	20071213
WO08076819 A3	20090326	WO2007US87417	20071213

Priority:

US20060870605P 20061218 EP20070869230 20071213 EP20110010051 20071213
US20070519720 20071213 JP20090541592T 20071213 WO2007US87417 20071213
US20100519720 20100504 US20110270136 20111010 JP20150153650 20150803

Probable Assignee: AJINOMOTO CO INC

Assignee(s): (std): BASU SUJIT K ; BUSH LAWRENCE ; CHUNG WEN LI ; PECHENOV SERGEY ; ALTHEA TECHNOLOGIES INC ; AJINOMOTO CO INC ; ALTUS PHARMACEUTICALS INC ; AJINOMOTO ALTHEA INC

Assignee(s): ALTHEA TECHNOLOGIES INC11040 ROSELLE STREETSAN DIEGOCA92121US ; ALTUS PHARMACEUTICALS INC125 SIDNEY STREETCAMBRIDGEMA02139US ; AJINOMOTO ALTHEA INC SAN DIEGO

Inventor(s): (std): BASU SUJIT K ; BUSH LAWRENCE ; LAWRENCE BUSH ; PECHENOV SERGEY ; SERGEY PECHENOV ; SUJIT K BASU ; CHUNG WEN LI

Inventor(s): CHUNG WEN LI SAN MATTEO ; CHUNG WEN LIUS ; WEN LI CHUNG ; PECHENDV SERGEY ; PECHENOV SERGEY MALDEN ; PECHENOV SERGEYUS ; BUSH LAWRENCE SEATTLE ; BUSH LAWRENCEUS ; BASU SUJIT K NEWTON ; BASU SUJIT KUS

Agent(s): CULLENS PATENT AND TRADE MARK ATTORNEYS; CULLENS PTY LTD; SPRUSON AND FERGUSON; SMART AND BIGGAR; VOSSIUS AND PARTNER; GRAF VON STOSCH ANDREAS; MAYER BROWN JSM; YAMASAKI KAZUO; HAKODA ATSUSHI; ICHIKAWA SATSUKI; KUMAKURA YOSHIO; ASAI KENJI; DESHIMARU TAKESHI; NISHIJIMA TAKAKI; LANDO AND ANASTASI LLP; WILSON SONSINI GOODRICH AND ROSATI; MYERS LOUIS

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)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
AU2007333959 AA	20080626	LSPB	+	published / reissued	
AU2007333959 AA	20111215	LSLE	-MK1	APPLICATION LAPSED SECTION 142(2)(A) - NO REQUEST FOR EXAMINATION IN RELEVANT PERIOD	
CA2672284 AA	20090610	LSPB	+	published / reissued	
CA2672284 AA	20120808	LSES	+EEER	EXAMINATION REQUEST	
CA2672284 C	20140826	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2672284 C	20271213	PEXP		Calculated Patent Term Expiry	
DK2486916 T3	20150615	LSGT	+	granted / extensions (spc, cpc, pte)	
DK2486916 T3	20150615	LSGT	+	granted / extensions (spc, cpc, pte)	
DK2486916 T3	20271213	PEXP		Calculated Patent Term Expiry	
DK2486916 T3	20271213	PEXP		Calculated Patent Term Expiry	
EP2120869 A2	20091125	LSPB	+	published / reissued	
EP2120869 A2	20091125	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20090612
EP2120869 A2	20100113	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20091211
EP2120869 A2	20120523	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : ALTHEA TECHNOLOGIES, INC.
EP2120869 A2	20120718	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20120613
EP2120869 A2	20151223	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20150701
EP2120869 A2	20160708	LSWD	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HK REF LEGAL EVENT CODE : WD REF DOCUMENT NUMBER : 1136977 COUNTRY OF REF DOCUMENT : HK
EP2486916 A1	20120815	LSPB	+	published / reissued	
EP2486916 A1	20120815	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20120120
EP2486916 A1	20160129	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20151228 YEAR OF FEE PAYMENT : 9
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EP2486916 A1	20160129	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20151228 YEAR OF FEE PAYMENT : 9
EP2486916 A1	20160129	LSFE	+PGFP	ANNUAL FEE PAID	COUNTRY OF REF DOCUMENT : GB

				TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	PAYMENT DATE : 20151229 YEAR OF FEE PAYMENT : 9
EP2486916 A1	20160229	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20151217 YEAR OF FEE PAYMENT : 9
EP2486916 A1	20160229	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20151226 YEAR OF FEE PAYMENT : 9
EP2486916 A1	20160229	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20151230 YEAR OF FEE PAYMENT : 9
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EP2486916 A8	20141112	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20141017
EP2486916 A8	20150211	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : AJINOMOTO ALTHEA, INC.
EP2486916 B1	20150401	LSGT	+	granted / extensions (spc, cpc, pte)	
EP2486916 B1	20150401	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP2486916 B1	20150415	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP2486916 B1	20150422	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP2486916 B1	20150513	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602007040917 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20150513
EP2486916 B1	20150515	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 718667 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20150515
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EP2486916 B1	20151030	LSLE	-PG25	LAPSED IN A	COUNTRY OF REF DOCUMENT : ES

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EP2486916 B1	20151030	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 : 20150401
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EP2486916 B1	20151130	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 : 20150801
EP2486916 B1	20151217	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 : 9
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EP2486916 B1	20160229	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION	COUNTRY OF REF DOCUMENT : RO NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20150401

				FROM NATIONAL OFFICE TO EPO]	
EP2486916 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 : 20150401
EP2486916 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 : 20150401
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EP2486916 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 FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20150401
EP2486916 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 NON-PAYMENT OF DUE FEES LAPSED DATE : 20151231
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EP2486916 B1	20160729	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 : 20151213
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EP2486916 B1	20161227	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
EP2486916 B1	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20161227 YEAR OF FEE PAYMENT : 10
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EP2486916 B1	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20161229 YEAR OF FEE PAYMENT : 10

				[ANNOUNCED FROM NATIONAL OFFICE TO EPO]	
EP2486916 B1	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20161227 YEAR OF FEE PAYMENT : 10
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EP2486916 B1	20170228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20161227 YEAR OF FEE PAYMENT : 10
EP2486916 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20161229 YEAR OF FEE PAYMENT : 10
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EP2486916 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 : 20150401
EP2486916 B1	20170831	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 : 20150401
EP2486916 B1	20171227	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 11
EP2486916 B1	20171229	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HK REF LEGAL EVENT CODE : GR REF DOCUMENT NUMBER : 1174558 COUNTRY OF REF DOCUMENT : HK
EP2486916 B1	20180131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20171226 YEAR OF FEE PAYMENT : 11

EP2486916 B1	20180131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20171227 YEAR OF FEE PAYMENT : 11
EP2486916 B1	20180131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20171227 YEAR OF FEE PAYMENT : 11
EP2486916 B1	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20171229 YEAR OF FEE PAYMENT : 11
EP2486916 B1	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20171227 YEAR OF FEE PAYMENT : 11
EP2486916 B1	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20171228 YEAR OF FEE PAYMENT : 11
EP2486916 B1	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20171227 YEAR OF FEE PAYMENT : 11
EP2486916 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20171229 YEAR OF FEE PAYMENT : 11
EP2486916 B1	20190131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20181227 YEAR OF FEE PAYMENT : 12
EP2486916 B1	20190131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20181227 YEAR OF FEE PAYMENT : 12
EP2486916 B1	20190131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20181227 YEAR OF FEE PAYMENT : 12
EP2486916 B1	20190228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20181226 YEAR OF FEE PAYMENT : 12
EP2486916 B1	20190228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20181227 YEAR OF FEE PAYMENT : 12
EP2486916 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20190103 YEAR OF FEE PAYMENT : 12
EP2486916 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20181226 YEAR OF FEE PAYMENT : 12
EP2486916 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 : 12
EP2486916 B1	20200131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20191227 YEAR OF FEE PAYMENT : 13

				FROM NATIONAL OFFICE TO EPO]	
EP2486916 B1	20200131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20191227 YEAR OF FEE PAYMENT : 13
EP2486916 B1	20200131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20191226 YEAR OF FEE PAYMENT : 13
EP2486916 B1	20200228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20191226 YEAR OF FEE PAYMENT : 13
EP2486916 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20191230 YEAR OF FEE PAYMENT : 13
EP2486916 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20191227 YEAR OF FEE PAYMENT : 13
EP2486916 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20191231 YEAR OF FEE PAYMENT : 13
EP2486916 B1	20200529	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20191231 YEAR OF FEE PAYMENT : 13
EP2486916 B1	20271213	PEXP		Calculated Patent Term Expiry	
HK1136977 A1	20100716	LSPB	+	published / reissued	
IN02307KN2009 A	20090710	LSPB	+	published / reissued	
JP2010513309 T2	20100430	LSPB	+	published / reissued	
JP2010513309 T2	20101127	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20101126
JP2010513309 T2	20101127	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20101126
JP2010513309 T2	20111115	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20111114
JP2010513309 T2	20120927	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20120926
JP2010513309 T2	20130226	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20130225
JP2010513309 T2	20131017	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20131016
JP2010513309 T2	20140213	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20140212
JP2010513309 T2	20141120	LSAS	A711	NOTIFICATION OF CHANGE IN APPLICANT	TEXT : JAPANESE INTERMEDIATE CODE: A711 EFFECTIVE DATE : 20141119
JP2010513309 T2	20141209	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A821 EFFECTIVE DATE : 20141119

JP2010513309 T2	20150210	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A821 EFFECTIVE DATE : 20150123
JP2010513309 T2	20150406	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20150403
JP2010513309 T2	20150619	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A821 EFFECTIVE DATE : 20150603
JP2015214573 A2	20151203	LSPB	+	published / reissued	
JP2015214573 A2	20160623	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20160623
JP2015214573 A2	20161124	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20161124
JP2015214573 A2	20170123	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2015214573 A2	20170206	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20170206
JP2015214573 A2	20170309	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20170306
JP2015214573 A2	20170310	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 6106722 COUNTRY OF REF DOCUMENT : JP
JP6106722 B2	20170405	LSGT	+	granted / extensions (spc, cpc, pte)	
JP6106722 B2	20170209	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP6106722 B2	20170307	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP6106722 B2	20170310	LSGT	+R150	特許証 (Patent certificate)	
JP6106722 B2	20200220	LSFE	R20	特許料納付書 (Patent fee payment form)	EFFECTIVE DATE : 20200219
JP6106722 B2	20200221	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP6106722 B2	20350803	PEXP		Calculated Patent Term Expiry	
US2010216705 AA	20100826	LSPB	+	published / reissued	
US2010216705 AA	20100916	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ALTHEA TECHNOLOGIES, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:RILEY, AS CHAPTER 7 TRUSTEE, LYNNE F.; REEL/FRAME:024998/0883 EFFECTIVE DATE : 20100421
US2010216705 AA	20111116	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2012088724 AA	20120412	LSPB	+	published / reissued	
US2012088724 AA	20150617	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ALTHEA TECHNOLOGIES INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:BANKRUPTCY ESTATE OF ALTUS PHARMACEUTICALS

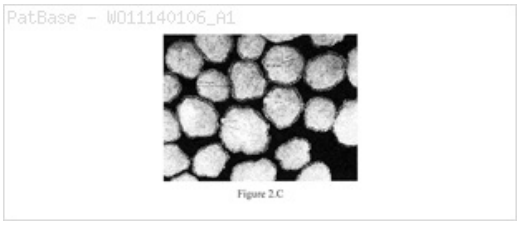
					INC.; REEL/FRAME:035942/0650 EFFECTIVE DATE : 20100421
US2012088724 AA	20150701	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AJINOMOTO ALTHEA INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:ALTHEA TECHNOLOGIES INC.; REEL/FRAME:036048/0841 EFFECTIVE DATE : 20130404
US2012088724 AA	20160401	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US8071544 BB	20111206	LSGT	+	granted / extensions (spc, cpc, pte)	
US8071544 BB	20100422	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ALTUS PHARMACEUTICALS INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BUSH, LAWRENCE; PECHENOV, SERGEY; BASU, SUJIT K.; AND OTHERS; SIGNING DATES FROM 20100401 TO 20100421; REEL/FRAME:024273/0292
US8071544 BB	20111116	LSGT	PAT1	Patented Case	
US8071544 BB	20150608	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8071544 BB	20150701	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AJINOMOTO ALTHEA INC., CALIFORNIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:ALTHEA TECHNOLOGIES INC.; REEL/FRAME:036048/0841 EFFECTIVE DATE : 20130404
US8071544 BB	20190606	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US8071544 BB	20271213	PEXP		Calculated Patent Term Expiry	
WO08076819 A2	20080626	LSPB	+	published / reissued	
WO08076819 A3	20090605	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2007333959 COUNTRY OF REF DOCUMENT : AU
WO08076819 A3	20090610	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2672284 COUNTRY OF REF DOCUMENT : CA
WO08076819 A3	20090612	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2007869230 COUNTRY OF REF DOCUMENT : EP
WO08076819 A3	20090616	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2009541592 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO08076819 A3	20090619	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE	REF COUNTRY CODE : DE
WO08076819 A3	20090622	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2307/KOLNP/2009 COUNTRY OF REF DOCUMENT : IN
WO08076819 A3	20090702	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2007333959 COUNTRY OF REF DOCUMENT : AU DATE OF REF DOCUMENT : 20071213 KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO08076819 A3	20100504	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 12519720 COUNTRY OF REF DOCUMENT : US

76) Family number: 49918034 (WO11140106A1)

Title: MICROPELLET COMPOSITIONS COMPRISING PANCREATIN CONTAINING DIGESTIVE ENZYME MIXTURES

Abstract: The present invention relates to a small particle size composition comprising pancreatin containing digestive enzymes for use in patients in need, including pediatric, geriatric, and adult patients, particularly those patients with dysphagia or wherein enteral administration using such composition would be suitable. In addition, the invention is directed to the composition as particles, such as micropellets or microgranules having a high potency, high useable yield and at least 10 percent - 90 percent of 400-800 micrometres. Furthermore, the composition optionally has an improved enteric coating and concomitant improved stability and enzyme activity compared to conventional prepared enterically coated pancreatic enzyme particles.

Classifications:
International (IPC 8-9): A61K A61K38/46 A61K38/54 A61K47/02 A61K47/10 A61K47/12 A61K47/14 A61K47/30 A61K47/32 A61K47/34 A61K47/38 A61K47/44 A61K9/16 A61K9/20 A61K9/22 A61K9/26 A61K9/48 A61P1/14 A61P3/10 (Advanced/Invention); A61J3/00 (Advanced/Non-invention)
CPC: A61K38/48 A61P1/14 A61K9/0056 A61K9/1641 A61K9/1652 A61K9/5042 A61K9/5047 A61K9/5078 A61K9/5089 A61K38/465 A61K38/47 A61P3/10
European: A61K38/46A A61K38/47 A61K38/48H A61K38/48K1 A61K38/48L A61K38/54 A61K9/00M18B A61K9/16H6D A61K9/16H6F A61K9/50H6F2 A61K9/50H6F2B A61K9/50K2 A61K9/50P



Family:

Publication number	Publication date	Application number	Application date
AU2011248293 AA	20111110	AU20110248293	20110503
AU2011248293 AA	20121115	AU20110248293	20110503
CA2798280 AA	20111110	CA20112798280	20110503
CN102946872 A	20130227	CN201180030393	20110503
CO6640298 A2	20130322	CO20120217880	20121130
EP2566466 A1	20130313	EP20110778183	20110503
IL222796 A0	20121231	IL20110222796	20110503
IN10092CN2012 A	20140509	IN2012CN10092	20121130
JP2013525488 T2	20130620	JP20130509183T	20110503
MX2012012794 A1	20130312	MX20120012794	20110503
RU2012148776 A	20140610	RU20120148776	20110503
WO11140106 A1	20111110	WO2011US35023	20110503

Priority:
US20100330768P 20100503 WO2011US35023 20110503

Probable Assignee: EURAND PHARMACEUTICALS LTD

Assignee(s): (std): EURAND PHARMACEUTICALS LTD ; FABIANI FLAVIO ; KRAMER CRAIG ; LATINO MASSIMO ; MAPELLI LUIGI ; ORTENZI GIOVANNI ; VENKATESH GOPI M ; APTALIS PHARMA LTD

Assignee(s): EURAND PHARMACEUTICALS LIMITED ; APTALIS PHARMA LIMITED

Inventor(s): (std): FABIANI FLAVIO ; KRAMER CRAIG ; LATINO MASSIMO ; MAPELLI LUIGI ; ORTENZI GIOVANNI ; VENKATESH GOPI M

Inventor(s): MASSIMO LATINO ; LUIGI MAPELLI ; GOPI M VENKATESH ; GIOVANNI ORTENZI ; FLAVIO FABIANI ; CRAIG KRAMER

Agent(s): SHELSTON IP; SHELSTON IP PTY LTD; BORDEN LADNER GERVAIS LLP; MAURICIO JARAMILLO CAMPUZANO; HART DEBORAH MARY; KITA AOYAMA INT PATENT BUREAU; TUSCAN MICHAEL S 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)

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Patent	Date recorded	Event group	Code	Event	Details
AU2011248293 AA	20111110	LSPB	+	published / reissued	
AU2011248293 AA	20121115	LSPB	+	published / reissued	
AU2011248293 AA	20151126	LSLE	-MK4	APPLICATION LAPSED SECTION 142(2)(D) - NO CONTINUATION FEE PAID FOR THE APPLICATION	
AU2011248293 AA	20151126	LSLE	-MK4	APPLICATION LAPSED SECTION 142(2)(D) - NO CONTINUATION FEE PAID FOR THE APPLICATION	
CA2798280 AA	20111110	LSPB	+	published / reissued	
CA2798280 AA	20160615	LSLE	-FZDE	DEAD	EFFECTIVE DATE : 20160504
CN102946872 A	20130227	LSPB	+	published / reissued	
CN102946872 A	20130227	LSPB	+C06	PUBLICATION	
CN102946872 A	20150114	LSDW	-C02	DEEMED WITHDRAWAL OF PATENT APPLICATION AFTER PUBLICATION (PATENT LAW 2001)	

CO6640298 A2	20130322	LSPB	+	published / reissued	
CO6640298 A2	20140805	LSRV	-FC	APPLICATION REFUSED	
EP2566466 A1	20130313	LSPB	+	published / reissued	
EP2566466 A1	20130313	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20121203
EP2566466 A1	20150715	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20141202
IN10092CN2012 A	20140509	LSPB	+	published / reissued	
JP2013525488 T2	20130620	LSPB	+	published / reissued	
JP2013525488 T2	20140521	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20140520
JP2013525488 T2	20141015	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20141014
MX2012012794 A1	20130312	LSPB	+	published / reissued	
MX2012012794 A1	20191129	LSWD	-FA	ABANDONMENT OR WITHDRAWAL	
RU2012148776 A	20140610	LSPB	+	published / reissued	
WO11140106 A1	20111110	LSPB	+	published / reissued	
WO11140106 A1	20110503	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 201180030393.5 COUNTRY OF REF DOCUMENT : CN
WO11140106 A1	20121024	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2011778183 COUNTRY OF REF DOCUMENT : EP
WO11140106 A1	20121029	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2013509183 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO11140106 A1	20121101	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 222796 COUNTRY OF REF DOCUMENT : IL
WO11140106 A1	20121101	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : MX/A/2012/012794 COUNTRY OF REF DOCUMENT : MX
WO11140106 A1	20121102	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2798280 COUNTRY OF REF DOCUMENT : CA
WO11140106 A1	20121105	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE	REF COUNTRY CODE : DE
WO11140106 A1	20121115	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2011248293 COUNTRY OF REF DOCUMENT : AU DATE OF REF DOCUMENT : 20110503 KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO11140106 A1	20121130	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 12217880 COUNTRY OF REF DOCUMENT : CO

WO11140106 A1	20121130	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 10092/CHENP/2012 COUNTRY OF REF DOCUMENT : IN
WO11140106 A1	20121203	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2012148776 COUNTRY OF REF DOCUMENT : RU KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO11140106 A1	20170801	LSNP	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : BR REF LEGAL EVENT CODE : B01E REF DOCUMENT NUMBER : 112012027885 COUNTRY OF REF DOCUMENT : BR
WO11140106 A1	20171024	LSNE	-ENPW	STARTED TO ENTER NATIONAL PHASE AND WAS WITHDRAWN OR FAILED FOR OTHER REASONS	REF DOCUMENT NUMBER : 112012027885 COUNTRY OF REF DOCUMENT : BR

77) Family number: 2945035 (US4992278A)

Title: THERAPEUTIC SYSTEM FOR SPARINGLY SOLUBLE ACTIVE INGREDIENTS

Abstract: The present invention relates to a therapeutic system with systemic action for peroral administration, having a compartment for active ingredients, which system contains in that compartment sparingly soluble active ingredients, swelling agents and, optionally, water-soluble substances for producing an osmotic pressure.

Classifications:
International (IPC 8-9): A61K9/00 A61K9/22 A61K9/30 A61M31/00 (Advanced/Invention);
A61K9/22 (Advanced/Non-invention);
A61K9/00 A61K9/22 A61M31/00 (Core/Invention)
International (IPC 1-7): A61J A61K31/40 A61K31/44 A61K31/52 A61K31/55 A61K31/60 A61K47/00 A61K9/00 A61K9/16 A61K9/22 A61K9/24 A61K9/28 A61K9/30 A61K9/36 A61K9/44 A61K9/48 A61M31/00
CPC: A61K9/0004
European: A61K9/00L4
US: 424/464 424/468 424/469 424/473



Family:

Publication number	Publication date	Application number	Application date
AT72111 E	19920215	AT19880810005T	19880108
AU198810237 A1	19880721	AU19880010237	19880113
AU604825 B2	19910103	AU19880010237	19880113
CA1328403 A1	19940412	CA19880556272	19880112
DE3868077 D1	19920312	DE19883868077	19880108
DE3868077 D1	19920312	DE19883868077T	19880108
DK13688 A	19880715	DK19880000136	19880113
DK13688 A0	19880113	DK19880000136	19880113
EP0277092 A1	19880803	EP19880810005	19880108
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ES2039287 T3	19930916	ES19880810005T	19880108
FI880100 A	19880715	FI19880000100	19880111
FI880100 A0	19880111	FI19880000100	19880111
FI92648 B	19940915	FI19880000100	19880111
FI92648 C	19941227	FI19880000100	19880111
GR3003734 T3	19930316	GR19920402099T	19920206
IE61821 B	19941130	IE19880000085	19880113
IE880085 L	19880714	IE19880000085	19880113
IL85060 A0	19880630	IL19880085060	19880111
IL85060 A1	19920115	IL19880085060	19880111
JP2656933 B2	19970924	JP19880003911	19880113
JP63174922 A2	19880719	JP19880003911	19880113
KR19880008800 A	19880913	KR19880000168	19880113
KR960005139 B1	19960422	KR19880000168	19880113
MX10086 A	19931201	MX19880010086	19880113
NO175564 B	19940725	NO19880000124	19880113
NO175564 C	19941102	NO19880000124	19880113
NO880124 A	19880715	NO19880000124	19880113
NO880124 A0	19880113	NO19880000124	19880113
NO880124 L	19880715	NO19880000124	19880113
NZ223164 A	19900129	NZ19880223164	19880112
PH25901 A	19911219	PH19880036345	19880111
PT86536 A	19890130	PT19880086536	19880112
PT86536 B	19940228	PT19880086536	19880112
US4992278 A	19910212	US19890390435	19890803
ZA8800211 A	19891025	ZA19880000211	19880113

Priority:

CH19870000116 19870114 US19880140467 19880104 EP19880810005 19880108
CA19880556272 19880112

Probable Assignee: ADD ADVANCED DRUG DELIVERY TECHNOLOGIES AG

Assignee(s): (std): CIBA GEIGY ; CIBA GEIGY AG ; CIBA GEIGY CORP ; THOMAS MURRAY ; KHANNA SATISH C

Assignee(s):	KHANNA SATISH CHANDRA ; NOVARTIS AG ; CIBA GEIGY BASEL CH AG ; ADD ADVANCED DRUG DELIVERY TECHNOLOGIES AG ; CHIBA GAIGII AG
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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
AT72111 E	19920215	LSGT	+	granted / extensions (spc, cpc, pte)	
AT72111 E	20001015	LSLE	-REN	CEASED DUE TO NON-PAYMENT OF THE ANNUAL FEE	
AT72111 E	20080108	PEXP		Calculated Patent Term Expiry	
AU198810237 A1	19880721	LSPB	+	published / reissued	
AU604825 B2	19910103	LSGT	+	granted / extensions (spc, cpc, pte)	
AU604825 B2	20000817	LSLE	-MK14	PATENT CEASED SECTION 143(A) (ANNUAL FEES NOT PAID) OR EXPIRED	
AU604825 B2	20080113	PEXP		Calculated Patent Term Expiry	
CA1328403 A1	19940412	LSGT	+	granted / extensions (spc, cpc, pte)	
CA1328403 A1	20000412	LSLE	-MKLA	LAPSED	
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DE3868077 D1	19990722	LSAS	8327	CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER	PARTYTYPE : OWNER OWNER : ADD ADVANCED DRUG DELIVERY

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DK13688 A	19880715	LSPB	+	published / reissued	
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EP0277092 A1	19880803	LSPB	+	published / reissued	
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EP0277092 A1	19900829	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 19900718
EP0277092 B1	19920129	LSGT	+	granted / extensions (spc, cpc, pte)	
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EP0277092 B1	19940307	LSFE	+EPTA	LU: LAST PAID ANNUAL FEE	REF COUNTRY CODE : EP
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EP0277092 B1	19950131	LSFE	ITTA	IT: LAST PAID ANNUAL FEE	REF COUNTRY CODE : EP
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EP0277092 B1	19970602	LSAS	NLS	NL: ASSIGNMENTS OF EP-PATENTS	PARTYTYPE : OWNER REF COUNTRY CODE : EP OWNER : NOVARTIS AG
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EP0277092 B1	19971114	LSAS	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : TP
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EP0277092 B1	20000109	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 : 20000109
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EP0277092 B1	20000131	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 : 20000131
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EP0277092 B1	20020131	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 : 20020131
EP0277092 B1	20020801	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 : 20020801
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EP0277092 B1	20021001	LSLE	-NLV4	NL: LAPSED OR ANULLED DUE TO NON-PAYMENT OF THE ANNUAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20020801
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ES2039287 T3	19930916	LSGT	+	granted / extensions (spc, cpc, pte)	
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ES2039287 T3	20080108	PEXP		Calculated Patent Term Expiry	
FI880100 A	19880715	LSPB	+	published / reissued	

FI880100 A	19940816	LSPB	BB	PUBLICATION OF EXAMINED APPLICATION	
FI92648 B	19940915	LSPB	+	published / reissued	
FI92648 B	20080111	PEXP		Calculated Patent Term Expiry	
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FI92648 C	19970826	LSAS	PC	TRANSFER OF ASSIGNMENT OF PATENT	PARTYTYPE : OWNER OWNER : NOVARTIS AG
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IE61821 B	19941130	LSGT	+	granted / extensions (spc, cpc, pte)	
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IE61821 B	20080113	PEXP		Calculated Patent Term Expiry	
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JP2656933 B2	20080113	PEXP		Calculated Patent Term Expiry	
JP63174922 A2	19880719	LSPB	+	published / reissued	
KR19880008800 A	19880913	LSPB	+	published / reissued	
KR960005139 B1	19960422	LSGT	+	granted / extensions (spc, cpc, pte)	
KR960005139 B1	19930108	LSES	A201	REQUEST FOR EXAMINATION	
KR960005139 B1	19960326	LSPB	G160	DECISION TO PUBLISH PATENT APPLICATION	
KR960005139 B1	19960629	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
KR960005139 B1	19960821	LSGT	+GRNT	WRITTEN DECISION TO GRANT	
KR960005139 B1	19990423	LSLE	-LAPS	LAPSE DUE TO UNPAID ANNUAL FEE	
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MX10086 A	20071201	PEXP		Calculated Patent Term Expiry	
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NO175564 C	19941102	LSGT	+	granted / extensions (spc, cpc, pte)	
NO175564 C	20080113	PEXP		Calculated Patent Term Expiry	
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PH25901 A	19911219	LSGT	+	granted / extensions (spc, cpc, pte)	
PH25901 A	20081219	PEXP		Calculated Patent Term Expiry	
PT86536 A	19890130	LSPB	+	published / reissued	
PT86536 B	19940228	LSGT	+	granted / extensions (spc, cpc, pte)	
PT86536 B	19940228	LSGT	+FG3A	PATENT GRANTED, DATE OF GRANTING	EFFECTIVE DATE : 19930802

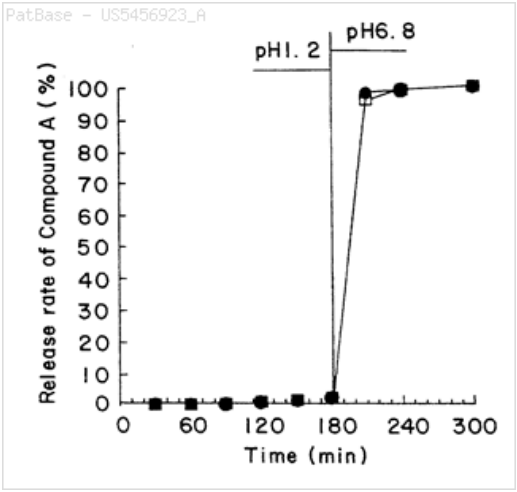
PT86536 B	19970930	LSAS	PC3A	TRANSFER OR ASSIGNMENT	TEXT : 970603 NOVARTIS AG CH
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PT86536 B	20090228	PEXP		Calculated Patent Term Expiry	
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US4992278 A	19940729	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US4992278 A	19980803	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US4992278 A	19990805	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ADD ADVANCED DRUG DELIVERY TECHNOLOGIES AG, SWITZE OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:NOVARTIS CORPORATION; REEL/FRAME:010133/0798 EFFECTIVE DATE : 19990716
US4992278 A	20030212	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US4992278 A	20030312	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US4992278 A	20030312	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US4992278 A	20030408	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20030212
US4992278 A	20090803	PEXP		Calculated Patent Term Expiry	
ZA8800211 A	19891025	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA8800211 A	20080112	PEXP		Calculated Patent Term Expiry	

78) Family number: 11159036 (US5456923A)

Title: METHOD OF MANUFACTURING SOLID DISPERSION

Abstract: PCT No. PCT/JP92/00470 Sec. 371 Date Nov. 15, 1993 Sec. 102(e) Date Nov. 15, 1993 PCT Filed Dec. 23, 1993 PCT Pub. No. WO92/18106 PCT Pub. Date Oct. 29, 1992.The object of this invention is to provide a process for producing a solid dispersion, which has overcome the disadvantages of the conventional production technology for solid dispersions. The invention comprises employing a twin-screw extruder in the production of a solid dispersion. In accordance with the invention, a solid dispersion can be expediently produced without heating a drug and a polymer to or beyond their melting points and without using an organic solvent for dissolving both components and the resulting solid dispersion has excellent performance characteristics.

Classifications:
International (IPC 8-9): A61J3/06 A61K9/00 A61K9/14 A61K9/16 A61K9/22 C07B61/00 F02N11/08 H01M10/44 H02J7/14 (Advanced/Invention);
A61K9/00 A61K9/22 F02N11/10 H01M6/50 (Advanced/Non-invention)
International (IPC 1-7): A61J3/00 A61J3/06 A61K47/30 A61K9/00 A61K9/10 A61K9/14 A61K9/16 A61K9/22 B01D9/00 C07B61/00 C07D209/32 C07D223/24
CPC: A61K9/14 H02J7/1423 H01M6/5016 H01M10/441 A61K9/146 A61K9/1694 Y10S514/937
European: A61K9/14 A61K9/14H6 A61K9/16P4
US: 424/452 424/455 424/465 424/489 514/772.2 514/772.3 514/774 514/778 514/779 514/781 514/937 540/589 548/500 564/213 564/45



Family:

Publication number	Publication date	Application number	Application date
AT159426 E	19971115	AT19920907654T	19920414
AT189770 E	20000315	AT19930922625T	19931013
AU199215372 A1	19921117	AU19920015372	19920414
AU199351607 A1	19940509	AU19930051607	19931013
CA2108575 AA	19921017	CA19922108575	19920414
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EP0580860 B1	19971022	EP19920907654	19920414
EP0580860 B2	20041215	EP19920907654	19920414
EP0665009 A1	19950802	EP19930922625	19931013
EP0665009 A4	19960228	EP19930922625	19931013
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JP2527107 B2	19960821	JP19920507772T	19920414
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US5456923 A	19951010	US19930129133	19931115
US5811547 A	19980922	US19950416815	19950609
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Priority:

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Probable Assignee: NIPPON SHINYAKU CO LTD

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Inventor(s): (std): NAKAMICHI KOUICHI ; IZUMI SHOGO ; HIROYUKI YASUURA ; YASUURA HIROYUKI HIRAI CH ; NAKAMICHI KOUICHI KITAYAMADA ; IZUMI SHOUGO NISHITSUTSUJIGA ; IZUMI SHOUGO ; YASUURA HIROYUKI ; OKA MASAAKI

Inventor(s): IZUMI SHOUGO 3 94 NISHITSUTSUJIGAOKA MIYAMADAI... ; KOUICHI NAKAMICHI ; YASUURA HIROYUKI 10 20 312 HIRAI 5 CHOME SHIGA 525 ; NAKAMICHI KOUICHI 13 16 KITAYAMADAI 1 CHOME SHIGA ; MASAAKI OKA ; IZUMI SHOUGO 3 94 NISHITSUTSUJIGAOKA MIYAMADAI KYO ; NAKAMICHI KOUICHI 13 16 KITAYAMADAI 1 CHOME ; NAKAMICHI KOUICHI 13 16 KITAYAMADAI 1 CHOME SHIGA 520 32 JP ; SHOUGO IZUMI ; YASUURA HIROYUKI 10 20 312 HIRAI 5 CHOME ; YASUURA HIROYUKI 10 20 312 HIRAI 5 CHOME SHIGA 525 JP ; YASUURA HIROYUKI 10 20 312 HIRAI 5 CHOME SHIGA... ; IZUMI SHOUGO 3 94 NISHITSUTSUJIGAOKA MIYAMADAI KYOTO 621 JP

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

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT159426 E	19971115	LSGT	+	granted / extensions (spc, cpc, pte)	
AT159426 E	19980715	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	
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AT189770 E	20000315	LSGT	+	granted / extensions (spc, cpc, pte)	
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AU199351607 A1	19940509	LSPB	+	published / reissued	
CA2108575 AA	19921017	LSPB	+	published / reissued	
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					SHINYAKU COMPANY, LIMITED#14, KISSHOIN NISHINOSHO MONGUCHICHO#MINAMI-KU KYOTO-SHI KYOTO 601 (JP)
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EP0665009 B1	20050701	LSLE	-NLV4	NL: LAPSED OR ANULLED DUE TO NON-PAYMENT OF THE ANNUAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20050501
EP0665009 B1	20051013	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 : 20051013

				OFFICE TO EPO]	
EP0665009 B1	20051013	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 : 20051013
EP0665009 B1	20060116	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20041014
EP0665009 B1	20060503	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 : 20060503
EP0665009 B1	20060628	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20051013
EP0665009 B1	20060630	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 : 20060630
EP0665009 B1	20061020	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20060630
EP0665009 B1	20071231	LSLE	-BERE	BE: LAPSED	PARTYTYPE : OWNER REF COUNTRY CODE : EP OWNER : *NIPPON SHINYAKU CY LTD EFFECTIVE DATE : 20041031
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ES2111065 T3	19980301	LSGT	+	granted / extensions (spc, cpc, pte)	
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ES2111065 T3	20120414	PEXP		Calculated Patent Term Expiry	
ES2111065 T5	20050616	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2111065 T5	20120414	PEXP		Calculated Patent Term Expiry	
ES2145063 T3	20000701	LSGT	+	granted / extensions (spc, cpc, pte)	
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GR3025864 T3	19980430	LSGT	+	granted / extensions (spc, cpc, pte)	
GR3025864 T3	20180108	PEXP		Calculated Patent Term Expiry	
JP2527107 B1	19960821	LSGT	+	granted / extensions (spc, cpc, pte)	
JP2527107 B1	20120414	PEXP		Calculated Patent Term Expiry	
JP2527107 B2	19960821	LSGT	+	granted / extensions (spc, cpc, pte)	
JP2527107 B2	20040525	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP2527107 B2	20050412	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250

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JP2616251 B2	20131013	PEXP		Calculated Patent Term Expiry	
JP2616251 B2	20131013	PEXP		Calculated Patent Term Expiry	

KR100149525 B1	19981001	LSGT	+	granted / extensions (spc, cpc, pte)	
KR100149525 B1	20140516	PEXP		Calculated Patent Term Expiry	
KR100182801 B1	19990501	LSGT	+	granted / extensions (spc, cpc, pte)	
KR100182801 B1	19990501	LSGT	+	granted / extensions (spc, cpc, pte)	
KR100182801 B1	19990501	LSGT	+	granted / extensions (spc, cpc, pte)	
KR100182801 B1	19960819	LSES	A201	REQUEST FOR EXAMINATION	
KR100182801 B1	19960819	LSES	A201	REQUEST FOR EXAMINATION	
KR100182801 B1	19960819	LSES	A201	REQUEST FOR EXAMINATION	
KR100182801 B1	19980821	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
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KR100182801 B1	19981030	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
KR100182801 B1	19981030	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
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KR100182801 B1	19981214	LSGT	+GRNT	WRITTEN DECISION TO GRANT	
KR100182801 B1	19981214	LSGT	+GRNT	WRITTEN DECISION TO GRANT	
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KR100182801 B1	20120415	LSLE	-EXPY	EXPIRATION OF TERM	
KR100182801 B1	20120415	LSLE	-EXPY	EXPIRATION OF TERM	
KR100182801 B1	20120415	LSLE	-EXPY	EXPIRATION OF TERM	
KR100182801 B1	20140501	PEXP		Calculated Patent Term Expiry	
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KR100291361 B1	20010917	LSGT	+	granted / extensions (spc, cpc, pte)	
KR100291361 B1	19980401	LSES	A201	REQUEST FOR EXAMINATION	
KR100291361 B1	20000428	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR100291361 B1	20010226	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF	

				PATENT RIGHT	
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KR100291361 B1	20040313	LSLE	-LAPS	LAPSE DUE TO UNPAID ANNUAL FEE	
KR100291361 B1	20160917	PEXP		Calculated Patent Term Expiry	
KR19947000056 A	19940221	LSPB	+	published / reissued	
KR19950702677 A	19950729	LSPB	+	published / reissued	
KR19950703326 A	19950920	LSPB	+	published / reissued	
KR19950703326 A	19950920	LSPB	+	published / reissued	
KR950703326 A	19950920	LSPB	+	published / reissued	
KR957002677 A	19950729	LSPB	+	published / reissued	
US5456923 A	19951010	LSGT	+	granted / extensions (spc, cpc, pte)	
US5456923 A	19950414	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : NIPPON SHINYAKU COMPANY, LIMITED, JAPAN OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:NAKAMICHI, KOUICHI; IZUMI, SHOGO; YASUURA, HIROYUKI; REEL/FRAME:007455/0583 EFFECTIVE DATE : 19931021
US5456923 A	19950929	LSGT	PAT1	Patented Case	
US5456923 A	19950929	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5456923 A	19990316	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5456923 A	20030317	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5456923 A	20070316	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5456923 A	20131115	PEXP		Calculated Patent Term Expiry	
US5811547 A	19980922	LSGT	+	granted / extensions (spc, cpc, pte)	
US5811547 A	19950609	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : NIPPON SHINYAKU CO., LTD., JAPAN OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:NAKAMICHI, KOUICHI; IZUMI, SHOUGO; OKA, MASAAKI; REEL/FRAME:007503/0202 EFFECTIVE DATE : 19950417
US5811547 A	20020301	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5811547 A	20060922	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5811547 A	20061026	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US5811547 A	20061026	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US5811547 A	20061121	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20060922
US5811547 A	20150609	PEXP		Calculated Patent Term Expiry	
WO9218106 A1	19921029	LSPB	+	published / reissued	

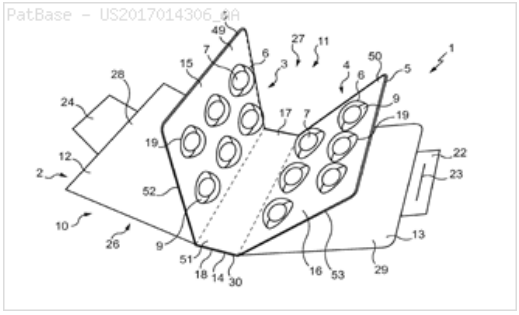
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WO9218106 A1	19931015	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1019930703143 COUNTRY OF REF DOCUMENT : KR
WO9218106 A1	19931026	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1992907654 COUNTRY OF REF DOCUMENT : EP
WO9218106 A1	19931115	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 08129133 COUNTRY OF REF DOCUMENT : US
WO9218106 A1	19940202	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1992907654 COUNTRY OF REF DOCUMENT : EP
WO9218106 A1	19971022	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1992907654 COUNTRY OF REF DOCUMENT : EP
WO9408561 A1	19940428	LSPB	+	published / reissued	
WO9408561 A1	19950324	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1993922625 COUNTRY OF REF DOCUMENT : EP
WO9408561 A1	19950418	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2147279 COUNTRY OF REF DOCUMENT : CA
WO9408561 A1	19950609	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 08416815 COUNTRY OF REF DOCUMENT : US
WO9408561 A1	19950802	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1993922625 COUNTRY OF REF DOCUMENT : EP
WO9408561 A1	20000216	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1993922625 COUNTRY OF REF DOCUMENT : EP

79) Family number: 58241036 (US2017014306A)

Title: PACKAGING ENCLOSING LOZENGE PRODUCTS AND BLANK FOR OBTAINING SAID PACKAGING

Abstract: The packaging comprises a cover (10) and a diptych (11), to be arranged in the same way as a book. The packaging comprises a case (2) comprising a cover part (26) and a diptych part (27), said cover part (26) forming said cover (10), a first blister plate (3) and a second blister plate (4) and the diptych part (27) forming said diptych (11); an intermediate panel (30) of said cover part (26) forming a back (14) of said cover (10) and an intermediate panel (51) of said diptych part (27) forming a back (17) of said diptych (11), with a side (43) of said intermediate panel (30) of said cover part (26) that is linked by a bridge (18) to a side (65) of said intermediate panel (51) of said diptych part (27). The blank is arranged to form the case (2).

Classifications:
International (IPC 8-9): A61J1/03 B65D5/42 B65D75/30 B65D75/32 B65D75/34 B65D75/36 B65D75/38 B65D75/58 B65D83/04 (Advanced/Invention)
CPC: B65D75/327 A61J1/035 B65D75/367 B65D5/4266 B65D75/58 B65D83/0463
US: 1/1 206/535



Family:

Publication number	Publication date	Application number	Application date
DE602014013544 D1	20171005	DE201460013544T	20140701
EP3016880 A1	20160511	EP20140745198	20140701
EP3016880 B1	20170823	EP20140745198	20140701
FR3008077 A1	20150109	FR20130056580	20130704
JP2016528955 T2	20160923	JP20160522715T	20140701
JP6435326 B2	20181205	JP20160522715T	20140701
US2017014306 AA	20170119	US20140902534	20140701
WO15001252 A1	20150108	WO2014FR51691	20140701

Priority:
FR20130056580 20130704 EP20140745198 20140701 WO2014FR51691 20140701

Probable Assignee: SANOFI
Assignee(s): (std): SANOFI SA
Assignee(s): SANOFI
Inventor(s): (std): ROUSSELET GUILHEM
Inventor(s): GUILHEM ROUSSELET
Agent(s): SANTARELLI
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)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
EP3016880 A1	20160511	LSPB	+	published / reissued	
EP3016880 A1	20160511	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20160129
EP3016880 A1	20170322	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20170224
EP3016880 B1	20170823	LSGT	+	granted / extensions (spc, cpc, pte)	
EP3016880 B1	20170823	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D TEXT : NOT ENGLISH
EP3016880 B1	20170831	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP3016880 B1	20170915	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 921066 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) :

					EFFECTIVE DATE : 20170915
EP3016880 B1	20170920	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D TEXT : LANGUAGE OF EP DOCUMENT: FRENCH
EP3016880 B1	20171005	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602014013544 COUNTRY OF REF DOCUMENT : DE
EP3016880 B1	20180110	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : LT REF LEGAL EVENT CODE : MG4D
EP3016880 B1	20180115	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MK05 REF DOCUMENT NUMBER : 921066 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20170823
EP3016880 B1	20180131	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 : 20171123
EP3016880 B1	20180131	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 : 20170823
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EP3016880 B1	20180131	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 : 20170823
EP3016880 B1	20180131	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 : 20170823
EP3016880 B1	20180131	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 : 20170823
EP3016880 B1	20180131	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 : 20170823

EP3016880 B1	20180228	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 : 20171124
EP3016880 B1	20180228	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 : 20171123
EP3016880 B1	20180228	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 : 20170823
EP3016880 B1	20180228	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 : 20170823
EP3016880 B1	20180228	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 : 20170823
EP3016880 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 : 20171223
EP3016880 B1	20180228	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 : 20170823
EP3016880 B1	20180430	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 : 20170823
EP3016880 B1	20180430	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 : 20170823
EP3016880 B1	20180430	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 : 20170823

EP3016880 B1	20180524	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 602014013544 COUNTRY OF REF DOCUMENT : DE
EP3016880 B1	20180531	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 : 20170823
EP3016880 B1	20180531	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 : 20170823
EP3016880 B1	20180531	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 : 20170823
EP3016880 B1	20180531	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 : 20170823
EP3016880 B1	20180612	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 5
EP3016880 B1	20180801	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20180524
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EP3016880 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20180612 YEAR OF FEE PAYMENT : 5
EP3016880 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 : 20170823
EP3016880 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180619 YEAR OF FEE PAYMENT : 5
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EP3016880 B1	20190228	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL

EP3016880 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 : 20170823
EP3016880 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 : 20180701
EP3016880 B1	20190417	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
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EP3016880 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 : 20180731
EP3016880 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 : 20180701
EP3016880 B1	20190531	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 : 20180731
EP3016880 B1	20190830	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20190619 YEAR OF FEE PAYMENT : 6
EP3016880 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20190618 YEAR OF FEE PAYMENT : 6
EP3016880 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20190626 YEAR OF FEE PAYMENT : 6
EP3016880 B1	20200331	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 : 20170823
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EP3016880 B1	20200630	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 NON-PAYMENT OF DUE FEES LAPSED DATE : 20170823
EP3016880 B1	20200630	LSLE	-PG25	LAPSED IN A CONTRACTING	COUNTRY OF REF DOCUMENT : CY

				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 : 20170823
EP3016880 B1	20200630	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 : 20140701
EP3016880 B1	20340701	PEXP		Calculated Patent Term Expiry	
FR3008077 A1	20150109	LSPB	+	published / reissued	
JP2016528955 T2	20160923	LSPB	+	published / reissued	
JP2016528955 T2	20170614	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20170614
JP2016528955 T2	20180508	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20180508
JP2016528955 T2	20180724	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20180724
JP2016528955 T2	20181009	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2016528955 T2	20181016	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20181016
JP2016528955 T2	20181115	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20181112
JP2016528955 T2	20181116	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 6435326 COUNTRY OF REF DOCUMENT : JP
JP6435326 B2	20181205	LSGT	+	granted / extensions (spc, cpc, pte)	
JP6435326 B2	20181018	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP6435326 B2	20181113	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP6435326 B2	20181116	LSGT	+R150	特許証 (Patent certificate)	
JP6435326 B2	20340701	PEXP		Calculated Patent Term Expiry	
US2017014306 AA	20170119	LSPB	+	published / reissued	
US2017014306 AA	20160914	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SANOFI, FRANCE OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ROUSSELET, GUILHEM; REEL/FRAME:039738/0016 EFFECTIVE DATE : 20140721
US2017014306 AA	20170614	LSES	NFA1	Non Final Action Mailed	
US2017014306 AA	20180206	LSES	NFA1	Non Final Action Mailed	
US2017014306 AA	20190521	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
WO15001252 A1	20150108	LSPB	+	published /	

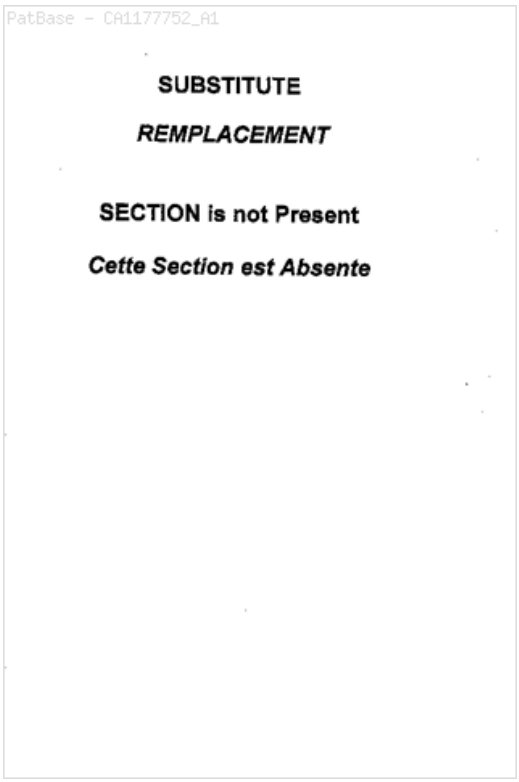
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WO15001252 A1	20151228	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2016522715 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO15001252 A1	20151231	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 14902534 COUNTRY OF REF DOCUMENT : US
WO15001252 A1	20160104	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE	REF COUNTRY CODE : DE
WO15001252 A1	20160129	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2014745198 COUNTRY OF REF DOCUMENT : EP

80) Family number: 1958036 (US4362711A)

Title: BLOOD CHOLESTEROL LEVEL REDUCING AGENT AND METHOD

Abstract: An agent for reducing the cholesterol level in the blood of a warm blooded animal comprises a plurality of vesicles prepared from a non-toxic, non-biodegradable, semi-permeable material, and a quantity of a bile acid sequestrant provided in liquid form. The liquid sequestrant is disposed within the vesicles in an amount by volume of up to ninety percent of the available internal volume of the vesicle. The vesicles selectively permit the ingress of bile acids, and may preferably possess an electrical charge on their outer surface to assist the passage of the bile acids therethrough. The present invention includes a method for reducing the cholesterol level in the blood, comprising administering the reducing agent. Oral administration is preferred, and, in one embodiment, the reducing agent comprising a plurality of the vesicles may be contained within a capsule or the like.

Classifications:
International (IPC 8-9): A61J3/07 A61K31/74 A61K31/785 A61K33/26 A61K9/00 A61K9/48 A61K9/50 A61K9/58 B01D15/00 B01J13/02 B01J45/00 (Advanced/Invention);
A61J3/07 A61K31/74 A61K9/00 A61K9/48 A61K9/50 A61K9/52 B01D15/00 B01J13/02 B01J45/00 (Core/Invention)
International (IPC 1-7): A01N25/28 A61J3/07 A61K31/74 A61K33/26 A61K9/48 A61K9/50 A61K9/58 B01D15/00 B01J13/02 B01J45/00
CPC: Y10S424/06 A61K9/0092 A61K9/5026 A61K31/785
European: A61K31/785 A61K9/00K4 A61K9/00Z4 A61K9/50H6B
US: 424/33 424/451 424/482 424/497 424/DIG.6



Family:

Publication number	Publication date	Application number	Application date
AT18510 E	19860315	AT19810902120T	19810708
AU198173764 A1	19820216	AU19810073764	19810708
AU538757 B2	19840823	AU19810073764	19810708
BE889583 A	19820111	BE19810205374	19810710
CA1177752 A1	19841113	CA19810381508	19810710
DE3174049 D1	19860417	DE19813174049	19810708
DE3174049 D1	19860417	DE19813174049T	19810708
EP0055767 A1	19820714	EP19810902120	19810708
EP0055767 A4	19830516	EP19810902120	19810708
EP0055767 B1	19860312	EP19810902120	19810708
US4362711 A	19821207	US19800167706	19800711
WO8200257 A1	19820204	WO1981US00922	19810708
ZA8104712 A	19820728	ZA19810004712	19810710

Priority:

US19800167706 19800711 EP19810902120 19810708 WO1981US00922 19810708
CA19810381508 19810710

Probable Assignee: EVREKA INC
Assignee(s): (std): CERAMI A ; EVREKA INC ; CERAMI ANTHONY
Assignee(s): ANTHONY CERAMI
Inventor(s): (std): CERAMI ANTHONY ; CERAMI A
Inventor(s): A CERAMI
Agent(s): SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD; BERESKIN AND PARR
Designated states: AT AU CH DE FR GB JP LI LU NL SE

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
AT18510 E	19860315	LSGT	+	granted / extensions (spc, cpc, pte)	
AT18510 E	19860915	LSLE	-RER	CEASED AS TO PARAGRAPH	

				5 LIT. 3 LAW INTRODUCING PATENT TREATIES	
AT18510 E	20010708	PEXP		Calculated Patent Term Expiry	
AU198173764 A1	19820216	LSPB	+	published / reissued	
AU538757 B2	19840823	LSGT	+	granted / extensions (spc, cpc, pte)	
AU538757 B2	20010708	PEXP		Calculated Patent Term Expiry	
BE889583 A	19820111	LSPB	+	published / reissued	
BE889583 A	19950131	LSLE	-RE	PATENT LAPSED	PARTYTYPE : OWNER OWNER : EVREKA INC. EFFECTIVE DATE : 19940731
DE3174049 D1	19870409	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
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DE3174049 D1	19870409	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE3174049 D1	19870409	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE3174049 D1	19950713	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
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DE3174049 D1	19950713	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
DE3174049 D1	19950713	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
EP0055767 A1	19820714	LSPB	+	published / reissued	
EP0055767 A1	19821006	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19820727
EP0055767 B1	19860312	LSGT	+	granted / extensions (spc, cpc, pte)	
EP0055767 B1	19860312	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT LAPSED DATE : 19860312
EP0055767 B1	19870304	LSGT	+26N	NO OPPOSITION FILED	
EP0055767 B1	19930519	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 19930519 YEAR OF FEE PAYMENT : 13
EP0055767 B1	19930624	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 19930624 YEAR OF FEE PAYMENT : 13
EP0055767 B1	19930706	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 19930706 YEAR OF FEE PAYMENT : 13
EP0055767 B1	19930719	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 19930719 YEAR OF FEE PAYMENT : 13
EP0055767 B1	19930730	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 19930730 YEAR OF FEE PAYMENT : 13
EP0055767 B1	19930731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 19930731 YEAR OF FEE PAYMENT :

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EP0055767 B1	19930909	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 19930909 YEAR OF FEE PAYMENT : 13
EP0055767 B1	19930921	LSFE	+EPTA	LU: LAST PAID ANNUAL FEE	REF COUNTRY CODE : EP
EP0055767 B1	19940708	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB LAPSED DATE : 19940708
EP0055767 B1	19940708	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 : 19940708
EP0055767 B1	19940709	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE LAPSED DATE : 19940709
EP0055767 B1	19940731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH LAPSED DATE : 19940731
EP0055767 B1	19940731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LI LAPSED DATE : 19940731
EP0055767 B1	19950131	LSLE	-EUG	SE: EUROPEAN PATENT HAS LAPSED	REF COUNTRY CODE : EP TEXT : 81902120.5 EFFECTIVE DATE : 19950210
EP0055767 B1	19950201	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL LAPSED DATE : 19950201
EP0055767 B1	19950308	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 19940708
EP0055767 B1	19950316	LSLE	-NLV4	NL: LAPSED OR ANULLED DUE TO NON-PAYMENT OF THE ANNUAL FEE	REF COUNTRY CODE : EP
EP0055767 B1	19950331	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR LAPSED DATE : 19950331
EP0055767 B1	19950331	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP0055767 B1	19950401	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE LAPSED DATE : 19950401
EP0055767 B1	19950403	LSLE	-EUG	SE: EUROPEAN PATENT HAS LAPSED	REF COUNTRY CODE : EP TEXT : 81902120.5
EP0055767 B1	19950524	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST
EP0055767 B1	20010708	PEXP		Calculated Patent Term Expiry	
US4362711 A	19821207	LSGT	+	granted / extensions (spc, cpc, pte)	
US4362711 A	19810728	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : EVREKA, INC., 76 FLANDERS-DRAKESTOWN RD., FLANDERS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNOR:CERAMI ANTHONY;

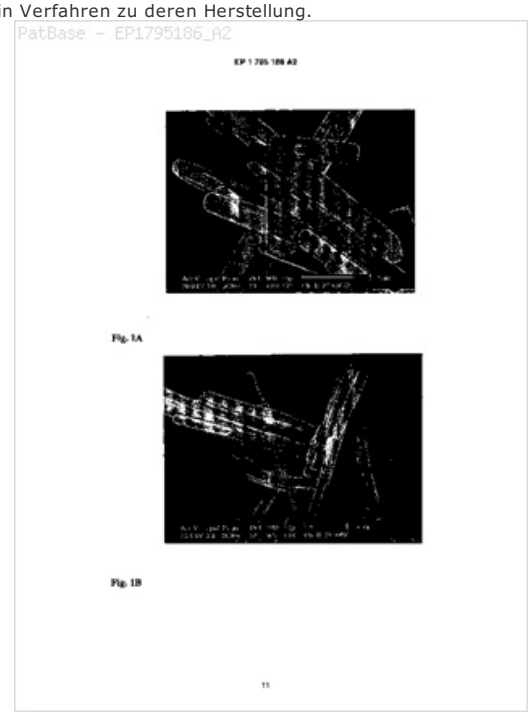
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US4362711 A	19810728	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : EVREKA, INC., NEW JERSEY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:CERAMI ANTHONY; REEL/FRAME:003885/0159 EFFECTIVE DATE : 19810706
US4362711 A	19821207	LSGT	PAT1	Patented Case	
US4362711 A	19821207	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US4362711 A	20000711	PEXP		Calculated Patent Term Expiry	
WO8200257 A1	19820204	LSPB	+	published / reissued	
WO8200257 A1	19820714	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1981902120 COUNTRY OF REF DOCUMENT : EP
WO8200257 A1	19820727	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1981902120 COUNTRY OF REF DOCUMENT : EP
WO8200257 A1	19860312	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1981902120 COUNTRY OF REF DOCUMENT : EP
ZA8104712 A	19820728	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA8104712 A	20010709	PEXP		Calculated Patent Term Expiry	

81) Family number: 34548037 (EP1795186B2)

Title: FLUPIRTIN COMPRISING MEDICAMENT FORMULATION WITH A CONTROLLED RELEASE OF THE ACTIVE AGENT
FORMULATION MEDICAMENTEUSE CONTENANT FLUPIRTIN A LIBERATION CONTROLEE DU PRINCIPE ACTI

Abstract: Source: EP1795186A3 [DE] Es wird eine feste Arzneimittelzubereitung zur Verfuegung gestellt, umfassend Flupirtin oder seine physiologisch vertraeglichen Salze als Wirkstoff, wobei mindestens ein Teil des Flupirtins oder seiner physiologisch vertraeglichen Salze als Wirkstoffformulierung mit verzoegerter Wirkstofffreisetzung vorliegt, wobei a. die Wirkstofffornmlierung mit verzoegerter Wirkstofffreisetzung Wirkstoffkompaktate umfasst, die mit einer Retardkomponente, vorzugsweise gleichmaessig, ueberzogen sind und gegebenenfalls pharmazeutisch uebliche Hilfsstoffe umfassen, so dass eine gleichmaessige Freisetzung des Flupirtins aus den Kompaktaten gewaehleistet ist, und b. die Wirkstoffkompaktate eine Teilchengroesse von 160 bis 800 micrometres, vorzugsweise 250 bis 500 micrometres, aufweisen und bevorzugt sphaerisch oder annaehernd sphaerisch sind, sowie Wirkstoffkompaktate und ein Verfahren zu deren Herstellung.

Classifications:
International (IPC 8-9): A61J3/10 A61K31/00 A61K31/44 A61K31/4425 A61K9/16 A61K9/20 A61K9/22 A61K9/32 A61K9/50 A61K9/52 A61P25/04 (Advanced/Invention);
A61P25/04 (Advanced/Non-invention);
A61J3/10 A61K31/00 A61K31/44 A61K31/4425 A61K9/16 A61K9/22 A61K9/30 A61K9/52 A61P25/00 (Core/Invention);
A61P25/00 (Core/Non-invention)
CPC: A61K9/1635 A61K9/2077 A61P25/04
European: A61K9/16H6B A61K9/20K2



Family:

Publication number	Publication date	Application number	Application date
CY1115709 T1	20170125	CY20141100058T	20140123
DE102005054610 A1	20070712	DE200510054610	20051108
DE102005054610 B4	20100610	DE200510054610	20051108
DE502006013295 D1	20131219	DE200650013295T	20061104
DK1795186 T3	20140127	DK20060022985T	20061104
DK1795186 T4	20180305	DK20060022985T	20061104
EP1795186 A2	20070613	EP20060022985	20061104
EP1795186 A3	20071024	EP20060022985	20061104
EP1795186 B1	20131023	EP20060022985	20061104
EP1795186 B2	20171206	EP20060022985	20061104
ES2443468 T3	20140219	ES20060022985T	20061104
ES2443468 T5	20180326	ES20060022985T	20061104
PL1795186 T3	20140530	PL20060022985T	20061104
PL1795186 T5	20180530	PL20060022985T	20061104
PT1795186 T	20140122	PT20060022985T	20061104
RU2006139127 A	20080520	RU20060139127	20061107
RU2352338 C2	20090420	RU20060139127	20061107

Priority:
DE200510054610 20051108 EP20060022985 20061104

Probable Assignee: TEVA PHARMA IND LTD

Assignee(s): (std): AVD FARMA GMBKH U KO KG ; AVD FARMA GMBKH UND KO KG ; AWD PHARMA GMBH AND CO KG ; TEVA GMBH ; TEVA PHARMA IND LTD

Assignee(s): AWDPHARMA GMBH AND CO KG ; AWDPHARMA GMBH AND 38 COKG ; AWDPHARMA GMBH AND COKG ; AVDFARMA GMBKH U KO KG

Inventor(s): (std): FAUSTMANN BARBARA ; QADAN ASAL ; TERHAAG BERND ; WOLF JOACHIM ; VOL F JOAKHIM ; TERKHAAG BERND ; KVADAN ASAL

Inventor(s): JOACHIM WOLF ; BERND TERHAAG ; BARBARA FAUSTMANN ; ASAL QADAN ; VOL'F JOAKHIM

Agent(s): BARDEHLE PAGENBERG PARTNERSCHAFT MBB PATENTANWAELTE RECHTSANWAELTE; BARDEHLE HEINZ; LANG JOHANNES; FABREGA XAVIER; FORTEA JUAN JOSE

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 MK NL PL PT RO RS SE SI SK TR YU

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
CY1115709 T1	20170125	LSGT	+	granted / extensions (spc, cpc, pte)	
CY1115709 T1	20340123	PEXP		Calculated Patent Term Expiry	
DE102005054610 A1	20070712	LSPB	+	published / reissued	
DE102005054610 A1	20070712	LSES	+OP8	REQUEST FOR EXAMINATION AS TO PARAGRAPH 44 PATENT LAW	
DE102005054610 A1	20101125	LSOP	-8363	OPPOSITION AGAINST THE PATENT	
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DE102005054610 A1	20140409	LSAL	R006	APPEAL FILED	
DE102005054610 A1	20140505	LSOP	R008	CASE PENDING AT FEDERAL PATENT COURT	
DE102005054610 A1	20170227	LSAL	R010	APPEAL PROCEEDINGS SETTLED BY WITHDRAWAL OF APPEAL(S) OR IN SOME OTHER WAY	
DE102005054610 B4	20100610	LSGT	+	granted / extensions (spc, cpc, pte)	
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DE502006013295 D1	20140717	LSOP	R026	OPPOSITION FILED AGAINST PATENT	
DK1795186 T3	20140127	LSGT	+	granted / extensions (spc, cpc, pte)	
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EP1795186 A2	20070613	LSPB	+	published / reissued	
EP1795186 A2	20140530	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 : 20140223
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EP1795186 A2	20160229	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20151118 YEAR OF FEE PAYMENT : 10
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EP1795186 A3	20080326	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20080221
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EP1795186 B1	20140717	LSOP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R026 REF DOCUMENT NUMBER : 502006013295 COUNTRY OF REF DOCUMENT : DE
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EP1795186 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 : 20131023
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EP1795186 B1	20161118	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
EP1795186 B1	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : LT

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EP1795186 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY PAYMENT DATE : 20161026 YEAR OF FEE PAYMENT : 11
EP1795186 B1	20171121	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 12
EP1795186 B1	20261104	PEXP		Calculated Patent Term Expiry	
EP1795186 B2	20171206	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1795186 B2	20171206	LSRE	27A	PATENT MAINTAINED IN AMENDED FORM	EFFECTIVE DATE : 20171206
EP1795186 B2	20171206	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R102 REF DOCUMENT NUMBER : 502006013295 COUNTRY OF REF DOCUMENT : DE
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EP1795186 B2	20180131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20171121 YEAR OF FEE PAYMENT : 12
EP1795186 B2	20180131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20171120 YEAR OF FEE PAYMENT : 12
EP1795186 B2	20180131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20171115 YEAR OF FEE PAYMENT : 12
EP1795186 B2	20180131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20171114 YEAR OF FEE PAYMENT : 12
EP1795186 B2	20180131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20171122 YEAR OF FEE PAYMENT : 12
EP1795186 B2	20180131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20171102 YEAR OF FEE PAYMENT : 12
EP1795186 B2	20180131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20171121 YEAR OF FEE PAYMENT : 12
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EP1795186 B2	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20171123 YEAR OF FEE PAYMENT : 12
EP1795186 B2	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20171114 YEAR OF FEE PAYMENT : 12
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EP1795186 B2	20180315	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : EE REF LEGAL EVENT CODE : LD4A REF DOCUMENT NUMBER : E008837 COUNTRY OF REF DOCUMENT : EE
EP1795186 B2	20180326	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : DC2A REF DOCUMENT NUMBER : 2443468 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T5 DESIGNATED STATE(S) : EFFECTIVE DATE : 20180326
EP1795186 B2	20180327	LSPB	REG	REFERENCE TO A	REF COUNTRY CODE : SE

				NATIONAL CODE	REF LEGAL EVENT CODE : RPEO
EP1795186 B2	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY PAYMENT DATE : 20171024 YEAR OF FEE PAYMENT : 12
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EP1795186 B2	20190131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK PAYMENT DATE : 20181023 YEAR OF FEE PAYMENT : 13
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EP1795186 B2	20190131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LT PAYMENT DATE : 20181022 YEAR OF FEE PAYMENT : 13
EP1795186 B2	20190131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20181101 YEAR OF FEE PAYMENT : 13
EP1795186 B2	20190131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20181102 YEAR OF FEE PAYMENT : 13
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EP1795186 B2	20190131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20181113 YEAR OF FEE PAYMENT : 13
EP1795186 B2	20190131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20181114 YEAR OF FEE PAYMENT : 13
EP1795186 B2	20190131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20181031 YEAR OF FEE PAYMENT : 13
EP1795186 B2	20190131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20181121 YEAR OF FEE PAYMENT : 13

EP1795186 B2	20190131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20181122 YEAR OF FEE PAYMENT : 13
EP1795186 B2	20190131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE PAYMENT DATE : 20181116 YEAR OF FEE PAYMENT : 13
EP1795186 B2	20190131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20181120 YEAR OF FEE PAYMENT : 13
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EP1795186 B2	20190228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20181120 YEAR OF FEE PAYMENT : 13
EP1795186 B2	20190228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20181120 YEAR OF FEE PAYMENT : 13
EP1795186 B2	20190228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20181126 YEAR OF FEE PAYMENT : 13
EP1795186 B2	20190228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20181123 YEAR OF FEE PAYMENT : 13
EP1795186 B2	20190228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20181218 YEAR OF FEE PAYMENT : 13
EP1795186 B2	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY PAYMENT DATE : 20181029 YEAR OF FEE PAYMENT : 13
EP1795186 B2	20191231	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20191120 YEAR OF FEE PAYMENT : 14
EP1795186 B2	20200131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20191114 YEAR OF FEE PAYMENT : 14
EP1795186 B2	20200131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20191121 YEAR OF FEE PAYMENT : 14
EP1795186 B2	20200131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK PAYMENT DATE : 20191024 YEAR OF FEE PAYMENT : 14
EP1795186 B2	20200131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20191121 YEAR OF FEE PAYMENT : 14
EP1795186 B2	20200131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LT PAYMENT DATE : 20191022 YEAR OF FEE PAYMENT : 14
EP1795186 B2	20200131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20191121 YEAR OF FEE PAYMENT : 14
EP1795186 B2	20200131	LSFE	+PGFP	ANNUAL FEE PAID TO	COUNTRY OF REF

				NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	DOCUMENT : CY PAYMENT DATE : 20191030 YEAR OF FEE PAYMENT : 14
EP1795186 B2	20200131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20191120 YEAR OF FEE PAYMENT : 14
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EP1795186 B2	20200131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20191121 YEAR OF FEE PAYMENT : 14
EP1795186 B2	20200131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20191115 YEAR OF FEE PAYMENT : 14
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EP1795186 B2	20200228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE PAYMENT DATE : 20191122 YEAR OF FEE PAYMENT : 14
EP1795186 B2	20200228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20191128 YEAR OF FEE PAYMENT : 14
EP1795186 B2	20200228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20191120 YEAR OF FEE PAYMENT : 14
EP1795186 B2	20200228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20191031 YEAR OF FEE PAYMENT : 14
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EP1795186 B2	20200331	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20191121 YEAR OF FEE PAYMENT : 14
EP1795186 B2	20200331	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20191121 YEAR OF FEE PAYMENT : 14
EP1795186 B2	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20191120 YEAR OF FEE PAYMENT : 14
EP1795186 B2	20261104	PEXP		Calculated Patent Term Expiry	
ES2443468 T3	20140219	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2443468 T3	20261104	PEXP		Calculated Patent Term Expiry	
ES2443468 T5	20180326	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2443468 T5	20261104	PEXP		Calculated Patent Term Expiry	

PL1795186 T3	20140530	LSGT	+	granted / extensions (spc, cpc, pte)	
PL1795186 T5	20180530	LSGT	+	granted / extensions (spc, cpc, pte)	
PT1795186 T	20140122	LSGT	+	granted / extensions (spc, cpc, pte)	
PT1795186 T	20261104	PEXP		Calculated Patent Term Expiry	
RU2006139127 A	20080520	LSPB	+	published / reissued	
RU2352338 C2	20090420	LSGT	+	granted / extensions (spc, cpc, pte)	
RU2352338 C2	20140610	LSLI	PC43	OFFICIAL REGISTRATION OF THE TRANSFER OF THE EXCLUSIVE RIGHT WITHOUT CONTRACT FOR INVENTIONS	EFFECTIVE DATE : 20140513
RU2352338 C2	20261107	PEXP		Calculated Patent Term Expiry	

82) Family number: 56787037 (US2015299433A)

Title: FILM-FORMING COMPOSITE USED TO MAKE STARCH **SOFTGEL** CAPSULES AND THE METHOD TO PREPARE IT

Abstract: This present invention relates to a film-forming composite used to make starch **softgel** capsules and the method to prepare it. The said composite is made from water and hydroxypropyl starch by specific percentage, plus (optional) light-screening agent, colorant, and flavoring agent. Mix up the above components in sequential order and then process the mix into film-forming composite through controlled heating. The composite such made can be directly used to make starch **softgel** capsules by the conventional method applied for the **gelatin** capsule production.

Classifications:
International (IPC 8-9): A61K47/36 A61K47/38 A61K8/00 A61K9/48 C08J3/075 C08J3/20 C08J5/18 C08L3/02 C08L3/08 C08L5/00 C08L5/06 (Advanced/Invention);
A61J3/07 (Advanced/Non-invention)
CPC: A61K9/4816 A61K47/38 C08L3/08 C08L5/00 C08L5/06
US: 106/162.9 106/205.71 106/206.1 106/213.1 106/215.1 514/778

Family:

Publication number	Publication date	Application number	Application date
AU2014268226 AA	20151105	AU20140268226	20141127
CA2872353 AA	20151021	CA20142872353	20141127
CA2872353 C	20170926	CA20142872353	20141127
CN103893771 A	20140702	CN201410159754	20140421
CN103893771 B	20150826	CN201410159754	20140421
EP2937082 A1	20151028	EP20140190253	20141024
US2015299433 AA	20151022	US20140520689	20141022

Priority:

CN201410159754 20140421

Probable Assignee: HUNAN ER KANG PHARMACEUTICAL CO LTD

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Assignee(s): HUNAN TONGTAI CAPSULE CO ; HUNAN ER KANG PHARMACEUTICAL CO ; HUNAN WITH THAI CAPSULE CO LTD ; SHUAI FANGWEN ; WANG XIANGFENG ; ZHANG JIAWEI

Inventor(s): (std): SHUAI FANGWEN ; WANG XIANGFENG ; ZHANG JIAWEI

Agent(s): FB RICE; FB RICE PTY LTD; MOFFAT AND CO; DISTEFANO LUIGI ROBERTO

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

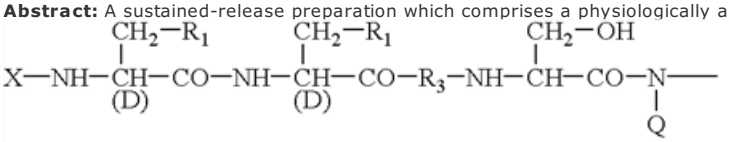
Patent	Date recorded	Event group	Code	Event	Details
AU2014268226 AA	20151105	LSPB	+	published / reissued	
CA2872353 AA	20151021	LSPB	+	published / reissued	
CA2872353 C	20170926	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2872353 C	20341127	PEXP		Calculated Patent Term Expiry	
CN103893771 A	20140702	LSPB	+	published / reissued	
CN103893771 A	20140702	LSPB	+C06	PUBLICATION	
CN103893771 A	20141029	LSAS	ASS	SUCCESSION OR ASSIGNMENT OF PATENT RIGHT	PARTYTYPE : OWNER OWNER : HU'NAN ERKANG PHARMACEUTICAL CO., LTD. OLDPARTY : FORMER OWNER: HUNAN TONGTAI CAPSULES CO., LTD. EFFECTIVE DATE : 20141013
CN103893771 A	20141029	LSAS	C41	TRANSFER OF PATENT APPLICATION OR PATENT RIGHT OR UTILITY MODEL	
CN103893771 B	20150826	LSGT	+	granted / extensions (spc, cpc, pte)	
CN103893771 B	20150826	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN103893771 B	20340421	PEXP		Calculated Patent Term Expiry	
EP2937082 A1	20151028	LSPB	+	published / reissued	

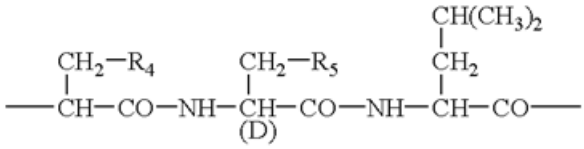
EP2937082 A1	20160608	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20160428
EP2937082 A1	20170830	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20170731
US2015299433 AA	20151022	LSPB	+	published / reissued	
US2015299433 AA	20141027	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : HUNAN ER-KANG PHARMACEUTICAL CO., LTD., CHINA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:SHUAI, FANGWEN; WANG, XIANGFENG; ZHANG, JIAWEI; REEL/FRAME:034066/0304 EFFECTIVE DATE : 20141010
US2015299433 AA	20170626	LSES	-NFA2	Non Final Action Counted, Not Yet Mailed	
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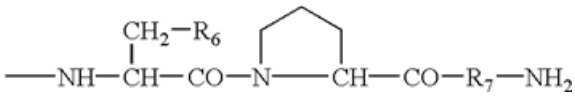
83) Family number: 31607037 (US2002147150A)

Title: SUSTAINED-RELEASE PREPARATION

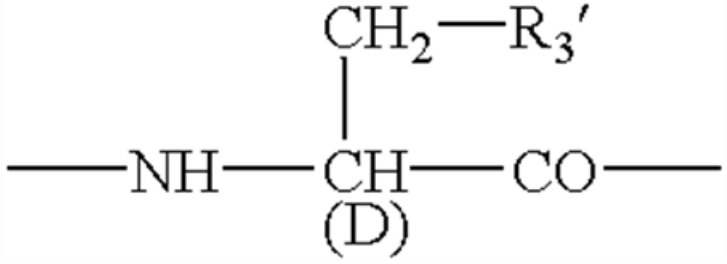
Abstract: A sustained-release preparation which comprises a physiologically active peptide of general formula 1



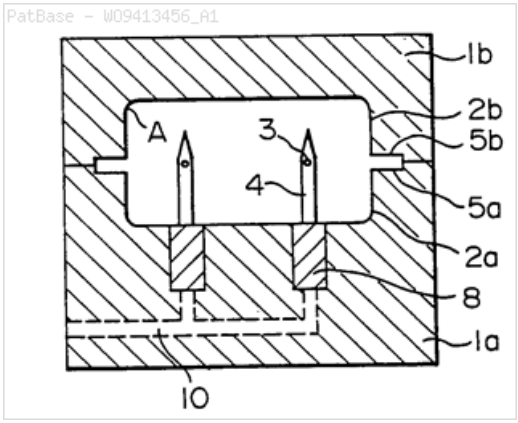




wherein X represents an acyl group; R 1, R 2 and R 4 each represents an aromatic cyclic group; R 3 represents a D-amino acid residue or a group of the formula 2



wherein R 3 ' is a heterocyclic group; R 5 represents a group of the formula --(CH 2) n --R 5 ' wherein n is 2 or 3, and R 5 ' is an amino group which may optionally be substituted, an aromatic cyclic group or an O-glycosyl group; R 6 represents a group of the formula --(CH 2) n --R 6 ' wherein n is 2 or 3, and R 6 ' is an amino group which may optionally be substituted; R 7 represents a D-amino acid residue or an azaglycyl residue; and Q represents hydrogen or a lower alkyl group, or a salt thereof and a biodegradable polymer having a terminal carboxyl group. The sustained-release preparation shows a constant release of the peptide over a long time and is substantially free from an initial burst.



Classifications:

International (IPC 8-9): A61J3/07 A61K37/02 A61K38/04 A61K38/08 A61K38/09 A61K38/12 A61K38/17 A61K47/30 A61K47/32 A61K47/34 A61K47/42 A61K9/14 A61K9/16 A61K9/22 A61K9/50 A61K9/52 A61K9/58 A61P35/00 A61P5/06 A61P5/24 B01J13/06 B29C39/10 B29C43/20 B29C45/14 B29C45/17 B29C49/00 B29C49/02 B29C49/20 B29C49/24 B29C49/58 B29C49/60 B29D22/00 C07D243/14 C07K7/00 C07K7/23 (Advanced/Invention); A61K38/12 A61K9/22 A61K9/50 A61K9/52 B29K105/20 B29L22/00 B29L9/00 (Advanced/Non-invention); A61K38/00 A61K38/04 A61K38/08 A61K47/30 A61K47/34 A61K9/14 A61K9/16 A61K9/22 A61K9/50 A61K9/52 A61P5/00 B01J13/06 B29C39/10 B29C43/20 B29C45/14 B29C45/17 B29C49/00 B29C49/02 B29C49/20 B29C49/24 B29C49/58 B29D22/00 (Core/Invention); A61K (Subclass/Invention)

International (IPC 1-7): A01N37/18 A61J3/07 A61K37/02 A61K37/24 A61K37/26 A61K37/36 A61K37/43 A61K38/00 A61K38/04 A61K38/08 A61K38/09 A61K38/10 A61K38/17 A61K47/08 A61K47/30 A61K47/32 A61K47/34 A61K47/42 A61K9/14 A61K9/16 A61K9/22 A61K9/50 A61K9/52 B01J13/06 B01J13/12 B29C39/10 B29C44/06 B29C45/14 B29C49/02 B29C49/20 B29C49/58 B29C49/60 B29D22/00 C07K7/06 C07K7/23 C08G63/08 C08G63/91 C08L67/00

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European: A61K38/09 A61K9/16H6D4 B29C43/20B2 B29C45/14G B29C45/17B2 B29C49/00F B29C49/02 B29C49/24 B29C49/60 C07K7/23 K61K38/12 L29C43/32A3A L29C45/14G7 L29C45/17B2C1 L29K105/00G L29K105/25C4 L29K63/00

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Family:

Publication number	Publication date	Application number	Application date
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Priority:

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Agent(s):	GRIFFITH HACK; FETHERSTONHAUGH AND CO; KUBOYAMA TAKASHI; TAKAHASHI SHUICHI; MOTOYAMA TADAYUKI; TANAKA MITSUO; TOMITA KENJI; SEKIGUCHI AKIRA; MATSUTANI MICHIKO; FOLEY AND LARDNER LLP,SUITE 500; FOLEY AND LARDNER LLP SUITE 500; FOLEY AND LARDNER LLP
Designated states:	AT BE BY CH DE DK ES FR GB GR IE IT KZ LI LU LV MC NL PT RU SE UA US

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
AT203910 E	20010815	LSGT	+	granted / extensions (spc, cpc, pte)	
AT203910 E	20011015	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	
AT203910 E	20040915	LSLE	-REN	CEASED DUE TO NON-PAYMENT OF THE ANNUAL FEE	
AT203910 E	20131203	PEXP		Calculated Patent Term Expiry	
AT295733 E	20050615	LSGT	+	granted / extensions (spc, cpc, pte)	
AT295733 E	20060115	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	REF DOCUMENT NUMBER : 1088555 COUNTRY OF REF DOCUMENT : EP
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EP0601799 B1	20020731	LSGT	+26N	NO OPPOSITION FILED	
EP0601799 B1	20021112	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20021112 YEAR OF FEE PAYMENT : 10
EP0601799 B1	20021211	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20021211 YEAR OF FEE PAYMENT : 10
EP0601799 B1	20021212	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20021212 YEAR OF FEE PAYMENT : 10
EP0601799 B1	20021220	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20021220 YEAR OF FEE PAYMENT : 10
EP0601799 B1	20021223	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20021223 YEAR OF FEE PAYMENT : 10
EP0601799 B1	20030121	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20030121 YEAR OF FEE PAYMENT : 10
EP0601799 B1	20031203	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 : 20031203
EP0601799 B1	20031203	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 : 20031203
EP0601799 B1	20031204	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 : 20031204
EP0601799 B1	20040102	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 : 20040102
EP0601799 B1	20040630	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 : 20040630
EP0601799 B1	20040705	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 : 20040705
EP0601799 B1	20040809	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DK REF LEGAL EVENT CODE : EBP

EP0601799 B1	20040922	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP0601799 B1	20040930	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 : 20040630
EP0601799 B1	20050316	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20031204
EP0601799 B1	20050429	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : CH OWNER : TAKEDA PHARMACEUTICAL COMPANY LIMITED REF LEGAL EVENT CODE : PFA OLDPARTY : TAKEDA CHEMICAL INDUSTRIES, LTD.#1-1, DOSHOMACHI 4-CHOME#CHUO-KU, OSAKA 541 (JP) -TRANSFER TO- TAKEDA PHARMACEUTICAL COMPANY LIMITED#1-1, DOSHOMACHI 4-CHOME, CHUO-KU#OSAKA 541 (JP)
EP0601799 B1	20051118	LSAS	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : CD
EP0601799 B1	20080625	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : CH OWNER : TAKEDA PHARMACEUTICAL COMPANY LIMITED REF LEGAL EVENT CODE : PFA OLDPARTY : TAKEDA PHARMACEUTICAL COMPANY LIMITED#1-1, DOSHOMACHI 4-CHOME, CHUO-KU#OSAKA 541 (JP) -TRANSFER TO- TAKEDA PHARMACEUTICAL COMPANY LIMITED#1-1, DOSHOMACHI 4-CHOME, CHUO-KU#OSAKA 541 (JP)
EP0601799 B1	20110331	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20101201 YEAR OF FEE PAYMENT : 18
EP0601799 B1	20110331	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20101218 YEAR OF FEE PAYMENT : 18
EP0601799 B1	20110531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20101130 YEAR OF FEE PAYMENT : 18
EP0601799 B1	20120131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20111213 YEAR OF FEE PAYMENT : 19
EP0601799 B1	20120131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20111213 YEAR OF FEE PAYMENT : 19
EP0601799 B1	20120131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20111219 YEAR OF FEE PAYMENT : 19
EP0601799 B1	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 : 20121204
EP0601799 B1	20130731	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP0601799 B1	20130828	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL	REF COUNTRY CODE : EP EFFECTIVE DATE : 20121203

				FEE	
EP0601799 B1	20130927	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20130830
EP0601799 B1	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
EP0601799 B1	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
EP0601799 B1	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
EP0601799 B1	20131107	LSDW	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R119 REF DOCUMENT NUMBER : 69330547 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20130702
EP0601799 B1	20131129	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 : 20130102
EP0601799 B1	20131129	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 : 20121203
EP0601799 B1	20131231	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 : 20121203
EP0601799 B1	20131203	PEXP		Calculated Patent Term Expiry	
EP0633121 A1	19950111	LSPB	+	published / reissued	
EP0633121 A1	19950111	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19940826
EP0633121 A4	19950503	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	
EP0633121 A4	19960814	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 19960628
EP0633121 B1	19970514	LSGT	+	granted / extensions (spc, cpc, pte)	
EP0633121 B1	19980506	LSGT	+26N	NO OPPOSITION FILED	
EP0633121 B1	19981209	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 19981209 YEAR OF FEE PAYMENT : 6
EP0633121 B1	19981211	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 19981211 YEAR OF FEE PAYMENT : 6
EP0633121 B1	19991207	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 : 19991207
EP0633121 B1	20000726	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-	REF COUNTRY CODE : EP EFFECTIVE DATE : 19991207

				PAYMENT OF RENEWAL FEE	
EP0633121 B1	20000831	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 : 20000831
EP0633121 B1	20001013	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST
EP0633121 B1	20021212	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20021212 YEAR OF FEE PAYMENT : 10
EP0633121 B1	20040701	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 : 20040701
EP0633121 B1	20051207	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 : 20051207
EP0633121 B1	20131207	PEXP		Calculated Patent Term Expiry	
EP1088555 A1	20010404	LSPB	+	published / reissued	
EP1088555 A1	20010404	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20001115
EP1088555 A1	20020102	LSFE	+AKX	DESIGNATION FEES PAID	TEXT : AT BE CH DE DK ES FR GB GR IE IT LI LU NL PT SE
EP1088555 A1	20030910	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20030724
EP1088555 A1	20041201	LSRE	RTI1	TITLE (CORRECTION)	TEXT : SUSTAINED-RELEASE LEUPRORELIN PREPARATION
EP1088555 A1	20050105	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : TAKEDA PHARMACEUTICAL COMPANY LIMITED
EP1088555 A1	20050518	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP1088555 A1	20050531	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1088555 A1	20050615	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP1088555 A1	20050712	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : EP REF DOCUMENT NUMBER : 20050401999 COUNTRY OF REF DOCUMENT : GR
EP1088555 A1	20050901	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2238247 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP1088555 A1	20051021	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HK REF LEGAL EVENT CODE : GR REF DOCUMENT NUMBER : 1037519 COUNTRY OF REF DOCUMENT : HK
EP1088555 A1	20060510	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20060221
EP1088555 A1	20080625	LSAS	REG	REFERENCE TO A	PARTYTYPE : OWNER

				NATIONAL CODE	REF COUNTRY CODE : CH OWNER : TAKEDA PHARMACEUTICAL COMPANY LIMITED REF LEGAL EVENT CODE : PFA OLDPARTY : TAKEDA PHARMACEUTICAL COMPANY LIMITED#1-1, DOSHOMACHI 4-CHOME, CHUO-KU#OSAKA (JP) -TRANSFER TO- TAKEDA PHARMACEUTICAL COMPANY LIMITED#1-1, DOSHOMACHI 4-CHOME, CHUO-KU#OSAKA (JP)
EP1088555 A1	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 : 20
EP1088555 A1	20130131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20121213 YEAR OF FEE PAYMENT : 20
EP1088555 A1	20130131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20121218 YEAR OF FEE PAYMENT : 20
EP1088555 A1	20130131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20121128 YEAR OF FEE PAYMENT : 20
EP1088555 A1	20130131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20121213 YEAR OF FEE PAYMENT : 20
EP1088555 A1	20130228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20121122 YEAR OF FEE PAYMENT : 20
EP1088555 A1	20130228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20121128 YEAR OF FEE PAYMENT : 20
EP1088555 A1	20130228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20120604 YEAR OF FEE PAYMENT : 20
EP1088555 A1	20130228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20121217 YEAR OF FEE PAYMENT : 20
EP1088555 A1	20130228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20121219 YEAR OF FEE PAYMENT : 20
EP1088555 A1	20130228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20121220 YEAR OF FEE PAYMENT : 20
EP1088555 A1	20130329	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20121215 YEAR OF FEE PAYMENT : 20
EP1088555 A1	20130329	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20121127 YEAR OF FEE PAYMENT : 20
EP1088555 A1	20130329	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20130107 YEAR OF FEE PAYMENT : 20
EP1088555 A1	20130430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20121217 YEAR OF FEE PAYMENT : 20
EP1088555 A1	20131203	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE :

					R071 REF DOCUMENT NUMBER : 69333817 COUNTRY OF REF DOCUMENT : DE
EP1088555 A1	20131204	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R071 REF DOCUMENT NUMBER : 69333817 COUNTRY OF REF DOCUMENT : DE
EP1088555 A1	20131209	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DK REF LEGAL EVENT CODE : EUP EFFECTIVE DATE : 20131203
EP1088555 A1	20131210	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : PT REF LEGAL EVENT CODE : MM4A TEXT : MAXIMUM VALIDITY LIMIT REACHED EFFECTIVE DATE : 20131203
EP1088555 A1	20131211	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : V4 EFFECTIVE DATE : 20131203
EP1088555 A1	20131213	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP1088555 A1	20131225	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : PE20 EXPIRY DATE : 20131202
EP1088555 A1	20131231	LSLE	-BE20	BE: PATENT EXPIRED	PARTYTYPE : OWNER REF COUNTRY CODE : EP OWNER : *TAKEDA PHARMACEUTICAL CY LTD EFFECTIVE DATE : 20131203
EP1088555 A1	20140115	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MK07 REF DOCUMENT NUMBER : 295733 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20131203
EP1088555 A1	20140129	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MK9A
EP1088555 A1	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 EXPIRATION OF PROTECTION LAPSED DATE : 20131202
EP1088555 A1	20140131	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 : 20131210
EP1088555 A1	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 EXPIRATION OF PROTECTION LAPSED DATE : 20131204
EP1088555 A1	20140204	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SE REF LEGAL EVENT CODE : EUG
EP1088555 A1	20140205	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : MA REF DOCUMENT NUMBER : 20050401999 COUNTRY OF REF DOCUMENT : GR

					EFFECTIVE DATE : 20131204
EP1088555 A1	20140307	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20140307
EP1088555 A1	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 EXPIRATION OF PROTECTION LAPSED DATE : 20131203
EP1088555 A1	20140530	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 : 20131204
EP1088555 B1	20050518	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1088555 B1	20131202	PEXP		Calculated Patent Term Expiry	
EP1088555 B1	20131203	PEXP		Calculated Patent Term Expiry	
ES2158856 T3	20010916	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2158856 T3	20010916	LSGT	+FG2A	DEFINITIVE PROTECTION	REF DOCUMENT NUMBER : 601799 COUNTRY OF REF DOCUMENT : ES
ES2158856 T3	20131203	PEXP		Calculated Patent Term Expiry	
ES2238247 T3	20050901	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2238247 T3	20131203	PEXP		Calculated Patent Term Expiry	
FI116196 B	20051014	LSPB	+	published / reissued	
FI116196 B	20051014	LSGT	+FG	PATENT GRANTED	REF DOCUMENT NUMBER : 116196 COUNTRY OF REF DOCUMENT : FI
FI116196 B	20140115	LSLE	-MA	PATENT EXPIRED	
FI116196 B	20230204	PEXP		Calculated Patent Term Expiry	
FI20030166 A	20030204	LSPB	+	published / reissued	
FI20030166 A	20041110	LSAS	PC	TRANSFER OF ASSIGNMENT OF PATENT	PARTYTYPE : OWNER OWNER : TAKEDA PHARMACEUTICAL COMPANY LIMITED
FI935471 A	19940608	LSPB	+	published / reissued	
GR3037085 T3	20020131	LSGT	+	granted / extensions (spc, cpc, pte)	
GR3037085 T3	20040705	LSLE	-ML	LAPSE DUE TO NON-PAYMENT OF FEES	
GR3037085 T3	20211031	PEXP		Calculated Patent Term Expiry	
HK1037519 A1	20051021	LSPB	+	published / reissued	
HK1037519 A1	20140103	LSLE	-PE	PATENT EXPIRED	EFFECTIVE DATE : 20131202
HK1037519 A1	20210926	PEXP		Calculated Patent Term Expiry	
JP3232722 B2	20011126	LSGT	+	granted / extensions (spc, cpc, pte)	
JP3232722 B2	20040921	LSLE	-LAPS	CANCELLATION BECAUSE OF NO PAYMENT OF ANNUAL FEES	
JP3232722 B2	20121207	PEXP		Calculated Patent Term Expiry	
JP3725906 B2	20051214	LSGT	+	granted / extensions (spc, cpc, pte)	
JP3725906 B2	20080729	LSFE	+FPAY	RENEWAL FEE PAYMENT	YEAR OF FEE PAYMENT : 4

				(EVENT DATE IS RENEWAL DATE OF DATABASE)	
JP3725906 B2	20081224	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 4
JP3725906 B2	20090527	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 4
JP3725906 B2	20090730	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 4
JP3725906 B2	20090901	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 5
JP3725906 B2	20100729	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 5
JP3725906 B2	20100907	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 6
JP3725906 B2	20110728	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 6
JP3725906 B2	20110906	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 7
JP3725906 B2	20120606	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 7
JP3725906 B2	20120724	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 7
JP3725906 B2	20120802	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 7
JP3725906 B2	20120904	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 8
JP3725906 B2	20130930	LSLE	-LAPS	CANCELLATION BECAUSE OF NO PAYMENT OF ANNUAL FEES	
JP3725906 B2	20131207	PEXP		Calculated Patent Term Expiry	
JP6170929 A2	19940621	LSPB	+	published / reissued	
JP6238766 A2	19940830	LSPB	+	published / reissued	
JP7097334 A2	19950411	LSPB	+	published / reissued	
JP7097334 A2	20040311	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A821 EFFECTIVE DATE : 20040310
JP7097334 A2	20050622	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20050621
JP7097334 A2	20050818	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20050817
JP7097334 A2	20050906	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP7097334 A2	20050914	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20050913
JP7097334 A2	20050929	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20050926

JP7097334 A2	20050930	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
KR100305951 B1	20011130	LSGT	+	granted / extensions (spc, cpc, pte)	
KR100305951 B1	20161130	PEXP		Calculated Patent Term Expiry	
KR100319425 B1	20020109	LSGT	+	granted / extensions (spc, cpc, pte)	
KR100319425 B1	20200901	PEXP		Calculated Patent Term Expiry	
KR19940013530 A	19940715	LSPB	+	published / reissued	
KR20010016379 A	20010305	LSPB	+	published / reissued	
KR20010016379 A	20000901	LSES	A201	REQUEST FOR EXAMINATION	
KR20010016379 A	20001230	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR20010016379 A	20011016	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
KR20010016379 A	20011219	LSGT	+GRNT	WRITTEN DECISION TO GRANT	
KR20010016379 A	20121121	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20121121 YEAR OF FEE PAYMENT : 12
KR20010016379 A	20131208	LSLE	-EXPY	EXPIRATION OF TERM	
KR940013530 A	19940715	LSPB	+	published / reissued	
KR940013530 A	19940104	LSRE	AMND	AMENDMENT	
KR940013530 A	19980910	LSES	A201	REQUEST FOR EXAMINATION	
KR940013530 A	19980910	LSRE	AMND	AMENDMENT	
KR940013530 A	20000601	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR940013530 A	20000901	LSRE	AMND	AMENDMENT	
KR940013530 A	20001222	LSRV	-E601	DECISION TO REFUSE APPLICATION	
KR940013530 A	20010323	LSRE	AMND	AMENDMENT	
KR940013530 A	20010517	LSGT	+B701	DECISION TO GRANT	
KR940013530 A	20010803	LSGT	+GRNT	WRITTEN DECISION TO GRANT	
KR940013530 A	20110630	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20110630 YEAR OF FEE PAYMENT : 11
KR940013530 A	20120804	LSLE	-LAPS	LAPSE DUE TO UNPAID ANNUAL FEE	
LT1526 A	19941025	LSPB	+	published / reissued	
LT3265 B	19950525	LSGT	+	granted / extensions (spc, cpc, pte)	
LT3265 B	20040726	LSLE	-MM9A	LAPSED PATENTS	EFFECTIVE DATE : 20031203
LT3265 B	20131203	PEXP		Calculated Patent Term Expiry	
LV10927 A	19951220	LSPB	+	published / reissued	
LV10927 B	19960420	LSGT	+	granted / extensions (spc, cpc, pte)	
LV10927 B	20150607	PEXP		Calculated Patent Term Expiry	
MX9307686 A1	19940630	LSPB	+	published / reissued	
NO310704 B1	20010820	LSGT	+	granted / extensions (spc, cpc, pte)	
NO310704 B1	20131206	PEXP		Calculated Patent Term Expiry	
NO934423 A	19940608	LSPB	+	published / reissued	
NZ250349 A	19941222	LSPB	+	published / reissued	
PT1088555 T	20050729	LSGT	+	granted / extensions (spc, cpc, pte)	
PT1088555 T	20200729	PEXP		Calculated Patent Term Expiry	
PT601799 T	20011228	LSGT	+	granted / extensions	

				(spc, cpc, pte)	
PT601799 T	20161228	PEXP		Calculated Patent Term Expiry	
RU2128055 C1	19990327	LSGT	+	granted / extensions (spc, cpc, pte)	
RU2128055 C1	20070920	LSLE	-MM4A	THE PATENT IS INVALID DUE TO NON-PAYMENT OF FEES	EFFECTIVE DATE : 20031208
RU2128055 C1	20131207	PEXP		Calculated Patent Term Expiry	
RU95114533 A	19970727	LSPB	+	published / reissued	
SG46283 A1	19980220	LSPB	+	published / reissued	
TH15278 A	19950117	LSPB	+	published / reissued	
TH28870 B	20100929	LSGT	+	granted / extensions (spc, cpc, pte)	
TH28870 B	20131203	PEXP		Calculated Patent Term Expiry	
TW333456 B	19980611	LSGT	+	granted / extensions (spc, cpc, pte)	
TW333456 B	20131124	PEXP		Calculated Patent Term Expiry	
UA61046 C2	20031117	LSGT	+	granted / extensions (spc, cpc, pte)	
UA61046 C2	20131207	PEXP		Calculated Patent Term Expiry	
US2002147150 AA	20021010	LSPB	+	published / reissued	
US2002147150 AA	20050404	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : TAKEDA PHARMACEUTICAL COMPANY LIMITED, JAPAN OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:TAKEDA CHEMICAL INDUSTRIES, LTD.; REEL/FRAME:016424/0206 EFFECTIVE DATE : 20040629
US2002147150 AA	20081205	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2002173467 AA	20021121	LSPB	+	published / reissued	
US2002173467 AA	20050404	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : TAKEDA PHARMACEUTICAL COMPANY LIMITED, JAPAN OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:TAKEDA CHEMICAL INDUSTRIES, LTD.; REEL/FRAME:016424/0206 EFFECTIVE DATE : 20040629
US2003039698 AA	20030227	LSPB	+	published / reissued	
US2009048180 AA	20090219	LSPB	+	published / reissued	
US2009048180 AA	20140110	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US5480868 A	19960102	LSGT	+	granted / extensions (spc, cpc, pte)	
US5480868 A	19931207	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : TAKEDA CHEMICAL INDUSTRIES, LTD., JAPAN OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:KAMEI, SHIGERU; IGARI, YASUTAKA; OGAWA, YASUAKI; REEL/FRAME:006793/0731; SIGNING DATES FROM 19931202 TO 19931206
US5480868 A	19951222	LSGT	PAT1	Patented Case	
US5480868 A	19951222	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5480868 A	19990621	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5480868 A	20030609	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8

US5480868 A	20050119	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : TAKEDA PHARMACEUTICAL COMPANY, LIMITED, JAPAN OLDPARTY : CHANGE OF NAME; ASSIGNOR:TAKEDA CHEMICAL INDUSTRIES, LTD.; REEL/FRAME:015612/0101 EFFECTIVE DATE : 20040629
US5480868 A	20070608	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5480868 A	20131207	PEXP		Calculated Patent Term Expiry	
US5562878 A	19961008	LSGT	+	granted / extensions (spc, cpc, pte)	
US5562878 A	19940803	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SUMITOMO CHEMICAL COMPANY, LIMITED, JAPAN OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:MATSUMOTO, MASAHITO; KITAYAMA, TAKEO; FUNAKOSHI, SATORU; AND OTHERS; REEL/FRAME:007129/0849; SIGNING DATES FROM 19940703 TO 19940705
US5562878 A	20000327	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5562878 A	20041008	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5562878 A	20041111	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US5562878 A	20041111	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US5562878 A	20041207	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20041008
US5562878 A	20140803	PEXP		Calculated Patent Term Expiry	
US5668111 A	19970916	LSGT	+	granted / extensions (spc, cpc, pte)	
US5668111 A	19970904	LSGT	PAT1	Patented Case	
US5668111 A	19970904	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5668111 A	20010222	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5668111 A	20050119	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : TAKEDA PHARMACEUTICAL COMPANY, LIMITED, JAPAN OLDPARTY : CHANGE OF NAME; ASSIGNOR:TAKEDA CHEMICAL INDUSTRIES, LTD.; REEL/FRAME:015612/0101 EFFECTIVE DATE : 20040629
US5668111 A	20050217	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5668111 A	20090211	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5668111 A	20150606	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
US5972891 A	19991026	LSGT	+	granted / extensions (spc, cpc, pte)	
US5972891 A	19991018	LSGT	PAT1	Patented Case	
US5972891 A	19991018	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5972891 A	20020226	LSRE	CC	CERTIFICATE OF CORRECTION	
US5972891 A	20030331	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4

US5972891 A	20050119	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : TAKEDA PHARMACEUTICAL COMPANY, LIMITED, JAPAN OLDPARTY : CHANGE OF NAME; ASSIGNOR:TAKEDA CHEMICAL INDUSTRIES, LTD.; REEL/FRAME:015612/0101 EFFECTIVE DATE : 20040629
US5972891 A	20070330	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5972891 A	20110330	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5972891 A	20170714	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
US6528093 BA	20030304	LSGT	+	granted / extensions (spc, cpc, pte)	
US6528093 BA	20050119	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : TAKEDA PHARMACEUTICAL COMPANY, LIMITED, JAPAN OLDPARTY : CHANGE OF NAME; ASSIGNOR:TAKEDA CHEMICAL INDUSTRIES, LTD.; REEL/FRAME:015612/0101 EFFECTIVE DATE : 20040629
US6528093 BA	20060811	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6528093 BA	20100811	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US6528093 BA	20150304	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US6528093 BA	20150330	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US6528093 BA	20150330	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US6528093 BA	20150421	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20150304
US6528093 BA	20190831	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
US7048947 BB	20060523	LSGT	+	granted / extensions (spc, cpc, pte)	
US7048947 BB	20060503	LSGT	PAT1	Patented Case	
US7048947 BB	20091021	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US7048947 BB	20131023	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US7048947 BB	20180101	LSFE	FEPP	FEE PAYMENT PROCEDURE	TEXT : MAINTENANCE FEE REMINDER MAILED (ORIGINAL EVENT CODE: REM.)
US7048947 BB	20180618	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	TEXT : PATENT EXPIRED FOR FAILURE TO PAY MAINTENANCE FEES (ORIGINAL EVENT CODE: EXP.)
US7048947 BB	20180618	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US7048947 BB	20180618	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US7048947 BB	20180710	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20180523

US7048947 BB	20230906	PEXP		Calculated Patent Term Expiry (PTA 501 days)	
WO9413317 A1	19940623	LSPB	+	published / reissued	
WO9413456 A1	19940623	LSPB	+	published / reissued	
WO9413456 A1	19940729	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1994901044 COUNTRY OF REF DOCUMENT : EP
WO9413456 A1	19940803	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 08256979 COUNTRY OF REF DOCUMENT : US
WO9413456 A1	19950111	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1994901044 COUNTRY OF REF DOCUMENT : EP
WO9413456 A1	19970514	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1994901044 COUNTRY OF REF DOCUMENT : EP
ZA9309163 A	19950607	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA9309163 A	20131206	PEXP		Calculated Patent Term Expiry	

84) Family number: 3177037 (US4917892A)

Title: ENCAPSULATED TOPICAL DELIVERY SYSTEM

Abstract: Delivery system for topical application comprising a highly viscous carrier containing dissolved or dispersed and microencapsulated topically-active agents providing immediate and sustained release of the topically-active agent to localized body sites.

Classifications:
International (IPC 8-9): A61K47/10 A61K47/18 A61K47/38 A61K9/00 A61K9/107 A61K9/22 A61K9/50 A61K9/52 A61K9/66 (Advanced/Invention);
A61K9/107 A61K9/22 A61K9/52 (Advanced/Non-invention);
A61K47/10 A61K47/16 A61K47/38 A61K9/00 A61K9/107 A61K9/22 A61K9/50 A61K9/52 (Core/Invention);
A61K (Subclass/Invention)
International (IPC 1-7): A61J3/04 A61J3/07 A61K47/00 A61K47/36 A61K6/00 A61K9/00 A61K9/06 A61K9/08 A61K9/10 A61K9/107 A61K9/22 A61K9/50 A61K9/52 A61K9/66
CPC: A61K9/0014 A61K9/0063 A61K9/5015 A61K9/5036 A61K47/10 A61K47/18 A61K47/38
European: A61K47/10 A61K47/18 A61K47/38 A61K9/00M18E A61K9/00M3 A61K9/50H4 A61K9/50H6F
US: 424/401 424/423 424/455 424/486 424/487 424/78 424/78.02 424/81



Family:

Publication number	Publication date	Application number	Application date
AU198938518 A1	19900123	AU19890038518	19890616
AU613298 B2	19910725	AU19890038518	19890616
DK51590 A	19900227	DK19900000515	19900227
DK51590 A0	19900227	DK19900000515	19900227
EP0393164 A1	19901024	EP19890907899	19890616
EP0393164 A4	19910703	EP19890907899	19890616
JP3501485 T2	19910404	JP19890507369T	19890616
NO900927 A	19900423	NO19900000927	19900227
NO900927 A0	19900227	NO19900000927	19900227
NO900927 L	19900423	NO19900000927	19900227
NZ229356 A	19910226	NZ19890229356	19890531
PT90994 A	19891229	PT19890090994	19890627
US4917892 A	19900417	US19880212492	19880628
WO9000048 A1	19900111	WO1989US02643	19890616
ZA8904308 A	19900228	ZA19890004308	19890607

Priority:
US19880212492 19880628 WO1989US02643 19890616

Probable Assignee: TEMPLE UNIV OF PHILADELPHIA

Assignee(s): (std): UNIV TEMPLE ; TEMPLE UNIV COMMUNWEALTH ; TEMPLE UNIVERSITY COMMUNWEALTH

Assignee(s): TEMPLE UNIVERSITY COMMUNWEALTH SYST HIGHER EDUCAT ; TEMPLE UNIVERSITY OF THE COMMONWEALTH SYSTEM OF HIGHER EDUCATION ; TEMPLE UNIVERSITY OF THE COMMONWEALTH SYSTEM OF HIGHER EDUC ; TEMPLE UNIVERSITY OF COMMONWEALTH SYST HIGHER EDUCATION ; TEMPLE UNIVERSITY OF THE COMMONWEALTH SYSTEM OF HIGHER EDUCATIO ; TEMPLE UNIV ; TEMPLE UNIV COMMUNWEALTH SYST HIGHER EDUCAT ; TEMPLE UNIV OF COMMW SYST HIGHER EDUCATION ; TEMPLE UNIV OF COMMW SYSTEM OF HI ; TEMPLE UNIV OF COMMW SYSTEM OF HIGHER EDUC ; TEMPLE UNIV OF COMMW SYSTEM OF HIGHER EDUCATIO ; TEMPLE UNIV OF COMMW SYSTEM OF HIGHER EDUCATION ; TEMPLE UNIV OF PHILADELPHIA ; TEMPLE UNIVERSITY

Inventor(s): (std): CHANG FRANK N ; FRANK N CHANG ; SPEAKER TULLY J ; HSU STEPHEN C ; HSU SPEPHEN C ; TULLY J SPEAKER ; STEPHEN C HSU

Inventor(s): SPEPHEN C HSU

Agent(s): WATERMARK PATENT AND TRADE MARKS ATTORNEYS; WATERMARK INTELLECTUAL PROPERTY PTY LTD; GRIFFITH HACK

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

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
AU198938518 A1	19900123	LSPB	+	published / reissued	

AU613298 B2	19910725	LSGT	+	granted / extensions (spc, cpc, pte)	
AU613298 B2	20090616	PEXP		Calculated Patent Term Expiry	
DK51590 A	19900227	LSPB	+	published / reissued	
DK51590 A	19950227	LSWD	-AHB	APPLICATION SHELVED DUE TO NON-PAYMENT	
EP0393164 A1	19901024	LSPB	+	published / reissued	
EP0393164 A1	19901024	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19900515
EP0393164 A4	19910703	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	EFFECTIVE DATE : 19910516
EP0393164 A4	19920520	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 19920402
EP0393164 A4	19940406	LSWD	-18W	APPLICATION WITHDRAWN	DATE APPLICATION WITHDRAWN : 19940210
JP3501485 T2	19910404	LSPB	+	published / reissued	
NO900927 A	19900423	LSPB	+	published / reissued	
NZ229356 A	19910226	LSPB	+	published / reissued	
PT90994 A	19891229	LSPB	+	published / reissued	
US4917892 A	19900417	LSGT	+	granted / extensions (spc, cpc, pte)	
US4917892 A	19880628	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : TEMPLE UNIVERSITY OF PHILADELPHIA, PENNSYLVANIA, 1 OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNORS:SPEAKER, TULLY J.; CHANG, FRANK N.; HSU, STEPHEN C.; REEL/FRAME:004894/0675 EFFECTIVE DATE : 19880614
US4917892 A	19880628	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : TEMPLE UNIVERSITY OF PHILADELPHIA, PENNSYLVANIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:SPEAKER, TULLY J.; CHANG, FRANK N.; HSU, STEPHEN C.; REEL/FRAME:004894/0675 EFFECTIVE DATE : 19880614
US4917892 A	19900710	LSGT	PAT1	Patented Case	
US4917892 A	19900710	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US4917892 A	19930907	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US4917892 A	19970915	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US4917892 A	20011206	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US4917892 A	20080628	PEXP		Calculated Patent Term Expiry	
WO9000048 A1	19900111	LSPB	+	published / reissued	
WO9000048 A1	19900213	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1989907899 COUNTRY OF REF DOCUMENT : EP
WO9000048 A1	19901024	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL	REF DOCUMENT NUMBER : 1989907899 COUNTRY OF REF DOCUMENT : EP

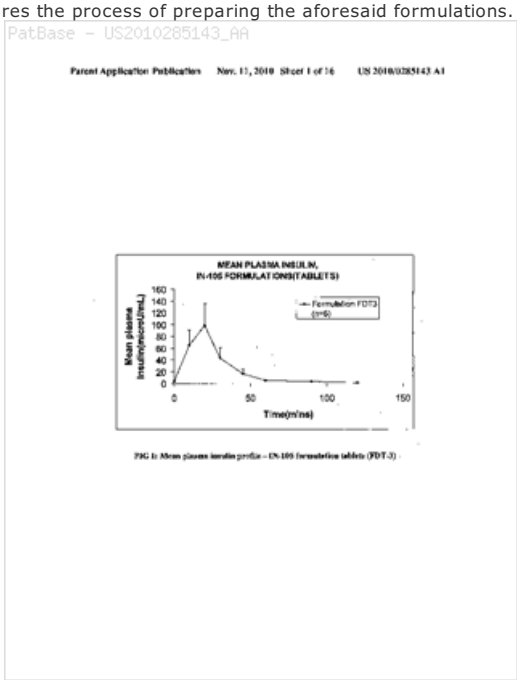
				OFFICE	
WO9000048 A1	19940210	LSWD	-WWW	WIPO INFORMATION: WITHDRAWN IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1989907899 COUNTRY OF REF DOCUMENT : EP
ZA8904308 A	19900228	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA8904308 A	20090606	PEXP		Calculated Patent Term Expiry	

85) Family number: 43175038 (US2010285143A)

Title: ORALLY ADMINISTERABLE SOLID PHARMACEUTICAL COMPOSITION AND A PROCESS THEREOF

Abstract: The invention relates to improvised pharmaceutical compositions permitting ingestion via oral delivery of proteins/peptides or their conjugates, and/or cation-insulin conjugate complexes demonstrating desirable pharmacokinetic profiles and potency in efficacy models of diabetes in dogs and humans. A preferred formulation comprises 0.01 percent -20 percent w/w of insulin, insulin compound conjugates and/or cation insulin conjugates, 10 percent -60 percent w/w of one or more fatty acid components selected from saturated or unsaturated C4-C12 fatty acids and/or salts of such fatty acids and additionally contains optimal amounts of other pharmaceutically suitable polymer excipients which permit improved solubility, dissolution rate and effective bioavailability of poorly water soluble compositions and consistent in-vivo release profiles upon scalability during manufacture. A further aspect of the invention features the process of preparing the aforesaid formulations.

Classifications:
International (IPC 8-9): A61J3/10 A61K A61K38/28 A61K47/12 A61K47/14 A61K47/20 A61K47/26 A61K47/32 A61K47/36 A61K47/38 A61K47/40 A61K47/42 A61K47/48 A61K47/50 A61K47/54 A61K9/00 A61K9/14 A61K9/16 A61K9/20 A61K9/22 A61P3/10 (Advanced/Invention);
A61K38/28 A61K47/14 A61K47/48 A61K9/20 A61P3/10 (Advanced/Non-invention);
A61K38/28 A61K47/12 A61K47/14 A61K47/48 A61K9/20 (Core/Invention);
A61K (Subclass/Invention)
International (IPC 1-7): A61K
CPC: A61K9/2054 A61K9/2077 A61K9/1617 A61K9/2013 A61K9/2018 A61K47/542 A61K47/543 A61P3/10 A61K38/28 A61K9/20 A61K47/14 A61K47/50
European: A61K38/28 A61K47/48H4C A61K47/48H4F A61K9/16H4 A61K9/20H4 A61K9/20H4B A61K9/20K2
US: 1/1 424/499 424/499P 514/5.9 514/5.900S



Family:

Publication number	Publication date	Application number	Application date
AU2008313248 AA	20090423	AU20080313248	20081016
AU2008313248 BB	20120426	AU20080313248	20081016
BRPI0818004 A2	20150414	BR2008PI18004	20081016
BRPI0818004 B1	20200707	BR2008PI18004	20081016
CA2702892 AA	20100416	CA20082702892	20081016
CA2702892 C	20170228	CA20082702892	20081016
CN101939023 A	20110105	CN200880120011	20081016
CN101939023 B	20160803	CN200880120011	20081016
DK2203181 T3	20180528	DK20080840520T	20081016
EP2203181 A2	20100707	EP20080840520	20081016
EP2203181 A4	20130116	EP20080840520	20081016
EP2203181 B1	20180214	EP20080840520	20081016
ES2664822 T3	20180423	ES20080840520T	20081016
HK1150970 A1	20120120	HK20110105048	20110523
HK1150970 B	20171020	HK20110105048	20110523
IN02340CH2007 A	20090911	IN2007CH02340	20071016
IN297120 B	20180601	IN2007CH02340	20071016
JP2011511759 T2	20110414	JP20100529507T	20081016
JP5868594 B2	20160224	JP20100529507T	20081016
KR101234540 B1	20130219	KR20107010449	20081016
KR20100077195 A	20100707	KR20107010449	20081016
MX2010003979 A1	20100602	MX20100003979	20081016
NZ585135 A	20120831	NZ20080585135	20081016
PL2203181 T3	20180731	PL20080840520T	20081016
PT2203181 T	20180510	PT20080840520T	20081016
RU2010119545 A	20111127	RU20100119545	20081016
RU2453332 C2	20120620	RU20100119545	20081016
UA101336 C2	20130325	UA20100004294	20081016
UA114700 C2	20170725	UA20130002142	20081016
US2010285143 AA	20101111	US20080682825	20081016
US9241908 BB	20160126	US20080682825	20081016
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WO09050738 A3	20090611	WO2008IN00683	20081016
ZA201002789 A	20101229	ZA20100002789	20100421

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Inventor(s): (std): CHIVUKULA SUDHEER ; DAVE NITESH ; IYER HARISH ; KHEDKAR ANAND ; MELARKODE RAMAKRISHNAN ; MURTHY SHANMUGAM THANDAVA ; PAI HARISH VENKATRAMAN ; RADHAKRISHNAN DEVESH ; RAMAKRISHNA RANJITH ; RANGAPPA SHARATH KUMAR MALLAPURA ; SENGUPTA NILANJAN ; SHANKAR SUNDARESH ; SUBRAMANI RAMESH ; SUBRAMINI ; SUNDARESH ; SUNDHEER ; THANDAVA ; VENKATRAMAN HARISH ; SHARATH ; SHANMUGAM ; SHAKAR ; SENGUPTA ; RANJITH ; RANGAPPA ; RAMESH ; RAMAKRISHNAN ; RAMAKRISHNA ; RADHAKRISHNAN ; PAI ; NILANJAN ; MURTHY ; MELARKODE ; MALLAPURA ; KUMAR ; KHEDKAR ; IYER ; HARISH ; DEVESH ; CHIVUKULA ; ANAND ; VENKATRAMAN PAI HARISH ; THANDAVA MURTHY SHANMUGAM ; SUDHEER CHIVUKULA ; SHANMUGAM THANDAVA MURTHY ; SENDZHUPTA NILANDZHAN ; RANJITH RAMAKRISHNA ; RANGAPPA SHARFTH KUMAR MALLAPURA ; RANGAPPA SHARATKH KUMAR MALLAPURA ; RANGAPPA SHARATH ; RAMESH SUBRAMANI ; RAMAKRISHNA RANDZHITKH ; RADKHAKRISHNAN DAVESH ; PAJ KHARISH VENKATRAMAN ; MURTKHI SHANMUGAM TKHANDAVA ; MURTHY SHANMUGAM ; KKHEDKAR ANAND ; JER KHARISH ; IVER HARISH ; HARISH VENKATRAMAN PAI ; DEVESH RADHAKRISHNAN ; CHIVUKULA SUDKHEER ; CHIVUCULA SUDHEER ; ANAND KHEDKAR ; SUNDARESH SHANKAR ; RAMAKRISHNAN MELARKODE ; NITESH DAVE ; NILANJAN SENGUPTA ; MALLAPURA RANGAPPA SHARATH KUMAR ; HARISH IYER ; SUBRAMINI RAMESH ; SHAKAR SUNDARESH ; CHIVUKULA SUNDHEER ; SHARATH SHARATH KUMAR MALLAPURA

Inventor(s): SHARATH KUMAR MR ; SHARATH KUMAR MALLAPURA RANGAPPA ; ANAND PRAKASH KHEDKAR ; RAMESH S ; SUDHEER CHIVUCULA ; HARISH VENKATRAMAN

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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)

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Patent	Date recorded	Event group	Code	Event	Details
AU2008313248 AA	20090423	LSPB	+	published / reissued	
AU2008313248 BB	20120426	LSGT	+	granted / extensions (spc, cpc, pte)	
AU2008313248 BB	20120823	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU2008313248 BB	20281016	PEXP		Calculated Patent Term Expiry	
BRPI0818004 A2	20180320	LSES	B07D	TECHNICAL EXAMINATION (OPINION) RELATED TO ARTICLE 229 OF INDUSTRIAL PROPERTY LAW	
BRPI0818004 A2	20180320	LSES	B07D	TECHNICAL EXAMINATION (OPINION) RELATED TO ARTICLE 229 OF INDUSTRIAL PROPERTY LAW	TEXT : DE ACORDO COM O ARTIGO 229-C DA LEI NO 10196/2001, QUE MODIFICOU A LEI NO 9279/96, A CONCESSAO DA PATENTE ESTA CONDICIONADA A ANUENCIA PREVIA DA ANVISA. CONSIDERANDO A APROVACAO DOS TERMOS DO PARECER NO 337/PGF/EA/2010, BEM COMO A PORTARIA INTERMINISTERIAL NO 1065 DE 24/05/2012, ENCAMINHA-SE O PRESENTE PEDIDO PARA AS PROVIDENCIAS CABIVEIS.
BRPI0818004 A2	20200218	LSES	B07A	TECHNICAL EXAMINATION (OPINION): PUBLICATION OF TECHNICAL EXAMINATION (OPINION)	
BRPI0818004 A2	20200602	LSGT	B09A	DECISION: INTENTION TO GRANT	
BRPI0818004 B1	20200707	LSGT	+B16A	PATENT OR CERTIFICATE OF ADDITION OF INVENTION GRANTED	TEXT : PRAZO DE VALIDADE: 10 (DEZ) ANOS CONTADOS A PARTIR DE 07/07/2020, OBSERVADAS AS CONDICOES LEGAIS.
BRPI0818004 B1	20300707	PEXP		Calculated Patent	

				Term Expiry	
CA2702892 AA	20100416	LSPB	+	published / reissued	
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CA2702892 C	20170228	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2702892 C	20281016	PEXP		Calculated Patent Term Expiry	
CN101939023 A	20110105	LSPB	+	published / reissued	
CN101939023 A	20110105	LSPB	+C06	PUBLICATION	
CN101939023 B	20160803	LSGT	+	granted / extensions (spc, cpc, pte)	
CN101939023 B	20160803	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN101939023 B	20281016	PEXP		Calculated Patent Term Expiry	
DK2203181 T3	20180528	LSGT	+	granted / extensions (spc, cpc, pte)	
DK2203181 T3	20281016	PEXP		Calculated Patent Term Expiry	
EP2203181 A2	20100707	LSPB	+	published / reissued	
EP2203181 A2	20100707	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20100423
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EP2203181 A4	20131009	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20130909
EP2203181 A4	20170913	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20170817
EP2203181 B1	20180214	LSGT	+	granted / extensions (spc, cpc, pte)	
EP2203181 B1	20180214	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20180108
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EP2203181 B1	20180215	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP2203181 B1	20180307	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
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EP2203181 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 FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20180214
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EP2203181 B1	20200131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20191014 YEAR OF FEE PAYMENT : 12
EP2203181 B1	20200131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20191015 YEAR OF FEE PAYMENT : 12
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ES2664822 T3	20180423	LSGT	+	granted / extensions (spc, cpc, pte)	
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HK1150970 A1	20120120	LSPB	+	published / reissued	
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				cpc, pte)	
HK1150970 B	20310523	PEXP		Calculated Patent Term Expiry	
IN02340CH2007 A	20090911	LSPB	+	published / reissued	
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IN297120 B	20271016	PEXP		Calculated Patent Term Expiry	
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JP2011511759 T2	20121219	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20121218
JP2011511759 T2	20130419	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20130418
JP2011511759 T2	20131218	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20131217
JP2011511759 T2	20140418	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20140417
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JP2011511759 T2	20140714	LSAL	-A912	REMOVAL OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A912 EFFECTIVE DATE : 20140711
JP2011511759 T2	20150903	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20150903
JP2011511759 T2	20151105	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20151105
JP2011511759 T2	20160114	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20160106
JP2011511759 T2	20160115	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 5868594 COUNTRY OF REF DOCUMENT : JP
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JP5868594 B2	20151224	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP5868594 B2	20160112	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP5868594 B2	20160115	LSGT	+R150	特許証 (Patent certificate)	
JP5868594 B2	20190104	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5868594 B2	20190108	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5868594 B2	20200110	LSFE	R20	特許料納付書 (Patent fee payment form)	EFFECTIVE DATE : 20200109
JP5868594 B2	20200114	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
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KR101234540 B1	20130219	LSGT	+	granted / extensions (spc, cpc, pte)	
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KR20100077195 A	20121120	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
KR20100077195 A	20130213	LSGT	+GRNT	WRITTEN DECISION TO GRANT	
MX2010003979 A1	20100602	LSPB	+	published / reissued	
MX2010003979 A1	20120412	LSGT	+FG	GRANT OR REGISTRATION	
NZ585135 A	20120831	LSPB	+	published / reissued	
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PT2203181 T	20281016	PEXP		Calculated Patent Term Expiry	
RU2010119545 A	20111127	LSPB	+	published / reissued	
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RU2453332 C2	20281016	PEXP		Calculated Patent Term Expiry	

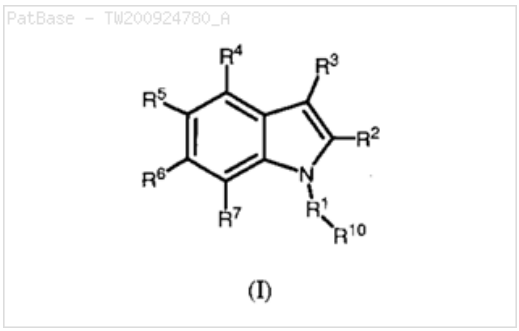
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UA101336 C2	20281016	PEXP		Calculated Patent Term Expiry	
UA114700 C2	20170725	LSGT	+	granted / extensions (spc, cpc, pte)	
UA114700 C2	20281016	PEXP		Calculated Patent Term Expiry	
US2010285143 AA	20101111	LSPB	+	published / reissued	
US2010285143 AA	20160106	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US9241908 BB	20160126	LSGT	+	granted / extensions (spc, cpc, pte)	
US9241908 BB	20100517	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BIOCON LIMITED, INDIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:KHEDKAR, ANAND; RANGAPPA, SHARATH KUMAR MALLAPURA; SUBRAMANI, RAMESH; AND OTHERS; REEL/FRAME:024391/0856 EFFECTIVE DATE : 20100511
US9241908 BB	20151214	LSFE	+PPR1	Publications -- Issue Fee Payment Received	
US9241908 BB	20151218	LSFE	+PPV1	Publications -- Issue Fee Payment Verified	
US9241908 BB	20160106	LSGT	PAT1	Patented Case	
US9241908 BB	20190711	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US9241908 BB	20300425	PEXP		Calculated Patent Term Expiry (PTA 556 days)	
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WO09050738 A2	20081016	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 200880120011.6 COUNTRY OF REF DOCUMENT : CN
WO09050738 A3	20100412	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : MX/A/2010/003979 COUNTRY OF REF DOCUMENT : MX
WO09050738 A3	20100413	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 12682825 COUNTRY OF REF DOCUMENT : US
WO09050738 A3	20100415	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2010529507 COUNTRY OF REF DOCUMENT : JP
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WO09050738 A3	20100418	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2010040634 COUNTRY OF REF DOCUMENT : EG
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ZA201002789 A	20101229	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA201002789 A	20300420	PEXP		Calculated Patent Term Expiry	

86) Family number: 43003038 (US2011104110A)

Title: SUBSTITUTED INDOLE DERIVATIVES AND METHODS OF USE THEREOF

Abstract: The present invention relates to Substituted Indole Derivatives, compositions comprising at least one Substituted Indole Derivative, and methods of using these Substituted Indole Derivatives for treating or preventing a viral infection or a virus-related disorder in a patient.



(I)

Classifications:
International (IPC 8-9): A61K A61K31/404 A61K31/4184 A61K31/426 A61K31/428 A61K31/4365 A61K31/437 A61K31/4375 A61K31/4402 A61K31/4427 A61K31/4439 A61K31/444 A61K31/4545 A61K31/47 A61K31/4709 A61K31/498 A61K31/506 A61K31/513 A61K31/517 A61K31/519 A61K31/5377 A61K31/675 A61K31/7052 A61K31/7056 A61K31/7088 A61K38/21 A61K39/12 A61K39/395 A61K39/42 A61K45/00 A61P A61P1/16 A61P31/12 A61P31/14 C07D C07D209/42 C07D211/88 C07D213/60 C07D213/61 C07D213/64 C07D215/18 C07D239/88 C07D239/96 C07D241/44 C07D249/18 C07D275/04 C07D277/18 C07D401/04 C07D401/14 C07D403/04 C07D403/14 C07D405/14 C07D409/14 C07D413/14 C07D417/14 C07D471/04 C07D487/04 C07D491/147 C07D495/04 C07F9/6558 (Advanced/Invention);
A61K31/404 A61K31/513 A61K31/7052 A61K45/00 A61P31/12 C07D209/42 C07D401/04 C07D403/04 C07D471/04 C12N15/09 (Advanced/Non-invention);
A61K31/513 A61P31/00 C07D401/00 C07D403/00 (Core/Invention);
A61K31/4709 A61K31/517 A61P31/12 C07D401/04 C07D401/14 (Core/Non-invention)
International (IPC 1-7): A61J31/403 A61J31/506 A61K31/513 A61P3/14 C07D209/10 C07D213/16 C07D239/24 C07D239/28 C07D401/04 C07D403/04
CPC: C07D401/04 C07D403/04 A61P1/16 A61P3/14 A61P31/12 A61P31/14
European: C07D401/04 C07D403/04
US: 424/147.1 424/147.100S 424/159.1 424/159.100S 424/204.1 424/204.100S 424/85.4 424/85.400P 514/235.2 514/235.200S 514/249 514/249S 514/259.41 514/259.410S 514/266.21 514/266.210S 514/274 514/274S 514/275 514/275S 514/287 514/287S 514/300 514/300S 514/311 514/312 514/312S 514/313 514/313S 514/314 514/314S 514/333 514/333S 514/338 514/338S 514/339 514/339S 514/352 514/369 514/373 514/395 514/419 514/419S 514/43 514/43S 514/44.00AS 514/44A 514/80 514/80S 544/131 544/131S 544/282 544/282S 544/284 544/284S 544/285 544/286 544/287 544/310 544/310S 544/331 544/331S 544/354 544/354S 544/356 546/113 546/113S 546/122 546/122S 546/152 546/157 546/157S 546/159 546/159S 546/167 546/167S 546/24 546/24S 546/256 546/256S 546/268.4 546/268.400S 546/268.7 546/268.700S 546/270.7 546/270.700S 546/271.1 546/271.100S 546/273.4 546/273.400S 546/275.7 546/275.700S 546/278.1 546/278.100S 546/290 546/300 546/64 546/64S 548/190 548/212 548/257 548/306.1 548/364.7 548/492 548/492S

Family:

Publication number	Publication date	Application number	Application date
AR068106 AA	20091104	AR2008P103715	20080827
AU2008295484 AA	20090312	AU20080295484	20080827
AU2008295484 BB	20130926	AU20080295484	20080827
BRPI0815811 A2	20150218	BR2008PI15811	20080827
CA2697454 AA	20090312	CA20082697454	20080827
CA2697454 C	20151103	CA20082697454	20080827
CL2008002539 A1	20090717	CL20080002539	20080828
CN101821252 A	20100901	CN200880110744	20080827
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ECSP100004 A	20100331	EC2010SP00004	20100226
ECSP10010004 A	20100331	EC2010SP10004	20100226
EP2408761 A1	20120125	EP20080795629	20080827
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ES2447543 T3	20140312	ES20080795629T	20080827
HK1160853 A1	20120817	HK20120101279	20120209
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IN01098CN2010 A	20100806	IN2010CN01098	20100226
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JP2013100375 A2	20130523	JP20130042524	20130305
JP5272008 B2	20130828	JP20100522934T	20080827
KR20100067652 A	20100621	KR20107006433	20080827
MX2010002317 A1	20100322	MX20100002317	20080827
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PE20090630 A1	20090516	PE20080001453	20080827
RU2010111551 A	20111010	RU20100111551	20080827
TW200924780 A	20090616	TW20080132796	20080827
US2011104110 AA	20110505	US20080675891	20080827
US8614229 BB	20131224	US20080675891	20080827
WO09032124 A1	20090312	WO2008US10148	20080827

Priority:

US20070968698P 20070829 EP20080795629 20080827 JP20100522934 20080827
WO2008US10148 20080827 US20080675891 20080827 JP20100522934T 20080827

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Assignee(s): SHERING CORP ; SCHERING CORPORATIONUS ; MERCK SHARP AND DOHME CORP ; MERCK SHARP AND DOHME CORP RAHWAY ; NJOROGE F

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Inventor(s):	VENKATRAMAN SRIKANTH EDISON ; ANILKUMAR ; ZENG QINGBEI EDISON ; VELAZQUEZ FRANCISCO CLINTON ; SANNIGRAHI MOUSUMI SUMMIT ; STUART B ROSENBLUM ; SHIH, NENG-YANG ; KEVIN X CHEN ; JOSEPH A KOZLOWSKI ; JOSE S DUCA ; GOPINADHAN N ANILKUMAR ; F GEORGE NJOROGE ; CHARLES A LESBURG ; CHAN, TIN-YAU ; SHIH NENG YANG LEXINGTON ; TIN YAU ; VELAZQUEZ ; ROSENBLUM STUART B WEST ORANGE ; SANNIGRAHI ; NJOROGE F GEORGE WARREN ; KOZLOWSKI JOSEPH A PRINCETON ; LESBURG CHARLES A SHORT HILLS ; MOUSUMI ; GOPINADHAN N ; KEVIN X ; CHEN KEVIN X EDISON ; DUCA JOSE S CRANFORD ; FRANCISCO ; FRANK ; CHAN TIN YAU EDISON ; CHEN ; BENNETT FRANK CRANFORD ; CHAN ; ANILKUMAR GOPINADHAN N EDISON ; BENNETT
Agent(s):	GRIFFITH HACK; NORTON ROSE FULBRIGHT CANADA LLP SENCRL SRL; SARGENT; ABITZ AND PARTNER PATENTANWAELTE MBB; HORGAN JAMES MICHAEL FREDERIC; VALLEJO JUAN PEDRO; SIT FUNG KWONG AND SHUM; SHELDON O; HENRY P; BERGMAN JEFFREY P 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
AR068106 AA	20091104	LSPB	+	published / reissued	
AR068106 AA	20141203	LSWD	-FA	ABANDONMENT OR WITHDRAWAL	
AU2008295484 AA	20090312	LSPB	+	published / reissued	
AU2008295484 BB	20130926	LSGT	+	granted / extensions (spc, cpc, pte)	
AU2008295484 BB	20140123	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU2008295484 BB	20280827	PEXP		Calculated Patent Term Expiry	
BRPI0815811 A2	20150609	LSRV	-B11A	DISMISSAL ACC. ART.33 OF IPL - EXAMINATION NOT REQUESTED WITHIN 36 MONTHS OF FILING	
BRPI0815811 A2	20150908	LSRV	-B11Y	DEFINITIVE DISMISSAL ACC. ARTICLE 33 OF IPL - EXTENSION OF TIME LIMIT FOR REQUEST OF EXAMINATION EXPIRED	
CA2697454 AA	20090312	LSPB	+	published / reissued	
CA2697454 AA	20130905	LSES	+EEER	EXAMINATION REQUEST	EFFECTIVE DATE : 20130826
CA2697454 C	20151103	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2697454 C	20280827	PEXP		Calculated Patent Term Expiry	
CL2008002539 A1	20090717	LSPB	+	published / reissued	
CN101821252 A	20100901	LSPB	+	published / reissued	
CN101821252 A	20100901	LSPB	+C06	PUBLICATION	
CN101821252 A	20130508	LSDW	-C02	DEEMED WITHDRAWAL OF PATENT APPLICATION AFTER PUBLICATION (PATENT LAW	

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ECSP100004 A	20100331	LSPB	+	published / reissued	
ECSP10010004 A	20100331	LSPB	+	published / reissued	
EP2408761 A1	20120125	LSPB	+	published / reissued	
EP2408761 A1	20120125	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20090331
EP2408761 A1	20120815	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : MERCK SHARP & DOHME CORP.
EP2408761 A1	20121010	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20120911
EP2408761 A1	20130821	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20130722
EP2408761 A1	20140829	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 : 20140501
EP2408761 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 : 20140101
EP2408761 A1	20151030	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20150807 YEAR OF FEE PAYMENT : 8
EP2408761 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 : 9
EP2408761 A1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20160812 YEAR OF FEE PAYMENT : 9
EP2408761 A1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20160725 YEAR OF FEE PAYMENT : 9
EP2408761 A1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20160719 YEAR OF FEE PAYMENT : 9
EP2408761 A1	20161230	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20160801 YEAR OF FEE PAYMENT : 9

				NATIONAL OFFICE TO EPO]	
EP2408761 B1	20140101	LSGT	+	granted / extensions (spc, cpc, pte)	
EP2408761 B1	20140101	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP2408761 B1	20140115	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP2408761 B1	20140129	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP2408761 B1	20140215	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 647556 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20140215
EP2408761 B1	20140220	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602008029665 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20140220
EP2408761 B1	20140312	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2447543 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) : EFFECTIVE DATE : 20140312
EP2408761 B1	20140514	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : VDEP EFFECTIVE DATE : 20140101
EP2408761 B1	20140515	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MK05 REF DOCUMENT NUMBER : 647556 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20140101
EP2408761 B1	20140625	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : LT REF LEGAL EVENT CODE : MG4D
EP2408761 B1	20140731	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 : 20140501
EP2408761 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 : 20140101
EP2408761 B1	20140829	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 : 20140101
EP2408761 B1	20140829	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM	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 : 20140101

				NATIONAL OFFICE TO EPO]	
EP2408761 B1	20140829	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 : 20140101
EP2408761 B1	20140829	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 : 20140101
EP2408761 B1	20140829	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 : 20140101
EP2408761 B1	20140829	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 : 20140502
EP2408761 B1	20140930	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 : 20140101
EP2408761 B1	20140930	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 : 20140101
EP2408761 B1	20140930	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 : 20140101
EP2408761 B1	20141002	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 602008029665 COUNTRY OF REF DOCUMENT : DE
EP2408761 B1	20141031	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 : 20140101
EP2408761 B1	20141031	LSLE	-PG25	LAPSED IN A CONTRACTING	COUNTRY OF REF DOCUMENT : DK NOTIFICATIONOFLAPSE : LAPSE

				STATE [ANNOUNCED VIA 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 : 20140101
EP2408761 B1	20141031	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 : 20140101
EP2408761 B1	20141031	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 : 20140101
EP2408761 B1	20141128	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 : 20140101
EP2408761 B1	20141128	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 : 20140101
EP2408761 B1	20141210	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20141002
EP2408761 B1	20150108	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 602008029665 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20141002
EP2408761 B1	20150331	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 : 20140827
EP2408761 B1	20150331	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 : 20140101
EP2408761 B1	20150331	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP2408761 B1	20150430	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 : 20140831

EP2408761 B1	20150430	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 : 20140831
EP2408761 B1	20150529	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 : 20140101
EP2408761 B1	20160429	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 : 20140401
EP2408761 B1	20160531	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 : 20140101
EP2408761 B1	20160630	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 : 20140402
EP2408761 B1	20160630	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 : 20140101
EP2408761 B1	20160719	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 : 9
EP2408761 B1	20160729	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 : 20080827
EP2408761 B1	20160729	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 : 20140101
EP2408761 B1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20160725 YEAR OF FEE PAYMENT : 9

				NATIONAL OFFICE TO EPO]	
EP2408761 B1	20170720	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 10
EP2408761 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170720 YEAR OF FEE PAYMENT : 10
EP2408761 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170825 YEAR OF FEE PAYMENT : 10
EP2408761 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20170816 YEAR OF FEE PAYMENT : 10
EP2408761 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 : 10
EP2408761 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20170905 YEAR OF FEE PAYMENT : 10
EP2408761 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 : 10
EP2408761 B1	20180323	LSWD	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HK REF LEGAL EVENT CODE : WD REF DOCUMENT NUMBER : 1160853 COUNTRY OF REF DOCUMENT : HK
EP2408761 B1	20180718	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 11
EP2408761 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 : 11
EP2408761 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20180814 YEAR OF FEE PAYMENT : 11
EP2408761 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 : 11

EP2408761 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 : 11
EP2408761 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180716 YEAR OF FEE PAYMENT : 11
EP2408761 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 : 11
EP2408761 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20190902 YEAR OF FEE PAYMENT : 12
EP2408761 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20190726 YEAR OF FEE PAYMENT : 12
EP2408761 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20190717 YEAR OF FEE PAYMENT : 12
EP2408761 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20190826 YEAR OF FEE PAYMENT : 12
EP2408761 B1	20191031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20190715 YEAR OF FEE PAYMENT : 12
EP2408761 B1	20191231	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20190728 YEAR OF FEE PAYMENT : 12
EP2408761 B1	20280827	PEXP		Calculated Patent Term Expiry	
ES2447543 T3	20140312	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2447543 T3	20280827	PEXP		Calculated Patent Term Expiry	
HK1160853 A1	20120817	LSPB	+	published / reissued	
IN01098CN2010 A	20100806	LSPB	+	published / reissued	

JP2010537981 T2	20101209	LSPB	+	published / reissued	
JP2010537981 T2	20110413	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20110412
JP2010537981 T2	20120911	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20120910
JP2010537981 T2	20130306	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20130305
JP2010537981 T2	20130415	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2010537981 T2	20130418	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20130417
JP2010537981 T2	20130516	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20130513
JP2010537981 T2	20130517	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP2010537981 T2	20130517	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 5272008 COUNTRY OF REF DOCUMENT : JP
JP2013100375 A2	20130523	LSPB	+	published / reissued	
JP2013100375 A2	20130307	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20130305
JP2013100375 A2	20130823	LSWD	-A761	WRITTEN WITHDRAWAL OF APPLICATION	TEXT : JAPANESE INTERMEDIATE CODE: A761 EFFECTIVE DATE : 20130822
JP5272008 B2	20130828	LSGT	+	granted / extensions (spc, cpc, pte)	
JP5272008 B2	20130425	LSGT	+A01	特許査定書 (Decision of patent grant)	EFFECTIVE DATE : 20130417
JP5272008 B2	20130425	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP5272008 B2	20130514	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP5272008 B2	20130514	LSFE	R100	特許料納付書 (Patent fee payment form)	TEXT : 51300991168 EFFECTIVE DATE : 20130513
JP5272008 B2	20160428	LSFE	R20	特許料納付書 (Patent fee payment form)	TEXT : 51600860898 EFFECTIVE DATE : 20160422
JP5272008 B2	20160428	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5272008 B2	20160510	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5272008 B2	20170508	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5272008 B2	20170508	LSFE	R20	特許料納付書 (Patent fee payment form)	TEXT : 51700934229 EFFECTIVE DATE : 20170428

JP5272008 B2	20170516	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5272008 B2	20180426	LSFE	R20	特許料納付書 (Patent fee payment form)	TEXT : 51800830434 EFFECTIVE DATE : 20180420
JP5272008 B2	20180426	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5272008 B2	20180508	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5272008 B2	20190509	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5272008 B2	20190509	LSFE	R20	特許料納付書 (Patent fee payment form)	TEXT : 51900922945 EFFECTIVE DATE : 20190426
JP5272008 B2	20190514	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5272008 B2	20200428	LSFE	R20	特許料納付書 (Patent fee payment form)	EFFECTIVE DATE : 20200427
JP5272008 B2	20200428	LSFE	R20	特許料納付書 (Patent fee payment form)	TEXT : 52000880510 EFFECTIVE DATE : 20200427
JP5272008 B2	20200430	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5272008 B2	20280827	PEXP		Calculated Patent Term Expiry	
KR20100067652 A	20100621	LSPB	+	published / reissued	
KR20100067652 A	20130928	LSDW	-WITN	WITHDRAWAL DUE TO NO REQUEST FOR EXAMINATION	
MX2010002317 A1	20100322	LSPB	+	published / reissued	
MX2010002317 A1	20100831	LSRE	HH	CORRECTION OR CHANGE IN GENERAL	
MX2010002317 A1	20170331	LSWD	-FA	ABANDONMENT OR WITHDRAWAL	
PE06302009 A1	20090516	LSPB	+	published / reissued	
PE06302009 A1	20110328	LSWD	-FD	APPLICATION DECLARED VOID OR LAPSED	
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US2011104110 AA	20110505	LSPB	+	published / reissued	
US2011104110 AA	20120830	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MERCK SHARP & DOHME CORP., NEW JERSEY OLDPARTY : CHANGE OF NAME; ASSIGNOR:SCHERING CORPORATION; REEL/FRAME:028884/0151 EFFECTIVE DATE : 20120502
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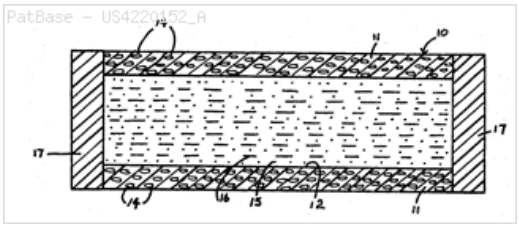
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US8614229 BB	20100519	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SCHERING CORPORATION, NEW JERSEY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ANILKUMAR, GOPINADHAN N.; BENNETT, FRANK; CHAN, TIN-YAU; AND OTHERS; SIGNING DATES FROM 20080921 TO 20081028; REEL/FRAME:024408/0937
US8614229 BB	20100610	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SCHERING CORPORATION, NEW JERSEY OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE ASSIGNOR: ZENG, QINGBEI DOC DATE: 09/21/2008 PREVIOUSLY RECORDED ON REEL 024408 FRAME 0937. ASSIGNOR(S) HEREBY CONFIRMS THE ASSIGNOR: ZENG, QINGBEI DOC DATE: 09/24/2008; ASSIGNORS:ANILKUMAR, GOPINADHAN N.; BENNETT, FRANK; CHAN, TIN-YAU; AND OTHERS; SIGNING DATES FROM 20080924 TO 20081028; REEL/FRAME:024513/0328
US8614229 BB	20131204	LSGT	PAT1	Patented Case	
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US8614229 BB	20170525	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
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WO09032124 A1	20090312	LSPB	+	published / reissued	
WO09032124 A1	20080827	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 200880110744.1 COUNTRY OF REF DOCUMENT : CN
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87) Family number: 10951040 (US4220152A)

Title: DELIVERY SYSTEM

Abstract: Delivery systems and devices for the controlled release of chemicals, including drugs, comprising a wall, formed in part at least, of a porous material, pores of which contain a hydrogel, said porous wall in contact with at least a portion of a reservoir comprised of a chemical and, if desired, a water-soluble liquid excipient and/or a detergent; process for preparation thereof, and use for the controlled release of chemicals, including drugs, to an aqueous liquid-containing environment. Emphasis is given to said systems and devices in which the porous material is a sintered plastic and gelled cellulose triacetate is the hydrogel, and to their use for controlled release of drugs to animals, especially to ruminants over prolonged periods of time.



Classifications:
International (IPC 8-9): A61D7/00 A61J3/07 A61K9/00 A61K9/22 A61K9/52 A61M31/00 A61M5/00 (Advanced/Invention); A61D7/00 A61J3/07 A61K9/22 A61K9/52 (Advanced/Non-invention); A61D7/00 A61J3/07 A61K9/00 A61K9/22 A61K9/52 A61M31/00 (Core/Invention)
International (IPC 1-7): A01M17/00 A01N25/34 A61D7/00 A61J1/00 A61J3/00 A61J3/07 A61J7/00 A61K27/00 A61K47/00 A61K9/00 A61K9/20 A61K9/22 A61K9/52 A61K9/58 A61K9/66 A61K9/70 A61M31/00 A61M37/00 A61M37/04 A61M5/00 A61M7/00 B01F1/00 B01J4/00 B01J4/02 C02F1/50 C08L1/12
CPC: A61K9/0068
European: A61K9/00M18G
US: 128/260 424/438 424/439 424/473 604/500

Family:

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RO81625 P	19830429	RO19790097439	19790507
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SE440449 C	19851114	SE19790003973	19790507
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Priority:

US19780904049 19780508 US19780904078 19780508 US19790014387 19790222
US19790014388 19790222 CA19790327100 19790507 YU19790001066 19790507

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Inventor(s): DRESBACK DAVID SAMUEL GROTON CONN ; DRESBACK DAVID SAMUEL GROTON CONN US ; D S DRESBACK ; SAMUEL DRESBACK DAVID ; DS DRESBACK ; DRESBACK DS ; DRESBACK DAVID S US ; DEEBITSUDO SAMYUERU DORESUBATSUKU ; DEVID SAMUEL DRESBAK US ; DAVID SAMUEL DRESBACK DAVID SAMUEL DRESBACK

Agent(s): SPRUSON AND FERGUSON; SMART AND BIGGAR; LUZZATTO AND LUZZATTO

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
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AR219795 A1	19990508	PEXP		Calculated Patent Term Expiry	
AT339379 A	19890515	LSPB	+	published / reissued	
AT389463 B	19891211	LSGT	+	granted / extensions (spc, cpc, pte)	
AT389463 B	20040115	LSLE	-ELJ	CEASED DUE TO NON-PAYMENT OF THE ANNUAL FEE	
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SE440449 B	19990802	LSLE	-NUG	PATENT HAS LAPSED	TEXT : 7903973-1
SE440449 C	19851114	LSGT	+	granted / extensions (spc, cpc, pte)	
SE440449 C	19990507	PEXP		Calculated Patent Term Expiry	
SU1222186 A3	19860330	LSGT	+	granted / extensions (spc, cpc, pte)	
US4220152 A	19800902	LSGT	+	granted / extensions (spc, cpc, pte)	
US4220152 A	19800902	LSGT	PAT1	Patented Case	
US4220152 A	19990222	PEXP		Calculated Patent Term Expiry	
US4220153 A	19800902	LSGT	+	granted / extensions (spc, cpc, pte)	
US4220153 A	19800902	LSGT	PAT1	Patented Case	
US4220153 A	19990222	PEXP		Calculated Patent Term Expiry	
YU106679 A	19841031	LSPB	+	published / reissued	
ZA7902129 A	19800528	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA7902129 A	19990502	PEXP		Calculated Patent Term Expiry	
ZM4079 A	19810223	LSGT	+	granted / extensions (spc, cpc, pte)	
ZM4079 A	19950508	PEXP		Calculated Patent Term Expiry	

88) Family number: 43257040 (US2009130199A)

Title: PREPARATIONS, METHODS AND KITS USEFUL FOR THE TREATMENT OF COUGH

Abstract: The invention relates to a respiratory preparation providing cough relief in a human comprising: a film forming agent; a thickening agent; and the respiratory preparation provides on demand relief. Additionally, the invention relates to a method of providing cough relief in a human comprising: the steps of administering to a human a respiratory preparation comprising: a film forming agent; a thickening agent; and wherein said respiratory preparation provides on demand cough relief as needed.

Classifications:
International (IPC 8-9): A61J7/00 A61K31/16 A61K35/74 A61K47/10 A61K47/26 A61K47/30 A61K47/34 A61K47/36 A61K47/38 A61K47/42 A61K47/44 A61K9/00 A61K9/06 A61K9/08 A61K9/12 A61K9/20 A61K9/48 A61K9/68 A61M15/00 A61P1/04 A61P11/14 (Advanced/Invention);
A61J7/00 A61K35/66 A61K47/10 A61K47/26 A61K47/34 A61K47/36 A61K47/38 A61K9/00 A61K9/20 A61K9/48 A61K9/68 A61M15/00 A61P11/00 (Core/Invention)
International (IPC 1-7): A61K47/38 A61K47/38
CPC: A61K9/006 A61K9/0073 A61K31/16 A61K47/36 A61K47/38 A61K9/0053 A61K9/007 A61K47/10 A61P1/04 A61P11/14
European: A61K47/36 A61K47/38 A61K9/00M18D A61K9/00M20B
US: 1/1 128/203.12 128/203.120S 424/455 424/455P 424/464 424/464S 424/48 424/48P 424/48S 424/93.4 424/93.400S 514/629 514/772 514/772.5 514/772.500S 514/778 514/778S 514/781 604/78 604/78S

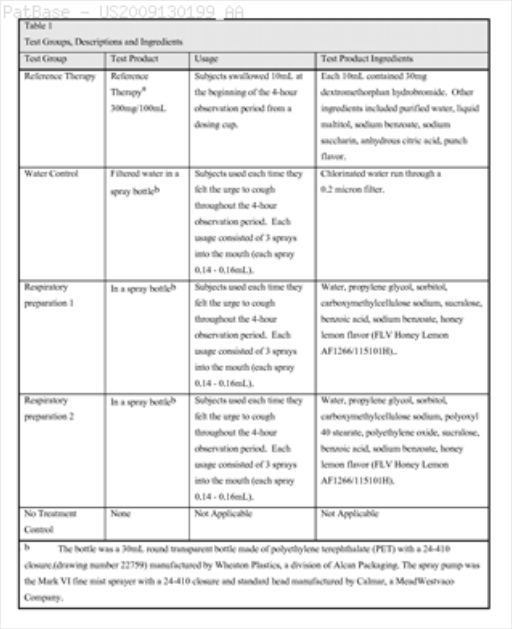

PatBase – US2009130199 AA

Table 1
Test Groups, Descriptions and Ingredients

Test Group	Test Product	Usage	Test Product Ingredients
Reference Therapy	Reference Therapy* 300mg/100mL	Subjects swallowed 10mL at the beginning of the 4-hour observation period from a dosing cup.	Each 10mL contained 30mg dextromethorphan hydrobromide. Other ingredients included purified water, liquid maltitol, sodium benzoate, sodium saccharin, anhydrous citric acid, punch flavor.
Water Control	Filtered water in a spray bottle[b]	Subjects used each time they felt the urge to cough throughout the 4-hour observation period. Each usage consisted of 3 sprays into the mouth (each spray 0.14 - 0.16mL).	Chlorinated water run through a 0.2 micron filter.
Respiratory preparation 1	In a spray bottle[b]	Subjects used each time they felt the urge to cough throughout the 4-hour observation period. Each usage consisted of 3 sprays into the mouth (each spray 0.14 - 0.16mL).	Water, propylene glycol, sorbitol, carboxymethylcellulose sodium, sucralose, benzoic acid, sodium benzoate, honey lemon flavor (FLV Honey Lemon AF1266/115101H),.
Respiratory preparation 2	In a spray bottle[b]	Subjects used each time they felt the urge to cough throughout the 4-hour observation period. Each usage consisted of 3 sprays into the mouth (each spray 0.14 - 0.16mL).	Water, propylene glycol, sorbitol, carboxymethylcellulose sodium, polyoxyl 40 stearate, polyethylene oxide, sucralose, benzoic acid, sodium benzoate, honey lemon flavor (FLV Honey Lemon AF1266/115101H).
No Treatment Control	None	Not Applicable	Not Applicable

b The bottle was a 30mL round transparent bottle made of polyethylene terephthalate (PET) with a 24-410 closure.(drawing number 22759) manufactured by Wheaton Plastics, a division of Alcan Packaging. The spray pump was the Mark VI fine mist sprayer with a 24-410 closure and standard head manufactured by Calmar, a MeadWestvaco Company.

Family:

Publication number	Publication date	Application number	Application date
AU2008326386 AA	20090528	AU20080326386	20081120
AU2008326386 BB	20140731	AU20080326386	20081120
BRPI0819338 A2	20150519	BR2008PI19338	20081120
BRPI0819819 A2	20150526	BR2008PI19819	20081120
CA2706440 AA	20090528	CA20082706440	20081120
CA2706440 C	20140325	CA20082706440	20081120
CA2706472 AA	20090528	CA20082706472	20081120
CN101868252 A	20101020	CN200880117164	20081120
CN101868253 A	20101020	CN200880117338	20081120
EP2217279 A2	20100818	EP20080852500	20081120
EP2217279 B1	20171101	EP20080852500	20081120
EP2219677 A1	20100825	EP20080851503	20081120
ES2655477 T3	20180220	ES20080852500T	20081120
IN03356DN2010 A	20101022	IN2010DN03356	20100512
IN03357DN2010 A	20101022	IN2010DN03357	20100512
JP2011504184 T2	20110203	JP20100535069T	20081120
MX2010005642 A1	20100730	MX20100005642	20081120
MX2010005643 A1	20100730	MX20100005643	20081120
MX337194 B	20160215	MX20100005643	20081120
RU2010116996 A	20111227	RU20100116996	20081120
RU2476240 C2	20130227	RU20100116996	20081120
US2009130199 AA	20090521	US20080274705	20081120
US2009155189 AA	20090618	US20080274677	20081120
US2016000925 AA	20160107	US20150830861	20150820
US9149429 BB	20151006	US20080274705	20081120
WO09066262 A1	20090528	WO2008IB54886	20081120
WO09067605 A2	20090528	WO2008US84201	20081120
WO09067605 A3	20100211	WO2008US84201	20081120

Priority:

US20070003886 20071121
US20080028547P 20080214
US20080274705 20081120
US20150830861 20150820
US20070003886P 20071121
EP20080852500 20081120
WO2008US84201 20081120
US20080028547 20080214
US20080274677 20081120
WO2008IB54886 20081120

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Inventor(s): WILLIAMS KRISTIN ; MARY LYNN JUMP ; SARGENT JEFFREY ; STEPHEN ANDRAS KOVACS ; KRISTIN

	RHEDRICK WILLIAMS ; KEMP KHELEN ROSHELL' ; KOVACS STEPHEN ; HELEN ROCHELLE KEMP ; JEFFREY ALAN SARGENT ; JUMP MARY ; KEMP HELEN
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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
AU2008326386 AA	20090528	LSPB	+	published / reissued	
AU2008326386 BB	20140731	LSGT	+	granted / extensions (spc, cpc, pte)	
AU2008326386 BB	20141127	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU2008326386 BB	20281120	PEXP		Calculated Patent Term Expiry	
BRPI0819338 A2	20151201	LSFE	-B08F	APPLICATION FEES: DISMISSAL - ARTICLE 86 OF INDUSTRIAL PROPERTY LAW	TEXT : REFERENTE AS 4A, 5A, 6A E 7A ANUIDADES.
BRPI0819338 A2	20160405	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.
BRPI0819819 A2	20170919	LSFE	-B08F	APPLICATION FEES: DISMISSAL - ARTICLE 86 OF INDUSTRIAL PROPERTY LAW	
BRPI0819819 A2	20180109	LSLE	-B08K	LAPSE AS NO EVIDENCE OF PAYMENT OF THE ANNUAL FEE HAS BEEN FURNISHED TO INPI (ACC. ART. 87)	
CA2706440 AA	20090528	LSPB	+	published / reissued	
CA2706440 AA	20100520	LSES	+EEER	EXAMINATION REQUEST	
CA2706440 C	20140325	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2706440 C	20281120	PEXP		Calculated Patent Term Expiry	
CA2706472 AA	20090528	LSPB	+	published / reissued	
CA2706472 AA	20100520	LSES	+EEER	EXAMINATION REQUEST	
CA2706472 AA	20130115	LSLE	-FZDE	DEAD	EFFECTIVE DATE : 20121120
CN101868252 A	20101020	LSPB	+	published / reissued	
CN101868252 A	20101020	LSPB	+C06	PUBLICATION	
CN101868252 A	20120711	LSDW	-C02	DEEMED WITHDRAWAL OF PATENT APPLICATION AFTER PUBLICATION (PATENT LAW 2001)	
CN101868253 A	20101020	LSPB	+	published /	

				reissued	
CN101868253 A	20101020	LSPB	+C06	PUBLICATION	
CN101868253 A	20131030	LSRV	-C12	REJECTION OF A PATENT APPLICATION AFTER ITS PUBLICATION	
EP2217279 A2	20100818	LSPB	+	published / reissued	
EP2217279 A2	20100818	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20100614
EP2217279 A2	20120411	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20120309
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EP2217279 A2	20171026	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 10
EP2217279 B1	20171101	LSGT	+	granted / extensions (spc, cpc, pte)	
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EP2217279 B1	20171115	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
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EP2217279 B1	20171214	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602008052807 COUNTRY OF REF DOCUMENT : DE
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EP2217279 B1	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20171115 YEAR OF FEE PAYMENT : 10
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EP2217279 B1	20181011	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 11
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EP2217279 B1	20190228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20181114 YEAR OF FEE PAYMENT : 11
EP2217279 B1	20190228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20181203 YEAR OF FEE PAYMENT : 11
EP2217279 B1	20190228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20181011 YEAR OF FEE PAYMENT : 11

				FROM NATIONAL OFFICE TO EPO]	
EP2217279 B1	20190228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20181122 YEAR OF FEE PAYMENT : 11
EP2217279 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 : 20081120
EP2217279 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 FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20171101
EP2217279 B1	20200131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20191105 YEAR OF FEE PAYMENT : 12
EP2217279 B1	20200228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20191202 YEAR OF FEE PAYMENT : 12
EP2217279 B1	20200228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20191014 YEAR OF FEE PAYMENT : 12
EP2217279 B1	20200228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20191108 YEAR OF FEE PAYMENT : 12
EP2217279 B1	20200331	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 : 20171101
EP2217279 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20191122 YEAR OF FEE PAYMENT : 12
EP2217279 B1	20200529	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 : 20171101
EP2217279 B1	20281120	PEXP		Calculated Patent Term Expiry	
EP2219677 A1	20100825	LSPB	+	published / reissued	
EP2219677 A1	20100825	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20100616
EP2219677 A1	20120229	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20120127
EP2219677 A1	20121226	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20120601
ES2655477 T3	20180220	LSGT	+	granted /	

				extensions (spc, cpc, pte)	
ES2655477 T3	20281120	PEXP		Calculated Patent Term Expiry	
IN03356DN2010 A	20101022	LSPB	+	published / reissued	
IN03357DN2010 A	20101022	LSPB	+	published / reissued	
JP2011504184 T2	20110203	LSPB	+	published / reissued	
JP2011504184 T2	20120924	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20120921
JP2011504184 T2	20130222	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20130221
JP2011504184 T2	20130729	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20130726
JP2011504184 T2	20131127	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20131126
JP2011504184 T2	20131206	LSAL	A911	TRANSFER OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A911 EFFECTIVE DATE : 20131205
JP2011504184 T2	20140203	LSAL	-A912	REMOVAL OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A912 EFFECTIVE DATE : 20140131
JP2011504184 T2	20150807	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20150807
JP2011504184 T2	20160125	LSWD	-A045	WRITTEN MEASURE OF DISMISSAL OF APPLICATION	TEXT : JAPANESE INTERMEDIATE CODE: A045 EFFECTIVE DATE : 20160122
MX2010005642 A1	20100730	LSPB	+	published / reissued	
MX2010005642 A1	20171002	LSWD	-FA	ABANDONMENT OR WITHDRAWAL	
MX2010005643 A1	20100730	LSPB	+	published / reissued	
MX337194 B	20160215	LSGT	+	granted / extensions (spc, cpc, pte)	
MX337194 B	20160215	LSGT	+FG	GRANT OR REGISTRATION	
MX337194 B	20281120	PEXP		Calculated Patent Term Expiry	
RU2010116996 A	20111227	LSPB	+	published / reissued	
RU2476240 C2	20130227	LSGT	+	granted / extensions (spc, cpc, pte)	
RU2476240 C2	20281120	PEXP		Calculated Patent Term Expiry	
US2009130199 AA	20090521	LSPB	+	published / reissued	
US2009130199 AA	20150916	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2009155189 AA	20090618	LSPB	+	published / reissued	
US2009155189 AA	20090303	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : THE PROCTER & GAMBLE COMPANY, OHIO OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:KOVACS, STEPHEN ANDRAS; SARGENT, JEFFREY ALAN; KEMP, HELEN ROCHELLE; AND OTHERS; REEL/FRAME:022334/0502; SIGNING DATES FROM 20081118 TO 20090223

US2009155189 AA	20121217	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2016000925 AA	20160107	LSPB	+	published / reissued	
US2016000925 AA	20170418	LSES	NFA1	Non Final Action Mailed	
US2016000925 AA	20171223	LSES	-NFA2	Non Final Action Counted, Not Yet Mailed	
US2016000925 AA	20171226	LSES	NFA1	Non Final Action Mailed	
US2016000925 AA	20190106	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US9149429 BB	20151006	LSGT	+	granted / extensions (spc, cpc, pte)	
US9149429 BB	20090127	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : THE PROCTER & GAMBLE COMPANY, OHIO OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:KOVACS, STEPHEN ANDRAS; SARGENT, JEFFREY ALAN; KEMP, HELEN ROCHELLE; AND OTHERS; REEL/FRAME:022159/0232; SIGNING DATES FROM 20081118 TO 20090120
US9149429 BB	20090127	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : THE PROCTER & GAMBLE COMPANY, OHIO OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:KOVACS, STEPHEN ANDRAS; SARGENT, JEFFREY ALAN; KEMP, HELEN ROCHELLE; AND OTHERS; SIGNING DATES FROM 20081118 TO 20090120; REEL/FRAME:022159/0232
US9149429 BB	20150916	LSGT	PAT1	Patented Case	
US9149429 BB	20190321	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US9149429 BB	20300919	PEXP		Calculated Patent Term Expiry (PTA 668 days)	
WO09066262 A1	20090528	LSPB	+	published / reissued	
WO09066262 A1	20081120	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 200880117164.5 COUNTRY OF REF DOCUMENT : CN
WO09066262 A1	20100512	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 3356/DELNP/2010 COUNTRY OF REF DOCUMENT : IN
WO09066262 A1	20100520	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2706472 COUNTRY OF REF DOCUMENT : CA
WO09066262 A1	20100521	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : MX/A/2010/005642 COUNTRY OF REF DOCUMENT : MX
WO09066262 A1	20100522	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE	REF COUNTRY CODE : DE
WO09066262 A1	20100616	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2008851503 COUNTRY OF REF DOCUMENT : EP
WO09066262 A1	20100621	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2010116997 COUNTRY OF REF DOCUMENT : RU
WO09066262 A1	20150519	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : PI0819338 COUNTRY OF REF DOCUMENT :

					BR KIND CODE OF REF DOCUMENT : A2 DESIGNATED STATE(S) : EFFECTIVE DATE : 20100519
WO09067605 A2	20090528	LSPB	+	published / reissued	
WO09067605 A2	20081120	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 200880117338.8 COUNTRY OF REF DOCUMENT : CN
WO09067605 A3	20100512	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 3357/DELNP/2010 COUNTRY OF REF DOCUMENT : IN
WO09067605 A3	20100520	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2008326386 COUNTRY OF REF DOCUMENT : AU
WO09067605 A3	20100520	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2706440 COUNTRY OF REF DOCUMENT : CA
WO09067605 A3	20100520	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2010535069 COUNTRY OF REF DOCUMENT : JP
WO09067605 A3	20100521	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : MX/A/2010/005643 COUNTRY OF REF DOCUMENT : MX
WO09067605 A3	20100522	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE	REF COUNTRY CODE : DE
WO09067605 A3	20100610	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2008326386 COUNTRY OF REF DOCUMENT : AU DATE OF REF DOCUMENT : 20081120 KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO09067605 A3	20100614	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2008852500 COUNTRY OF REF DOCUMENT : EP
WO09067605 A3	20100621	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2010116996 COUNTRY OF REF DOCUMENT : RU
WO09067605 A3	20150526	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : PI0819819 COUNTRY OF REF DOCUMENT : BR KIND CODE OF REF DOCUMENT : A2 DESIGNATED STATE(S) : EFFECTIVE DATE : 20100521

89) Family number: 29788041 (US2003147927A)

Title: EUTECTIC-BASED SELF-NANOEMULSIFIED DRUG DELIVERY SYSTEM

Abstract: A eutectic-based self-nanoemulsified drug delivery system (SNEDDS) is formulated from polyoxyl 35 castor oil (Cremophor), medium chain mono- and diglycerides (capmul), essential oils, and a pharmacologically effective drug. The preferred pharmacologically effective drug is a poorly water soluble drug, such as ubiquinone (CoQ 10). The SNEDDS can be further incorporated into a powder to produce a solid dosage form. The solid dosage form contains the SNEDDS, a copolymer of vinylpyrrolidone and vinyl acetate (Kollidon VA 64), maltodextrin, and microcrystalline cellulose (MCC).

Classifications:
International (IPC 8-9): A61K31/12 A61K31/122 A61K31/355 A61K36/00 A61K36/752 A61K38/43 A61K47/14 A61K47/44 A61K9/00 A61K9/107 A61K9/58 A61K9/66 A61P3/02 A61P39/06 (Advanced/Invention); A61K9/20 A61K9/48 (Advanced/Non-invention)
International (IPC 1-7): A61J A61K31/12 A61K31/355 A61K35/78 A61K38/13 A61K9/00 A61K9/127 A61K9/48 A61K9/58 A61K9/66
CPC: A61K9/1075 A61K9/2013 A61K9/2077 A61K9/4858 A61K31/12 A61K31/355 A61K47/14 A61K47/44 A61P3/02 A61P39/06
European: A61K31/12 A61K31/355 A61K47/14 A61K47/44 A61K9/107D K61K9/20H4 K61K9/20K2 K61K9/48H4
US: 424/400 424/400P 424/400S 424/499 424/499P 424/725 424/736 424/736S 424/94.1 514/11 514/20.5 514/20.500S 514/458 514/458S 514/683 514/683S 514/690 977/779 977/779S 977/906 977/906S

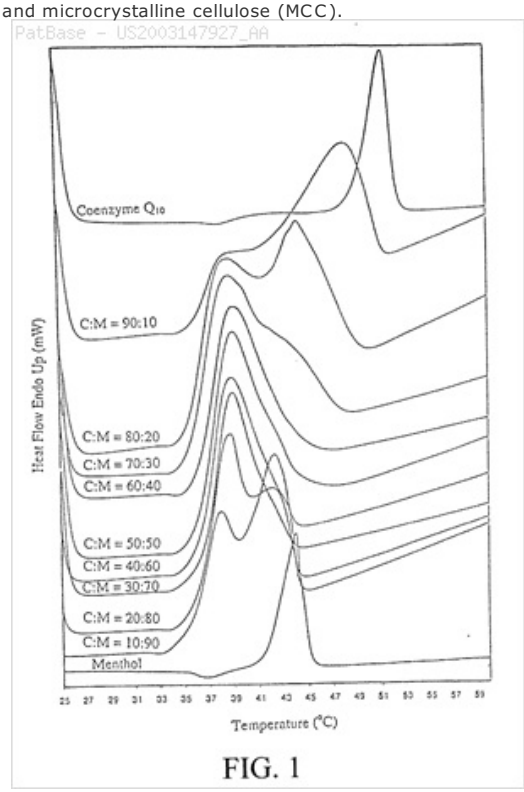


FIG. 1

Family:

Publication number	Publication date	Application number	Application date
AU2002343555 AA	20030526	AU20020343555	20021114
US2003147927 AA	20030807	US20020293932	20021114
US2010166873 AA	20100701	US20090493406	20090629
US2012269792 AA	20121025	US20120433284	20120328
US7588786 BB	20090915	US20020293932	20021114
US8158162 BB	20120417	US20090493406	20090629
US8790723 BB	20140729	US20120433284	20120328
WO03041632 A2	20030522	WO2002US33640	20021114
WO03041632 A3	20031120	WO2002US33640	20021114

Priority:

US20010331292P 20011114 US20020293932 20021114 WO2002US33640 20021114
US20090493406 20090629 US20120433284 20120328

Probable Assignee: JARROW FORMULAS INC

Assignee(s): (std): JARROW FORMULAS INC ; KHAN MANSOOR A ; NAZZAL SAMI ; UNIV TEXAS TECH ; TEXAS TECH UNIV

Assignee(s): TEXAS TECH UNIV SYSTEM ; TEXAS TECH UNIVERSITY

Inventor(s): (std): NAZZAL SAMI ; KHAN MANSOOR A

Inventor(s): SAMI NAZZAL ; MANSOOR A KHAN

Agent(s): JENNIFER P YANCY JONES TULLAR AND COOPER PC; MCCARTER AND ENGLISH LLP

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 VC VN YU ZA ZM ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AU2002343555 AA	20030526	LSPB	+	published / reissued	
AU2002343555 AA	20040729	LSLE	-MK6	APPLICATION LAPSED SECTION 142(2)(F)/REG. 8.3(3) - PCT APPLIC. NOT ENTERING	

				NATIONAL PHASE	
US2003147927 AA	20030807	LSPB	+	published / reissued	
US2003147927 AA	20060803	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : JARROW FORMULAS, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:TEXAS TECH UNIVERSITY; REEL/FRAME:018048/0001 EFFECTIVE DATE : 20060728
US2003147927 AA	20090826	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2010166873 AA	20100701	LSPB	+	published / reissued	
US2012269792 AA	20121025	LSPB	+	published / reissued	
US2012269792 AA	20140709	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US7588786 BB	20090915	LSGT	+	granted / extensions (spc, cpc, pte)	
US7588786 BB	20030213	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : TEXAS TECH UNIVERSITY SYSTEM, TEXAS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:KHAN, MANSOOR A.; NAZZAL, SAMI; REEL/FRAME:013761/0479; SIGNING DATES FROM 20030122 TO 20030127
US7588786 BB	20090826	LSGT	PAT1	Patented Case	
US7588786 BB	20130226	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US7588786 BB	20170912	LSFE	FEPP	FEE PAYMENT PROCEDURE	TEXT : 7.5 YR SURCHARGE - LATE PMT W/IN 6 MO, SMALL ENTITY (ORIGINAL EVENT CODE: M2555)
US7588786 BB	20170912	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US7588786 BB	20221114	PEXP		Calculated Patent Term Expiry	
US8158162 BB	20120417	LSGT	+	granted / extensions (spc, cpc, pte)	
US8158162 BB	20120328	LSGT	PAT1	Patented Case	
US8158162 BB	20121009	LSRE	CC	CERTIFICATE OF CORRECTION	
US8158162 BB	20160417	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US8158162 BB	20160516	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US8158162 BB	20160516	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US8158162 BB	20160607	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20160417
US8158162 BB	20290629	PEXP		Calculated Patent Term Expiry	
US8790723 BB	20140729	LSGT	+	granted / extensions (spc, cpc, pte)	
US8790723 BB	20140709	LSGT	PAT1	Patented Case	
US8790723 BB	20180123	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8790723 BB	20320613	PEXP		Calculated Patent Term Expiry (PTA 77 days and a terminal disclaimer has been filed)	

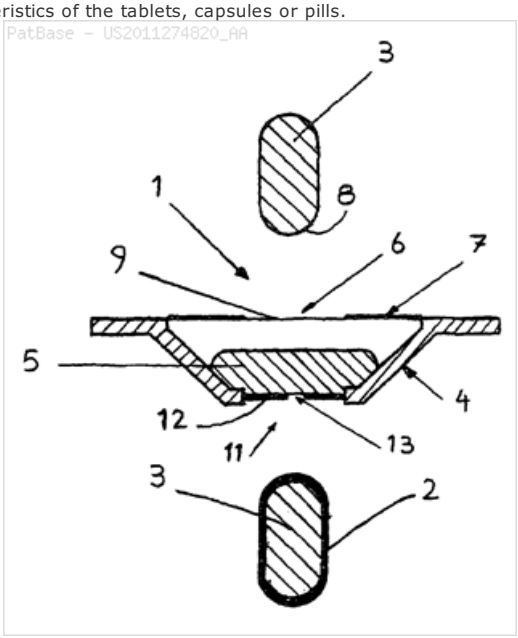
WO03041632 A2	20030522	LSPB	+	published / reissued	
WO03041632 A3	20041229	LSNE	-122	EP: PCT APPLICATION NON-ENTRY IN EUROPEAN PHASE	REF COUNTRY CODE : WO
WO03041632 A3	20060530	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE	REF COUNTRY CODE : JP
WO03041632 A3	20060530	LSWD	-WWW	WIPO INFORMATION: WITHDRAWN IN NATIONAL OFFICE	TEXT : JP

90) Family number: 46402041 (US2011274820A)

Title: COATING COMPOSITION AND USE THEREOF

Abstract: The present invention relates to a new coating composition and especially a new coating composition to be used with a specific coating device for providing an even, thin and enclosing coating on tablets, capsules or pills of different sizes and shapes in order to improve the taste and the swallowing characteristics of the tablets, capsules or pills.

Classifications:
International (IPC 8-9): A23G3/24 A61J A61J3/00 A61K A61K47/10 A61K47/26 A61K47/36 A61K47/42 A61K9/28 A61K9/36 A61K9/48 A61K9/54 B05C3/00 B05D1/18 B05D5/00 B05D7/00 B05D7/24 (Advanced/Invention);
A61J3/00 A61K9/28 (Core/Invention)
CPC: A61K9/286 A61J3/005 A61K9/282 A61K9/2826 A61K9/2873 A61K9/2893
European: A61J3/00C A61K9/28H4 A61K9/28H4B A61K9/28H6F A61K9/28H6H A61K9/28P
US: 118/13 118/18 118/26 118/30 424/480 424/488 427/2.14 427/2.22 427/2.220P 427/346 427/434.4 427/434.7



Family:

Publication number	Publication date	Application number	Application date
CN102292077 A	20111221	CN201080004878	20100120
CN102292077 B	20140326	CN201080004878	20100120
DE602010011474 D1	20140102	DE201060011474T	20100120
EP2389170 A2	20111130	EP20100704230	20100120
EP2389170 B1	20131106	EP20100704230	20100120
ES2443147 T3	20140218	ES20100704230T	20100120
JP2012515719 T2	20120712	JP20110546231T	20100120
JP5684729 B2	20150318	JP20110546231T	20100120
US2011274820 AA	20111110	US20100144070	20100120
US8911816 BB	20141216	US20100144070	20100120
WO10085195 A2	20100729	WO2010SE00009	20100120
WO10085195 A3	20110303	WO2010SE00009	20100120
ZA201106830 A	20120425	ZA20110006830	20110819

Priority:
SE20090050015 20090120 EP20100704230 20100120 WO2010SE00009 20100120

Probable Assignee: MED COAT AB

Assignee(s): (std): AXELSSON JOHAN ; AXELSSON JOHAN CLAES WILHELM ; LILIEBLAD FREDRIK ; LILIEBLAD FREDRIK ROBIN LECHARD ; MED COAT AB

Inventor(s): (std): AXELSSON JOHAN ; AXELSSON JOHAN CLAES WILHELM ; LILIEBLAD FREDRIK ; LILIEBLAD FREDRIK ROBIN LECHARD

Agent(s): POLO LUIS MIGUEL; TOMAS; KIPA AB

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
CN102292077 A	20111221	LSPB	+	published / reissued	
CN102292077 A	20111221	LSPB	+C06	PUBLICATION	
CN102292077 B	20140326	LSGT	+	granted / extensions (spc, cpc, pte)	
CN102292077 B	20300120	PEXP		Calculated Patent Term Expiry	
EP2389170 A2	20111130	LSPB	+	published / reissued	

EP2389170 A2	20111130	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20110818
EP2389170 A2	20130515	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20130417
EP2389170 A2	20140530	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 : 20140306
EP2389170 A2	20140530	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 : 20131106
EP2389170 A2	20140829	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 : 20131106
EP2389170 A2	20140930	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 : 20140120
EP2389170 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 : 7
EP2389170 A2	20160429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20160120 YEAR OF FEE PAYMENT : 7
EP2389170 A2	20160429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20160112 YEAR OF FEE PAYMENT : 7
EP2389170 A2	20160429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20160127 YEAR OF FEE PAYMENT : 7
EP2389170 A2	20160429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20160126 YEAR OF FEE PAYMENT : 7
EP2389170 A2	20160531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20160125 YEAR OF FEE PAYMENT : 7
EP2389170 A2	20160531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20160121 YEAR OF FEE PAYMENT : 7
EP2389170 A2	20160531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20160122 YEAR OF FEE PAYMENT : 7
EP2389170 B1	20131106	LSGT	+	granted /	

				extensions (spc, cpc, pte)	
EP2389170 B1	20131106	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP2389170 B1	20131115	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP2389170 B1	20131215	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 638933 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20131215
EP2389170 B1	20131218	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP2389170 B1	20140102	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602010011474 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20140102
EP2389170 B1	20140122	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : T3
EP2389170 B1	20140218	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2443147 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) : EFFECTIVE DATE : 20140218
EP2389170 B1	20140315	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MK05 REF DOCUMENT NUMBER : 638933 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20131106
EP2389170 B1	20140425	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : LT REF LEGAL EVENT CODE : MG4D
EP2389170 B1	20140430	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 : 20140206
EP2389170 B1	20140430	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 : 20131106
EP2389170 B1	20140430	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 : 20140306
EP2389170 B1	20140430	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 : 20131106
EP2389170 B1	20140430	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 : 20131106
EP2389170 B1	20140530	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 : 20131106
EP2389170 B1	20140530	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 : 20131106
EP2389170 B1	20140530	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 : 20131106
EP2389170 B1	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 FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20140306
EP2389170 B1	20140731	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 : 20131106
EP2389170 B1	20140807	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 602010011474 COUNTRY OF REF DOCUMENT : DE
EP2389170 B1	20140829	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 : 20131106
EP2389170 B1	20140829	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 : 20131106
EP2389170 B1	20140829	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 : 20131106
EP2389170 B1	20140829	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 : 20140120
EP2389170 B1	20140829	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 : 20131106
EP2389170 B1	20140930	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 : 20131106
EP2389170 B1	20141015	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20140807
EP2389170 B1	20141105	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP2389170 B1	20141113	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 602010011474 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20140807
EP2389170 B1	20150130	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 : 20140120
EP2389170 B1	20150227	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 : 20131106
EP2389170 B1	20150430	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 : 20131106
EP2389170 B1	20160121	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
EP2389170 B1	20160229	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 : 20131106
EP2389170 B1	20160429	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 : 20131106

EP2389170 B1	20160630	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 : 20131106
EP2389170 B1	20160630	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 : 20140207
EP2389170 B1	20160630	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 : 20131106
EP2389170 B1	20160729	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 : 20100120
EP2389170 B1	20160729	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 : 20131106
EP2389170 B1	20170131	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
EP2389170 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170130 YEAR OF FEE PAYMENT : 8
EP2389170 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170131 YEAR OF FEE PAYMENT : 8
EP2389170 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20170130 YEAR OF FEE PAYMENT : 8
EP2389170 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20170201 YEAR OF FEE PAYMENT : 8
EP2389170 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20170131 YEAR OF FEE PAYMENT : 8
EP2389170 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20170129 YEAR OF FEE PAYMENT : 8
EP2389170 B1	20170630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL	COUNTRY OF REF DOCUMENT : ES

				OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	PAYMENT DATE : 20170213 YEAR OF FEE PAYMENT : 8
EP2389170 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 : 8
EP2389170 B1	20180119	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 9
EP2389170 B1	20180330	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20180130 YEAR OF FEE PAYMENT : 9
EP2389170 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 : 9
EP2389170 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20180227 YEAR OF FEE PAYMENT : 9
EP2389170 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 : 9
EP2389170 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20180130 YEAR OF FEE PAYMENT : 9
EP2389170 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20180130 YEAR OF FEE PAYMENT : 9
EP2389170 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20180119 YEAR OF FEE PAYMENT : 9
EP2389170 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20180129 YEAR OF FEE PAYMENT : 9
EP2389170 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 : 20131106
EP2389170 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 : 10
EP2389170 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20190226 YEAR OF FEE PAYMENT : 10
EP2389170 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20190130 YEAR OF FEE PAYMENT : 10
EP2389170 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20190130

				[ANNOUNCED FROM NATIONAL OFFICE TO EPO]	YEAR OF FEE PAYMENT : 10
EP2389170 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20190130 YEAR OF FEE PAYMENT : 10
EP2389170 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20190130 YEAR OF FEE PAYMENT : 10
EP2389170 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20190130 YEAR OF FEE PAYMENT : 10
EP2389170 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20200121 YEAR OF FEE PAYMENT : 11
EP2389170 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20200124 YEAR OF FEE PAYMENT : 11
EP2389170 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20200121 YEAR OF FEE PAYMENT : 11
EP2389170 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20200131 YEAR OF FEE PAYMENT : 11
EP2389170 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20200121 YEAR OF FEE PAYMENT : 11
EP2389170 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20200221 YEAR OF FEE PAYMENT : 11
EP2389170 B1	20200529	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20200121 YEAR OF FEE PAYMENT : 11
EP2389170 B1	20200630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20200121 YEAR OF FEE PAYMENT : 11
EP2389170 B1	20300120	PEXP		Calculated Patent Term Expiry	
ES2443147 T3	20140218	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2443147 T3	20300120	PEXP		Calculated Patent Term Expiry	
JP2012515719 T2	20120712	LSPB	+	published / reissued	
JP2012515719 T2	20130111	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20130110
JP2012515719 T2	20140213	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20140212
JP2012515719 T2	20140812	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20140811

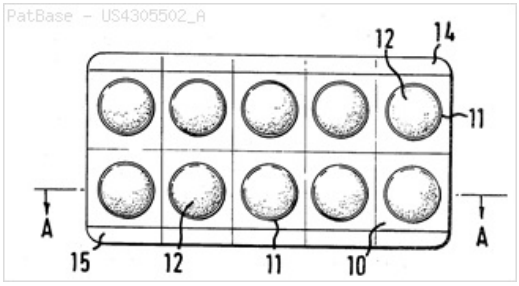
JP2012515719 T2	20150105	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2012515719 T2	20150114	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20150113
JP2012515719 T2	20150122	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20150115
JP2012515719 T2	20150123	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 5684729 COUNTRY OF REF DOCUMENT : JP
JP5684729 B2	20150318	LSGT	+	granted / extensions (spc, cpc, pte)	
JP5684729 B2	20150115	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP5684729 B2	20150120	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP5684729 B2	20150123	LSGT	+R150	特許証 (Patent certificate)	
JP5684729 B2	20180118	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5684729 B2	20180123	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5684729 B2	20190131	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5684729 B2	20190205	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5684729 B2	20200115	LSFE	R20	特許料納付書 (Patent fee payment form)	EFFECTIVE DATE : 20200114
JP5684729 B2	20200116	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5684729 B2	20300120	PEXP		Calculated Patent Term Expiry	
US2011274820 AA	20111110	LSPB	+	published / reissued	
US2011274820 AA	20141125	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US8911816 BB	20141216	LSGT	+	granted / extensions (spc, cpc, pte)	
US8911816 BB	20141125	LSGT	PAT1	Patented Case	
US8911816 BB	20180604	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8911816 BB	20301218	PEXP		Calculated Patent Term Expiry (PTA 332 days)	
WO10085195 A2	20100729	LSPB	+	published / reissued	
WO10085195 A2	20100120	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 201080004878.2 COUNTRY OF REF DOCUMENT : CN
WO10085195 A3	20110704	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2011546231 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO10085195 A3	20110711	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 13144070 COUNTRY OF REF DOCUMENT : US
WO10085195 A3	20110720	LSNE	NENP	NON-ENTRY INTO THE NATIONAL	REF COUNTRY CODE : DE

				PHASE	
WO10085195 A3	20110818	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2010704230 COUNTRY OF REF DOCUMENT : EP
ZA201106830 A	20120425	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA201106830 A	20310818	PEXP		Calculated Patent Term Expiry	

91) Family number: 3792042 (US4305502A)

Title: PHARMACEUTICAL DOSAGE FORM PACKGES

Abstract: The invention relates to packages containing shaped articles carrying chemicals, particularly to pharmaceutical dosage forms carrying pharmaceuticals. The shaped articles, which disintegrate rapidly in water are contained in depressions in sheets of filmic material and are enclosed by a covering sheet adhering to the filmic material. The shaped articles may be formed in the depressions by a sublimation process.



Classifications:
International (IPC 8-9): A61J1/03 A61J3/00 A61K47/30 A61K9/00 A61K9/20 A61K9/26 B65B5/04 B65B9/04 (Advanced/Invention); A61J1/00 A61J3/00 A61K47/30 A61K9/00 A61K9/20 A61K9/26 B65B5/00 (Core/Invention)
International (IPC 1-7): A61J3/00 A61J3/07 A61K31/21 A61K31/48 A61K31/55 A61K31/705 A61K47/00 A61K9/00 A61K9/14 A61K9/20 A61K9/22 A61K9/26 A61K9/48 B65B11/50 B65B5/04 B65B7/28 B65B9/04 B65D75/34 B65D85/56 G01N33/16
CPC: Y10T428/234 A61K9/2095 A61K9/0056 A61K9/2004 A61K9/2018 A61K9/2027 A61K9/205 A61K9/2063
European: A61K9/00M18B A61K9/20H A61K9/20P K61K9/20H4B K61K9/20H6B K61K9/20H6F K61K9/20H6H
US: 156/292 156/69 156/80 206/484 206/532 206/538 264/101 264/28 34/304 424/22 424/422 424/427 424/436 424/484 424/485 424/486 428/72 53/432 53/452 53/559

Family:

Publication number	Publication date	Application number	Application date
AU197728825 A1	19790322	AU19770028825	19770915
AU513845 B2	19810108	AU19770028825	19770915
BE859291 A	19780330	BE19770181389	19770930
CA1083042 A1	19800805	CA19770287461	19770926
CA1097233 A1	19810310	CA19780307044	19780710
CH633717 A	19821231	CH19770012169	19771005
CY1129 A	19820219	CY19770001129	19770921
DE2744493 A1	19780413	DE19772744493	19771004
DE2744493 C2	19910718	DE19772744493	19771004
DE2744493 C3	19910718	DE19772744493	19771004
FR2366835 A1	19780505	FR19770029663	19771003
FR2366835 B1	19801024	FR19770029663	19771003
GB1548022 A	19790704	GB19760041483	19761006
HK58081 A	19811204	HK19810000580	19811126
IE45770 B	19821117	IE19770001877	19770912
IE45770 L	19780406	IE19770001877	19770912
IT1158951 A	19870225	IT19780025894	19780719
IT7825894 A0	19780719	IT19780025894	19780719
JP1446344 C3	19880630	JP19770119128	19771005
JP1509556 C3	19890726	JP19850239251	19851025
JP53044619 A2	19780421	JP19770119128	19771005
JP61118314 A2	19860605	JP19850239251	19851025
JP62050445 B4	19871024	JP19770119128	19771005
JP63052008 B4	19881017	JP19850239251	19851025
KE3171 A	19811218	KE19810003171	19811110
LU78259 A	19780609	LU19770078259	19771005
MY8200187 A	19821231	MY19820000187	19821230
NL189898 B	19930401	NL19770010876	19771004
NL189898 C	19930901	NL19770010876	19771004
NL7710876 A	19780410	NL19770010876	19771004
US4305502 A	19811215	US19780925002	19780714
US4371516 A	19830201	US19810284025	19810717
ZA7705465 A	19790425	ZA19770005465	19770912

Priority:

GB19760041483 19761006 GB19770030399 19770720 CA19770287461 19770926
US19770837345 19770928 JP19770119128 19771005 CA19780307044 19780710

Probable Assignee: WYETH JOHN AND BROTHER LTD

Assignee(s): (std): WYETH JOHN AND BROTHER LTD ; BROTHER LTD ; JOHN WYETH ; WYETH AND BROS LTD JOHN

Assignee(s): JOHN WYETH AND BROS LTD ; DU MAYNE JAMES D ; WYETH AND BROTHER LTD J ; WYETH AND BRO LTD JOHN ; JOHN WYETH AND BROTHER LTD ; WYETH JOHN AND BROTHER LIMITED ; WYETH J AND BROTHER LTD ; WYETH ET BROTHER LTD JOHN ; PEACH JAMES M ; JOHN WYETH AND BROTHER LIMITED ; GREGORY GEORGE K E ; HO DAVID S S ; JOHN WYETH AND BROTHER A BRITISH CO LTD ; JOHN WYETH AND BROTHER LIMITED TE TAPLOW GROOT BRITTANNIE ; JOHN WYETH AND BROTHER LTD TAPLOW MAIDENHEAD BERKSHIRE GB

Inventor(s): (std): GREGORY G ; GREGORY G K E ; GREGORY GEORGE K E ; GREGORY GEORGE KEITH EMERSON ; HO D ; HO D S S ; HO DAVID S S ; HO DAVID SUE SAN ; MAYNE J ; MAYNE J D DU ; MAYNE JAMES DAVID DU ; PEACH J ; PEACH J M ; PEACH JAMES M ; PEACH JAMES MARCHANT ; DU MAYNE JAMES D ; JIYOOJI KEISU EMAASON GUREGORI ; JAMES MARCHANT PEACH ; JAMES DAVID DU MAYNE ; GEORGE KEITH EMERSON GREGORY ; DAVID SUE SAN HO ; JIEEMUSU MAACHIYANTO PIICHI ; JIEEMUSU DEBITSUDO DOU MEIN ; DEBITSUDO SUU SAN HOO ; DU MAYNE JAMES DAVID

Inventor(s): JIYOOJI KEISU EMAASON GUREGORII ; J M PEACH ; J D DU MAYNE ; G K E GREGORY ; D S S HO ; JEEMUSU MAACHANTO PIICHI ; JEEMUSU DEBITSUDO DO MEIN ; JOOJI KEISU EMAASON GUREGORII ; MARCHANT PEACH JAMES ; DU MAYNE JAMES DAVID MAIDENHEAD BERKSHIRE GB ; EMERSON GREGORY GEORGE KEITH ; PEACH JAMES MARCHANT HIGH WYCOMBE BUCKINGHAMSHIRE ; PEACH JAMES MARCHANT HIGH WYCOMBE BUCKINGHAMSHIRE GB ; SAN HO DAVID SUE ; HO DAVID SUE SAN LONDON GB ; GREGORY GEORGE KEITH EMERSON MARLOW BUCKINGHAMSHIR ; GREGORY GEORGE KEITH EMERSON MARLOW BUCKINGHAMSHIRE GB

Agent(s): RIDOUT AND MAYBEE LLP

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
AU197728825 A1	19790322	LSPB	+	published / reissued	
AU513845 B2	19810108	LSGT	+	granted / extensions (spc, cpc, pte)	
BE859291 A	19780330	LSPB	+	published / reissued	
BE859291 A	19970101	LSLE	-RE20	PATENT EXPIRED	PARTYTYPE : OWNER OWNER : JOHN WYETH & BROTHER LTD EFFECTIVE DATE : 19970930
CH633717 A	19821231	LSGT	+	granted / extensions (spc, cpc, pte)	
CH633717 A	19971031	LSLE	-PL	PATENT CEASED	
CH633717 A	19971005	PEXP		Calculated Patent Term Expiry	
CY1129 A	19820219	LSGT	+	granted / extensions (spc, cpc, pte)	
CY1129 A	19970921	PEXP		Calculated Patent Term Expiry	
DE2744493 A1	19780413	LSPB	+	published / reissued	
DE2744493 A1	19841011	LSES	+8110	REQUEST FOR EXAMINATION PARAGRAPH 44	
DE2744493 A1	19870702	LSGT	+D2	GRANT AFTER EXAMINATION	
DE2744493 A1	19871210	LSOP	-8363	OPPOSITION AGAINST THE PATENT	
DE2744493 A1	19910523	LSOP	+8366	RESTRICTED MAINTAINED AFTER OPPOSITION PROCEEDINGS	
DE2744493 C2	19910718	LSGT	+	granted / extensions (spc, cpc, pte)	
DE2744493 C2	19910718	LSRE	+D4	PATENT MAINTAINED RESTRICTED	
DE2744493 C3	19910718	LSGT	+	granted / extensions (spc, cpc, pte)	
FR2366835 A1	19780505	LSPB	+	published / reissued	
FR2366835 B1	19801024	LSGT	+	granted / extensions (spc, cpc, pte)	
FR2366835 B1	19971003	PEXP		Calculated Patent Term Expiry	
GB1548022 A	19790704	LSGT	+	granted / extensions (spc, cpc, pte)	
GB1548022 A	19790919	LSGT	+PS	PATENT SEALED	
GB1548022 A	19890222	LSLI	704A	DECLARATION THAT LICENCE IS NOT AVAILABLE AS OF RIGHT FOR AN EXCEPTED USE (PAR. 4A/1977)	
GB1548022 A	19971015	LSLE	-PE20	PATENT EXPIRED AFTER TERMINATION OF 20 YEARS	EFFECTIVE DATE : 19970920
GB1548022 A	19961006	PEXP		Calculated Patent Term Expiry	
HK58081 A	19811204	LSGT	+	granted / extensions (spc, cpc, pte)	
HK58081 A	20041215	LSLE	-PE	PATENT EXPIRED	
HK58081 A	20011126	PEXP		Calculated Patent Term Expiry	
IE45770 B	19821117	LSGT	+	granted / extensions (spc, cpc, pte)	
IE45770 B	19971119	LSLE	-MK9A	PATENT EXPIRED	
IE45770 B	19970912	PEXP		Calculated Patent Term Expiry	
IT1158951 A	19870225	LSGT	+	granted / extensions (spc, cpc, pte)	

IT1158951 A	19920311	LSGT	ITCP	COMPLEMENTARY PROTECTION CERTIFICATE	TEXT : CCP 59
IT1158951 A	19921113	LSGT	+MEDD	SUPPLEMENTARY PROTECTION CERTIFICATE FOR PHARMACEUTICAL PRODUCTS: GRANTED	TEXT : CCP 59, 19920311; JOHN WYETH & BROTHER LIMITED
IT1158951 A	19991027	LSFE	TA	FEE PAYMENT DATE (SITUATION AS OF EVENT DATE), DATA COLLECTED SINCE 19931001	EFFECTIVE DATE : 19970919
IT1158951 A	19980719	PEXP		Calculated Patent Term Expiry	
JP1446344 C3	19880630	LSGT	+	granted / extensions (spc, cpc, pte)	
JP1509556 C3	19890726	LSGT	+	granted / extensions (spc, cpc, pte)	
JP53044619 A2	19780421	LSPB	+	published / reissued	
JP61118314 A2	19860605	LSPB	+	published / reissued	
JP62050445 B4	19871024	LSPB	+	published / reissued	
JP63052008 B4	19881017	LSPB	+	published / reissued	
KE3171 A	19811218	LSGT	+	granted / extensions (spc, cpc, pte)	
KE3171 A	20011110	PEXP		Calculated Patent Term Expiry	
LU78259 A	19780609	LSGT	+	granted / extensions (spc, cpc, pte)	
LU78259 A	19971006	PEXP		Calculated Patent Term Expiry	
MY8200187 A	19821231	LSPB	+	published / reissued	
NL189898 B	19930401	LSPB	+	published / reissued	
NL189898 B	19971004	PEXP		Calculated Patent Term Expiry	
NL189898 C	19930901	LSGT	+	granted / extensions (spc, cpc, pte)	
NL189898 C	19971201	LSLE	-V4	LAPSED BECAUSE OF REACHING THE MAXIMUM LIFETIME OF A PATENT	TEXT : 971004
NL189898 C	19971004	PEXP		Calculated Patent Term Expiry	
NL7710876 A	19780410	LSPB	+	published / reissued	
NL7710876 A	19840601	LSES	+BA	A REQUEST FOR SEARCH OR AN INTERNATIONAL-TYPE SEARCH HAS BEEN FILED	
NL7710876 A	19840801	LSES	BB	A SEARCH REPORT HAS BEEN DRAWN UP	
NL7710876 A	19840903	LSES	+BC	A REQUEST FOR EXAMINATION HAS BEEN FILED	
US4305502 A	19811215	LSGT	+	granted / extensions (spc, cpc, pte)	
US4305502 A	19810803	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : JOHN WYETH & BROTHER LIMITED, HUNTERCOMBE LANE SOU OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNORS:HO, DAVID S.S.; GREGORY, GEORGE K. E.; REEL/FRAME:003885/0963 EFFECTIVE DATE : 19780627
US4305502 A	19811215	LSGT	PAT1	Patented Case	
US4305502 A	19811215	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US4371516 A	19830201	LSGT	+	granted / extensions (spc, cpc, pte)	
US4371516 A	19830201	LSGT	PAT1	Patented Case	
US4371516 A	19830201	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US4371516 A	19860520	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4

US4371516 A	19900402	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US4371516 A	19940419	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US4371516 A	20010717	PEXP		Calculated Patent Term Expiry	
ZA7705465 A	19790425	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA7705465 A	19930911	PEXP		Calculated Patent Term Expiry	

92) Family number: 59344042 (US2016235803A)

Title: TURMERIC EXTRACT CONTAINING SOFT PASTILLES

Abstract: The present disclosure provides a soft pastille containing turmeric extract as an active ingredient. The pastille is prepared using at least one gelling agent and at least one plasticizer in combination with pharmaceutically acceptable excipients, wherein the ratio of the gelling agent to the plasticizer is in a range of 1:2.5 to 1:3.3.

Classifications:
International (IPC 8-9): A61J3/06 A61K31/12 A61K31/121 A61K31/715 A61K36/00 A61K36/906 A61K36/9066 A61K47/10 A61K47/12 A61K47/14 A61K47/24 A61K47/26 A61K47/36 A61K47/42 A61K47/44 A61K9/00 A61K9/20 A61P29/00 A61P39/06 (Advanced/Invention);
A61K36/9066 A61K9/00 (Core/Invention)
CPC: A61K47/26 A61K9/2063 A61J3/06 A61K31/12 A61K31/715 A61K47/24 A61K36/9066 A61K9/0056 A61K47/10 A61K47/42 A61P29/00 A61P39/06
US: 1/1 424/756

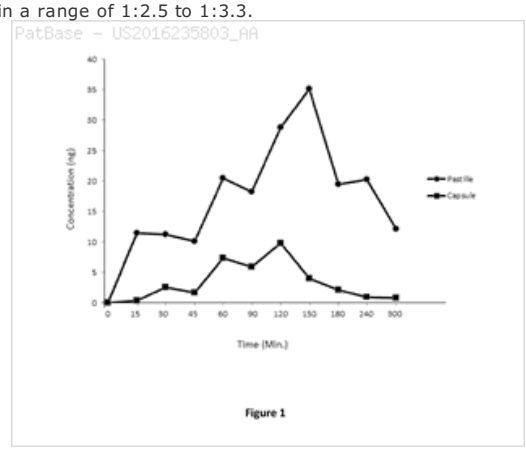


Figure 1

Family:

Publication number	Publication date	Application number	Application date
CA2929312 AA	20160429	CA20142929312	20141031
CN105682673 A	20160615	CN201480060047	20141031
CN111420008 A	20200717	CN202010171259	20141031
EA032539 B1	20190628	EA20160090810	20141031
EA201690810 A1	20161130	EA20160090810	20141031
EP3062771 A2	20160907	EP20140845008	20141031
EP3062771 B1	20191113	EP20140845008	20141031
IN01590MU2013 A	20150807	IN2013MU01590	20131102
IN201627014374 A	20160819	IN201627014374	20160425
JP2016535028 T2	20161110	JP20160526270T	20141031
JP6445002 B2	20181226	JP20160526270T	20141031
KR20160079035 A	20160705	KR20167014036	20141031
PH2016500793 A	20160627	PH20160500793	20160428
PH2016500793 B	20160627	PH20160500793	20160428
TH159856 A	20170127	TH20161002519	20141031
US2016235803 AA	20160818	US20140026844	20141031
US9913873 BB	20180313	US20140026844	20141031
WO15075745 A2	20150528	WO2014IN00697	20141031
WO15075745 A3	20150716	WO2014IN00697	20141031

Priority:

IN1590MU00013 20131102 IN2013MM01590 20131102 IN2013MU01590 20131102
CN201480060047 20141031 WO2014IN00697 20141031

Probable Assignee: THAKKAR JATIN VASANT

Assignee(s): (std): THAKKAR JATIN VASANT

Inventor(s): (std): VASANT THAKKAR JATIN ; THAKKAR JATIN VASANT

Agent(s): BERESKIN AND PARR LLP SENCRL SRL; PETRAZ GILBERTO LUIGI; ARC PATENT ATTORNEYSOFFICE; ROY; ROY GROSS LAW FIRM LLC; MOHAN DEWAN

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)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
CA2929312 AA	20160429	LSPB	+	published / reissued	
CA2929312 AA	20191107	LSES	+EEER	EXAMINATION REQUEST	EFFECTIVE DATE : 20191029
CN105682673 A	20160615	LSPB	+	published / reissued	
CN105682673 A	20160615	LSPB	+C06	PUBLICATION	
CN111420008 A	20200717	LSPB	+	published / reissued	
CN111420008 A	20200717	LSPB	PB01	PUBLICATION	
EA032539 B1	20190628	LSGT	+	granted / extensions (spc, cpc, pte)	
EA032539 B1	20200630	LSLE	-MM4A	LAPSE OF A EURASIAN	COUNTRY OF REF

				PATENT DUE TO NON-PAYMENT OF RENEWAL FEES WITHIN THE TIME LIMIT IN THE FOLLOWING DESIGNATED STATE(S)	DOCUMENT : AM COUNTRY OF REF DOCUMENT : AZ COUNTRY OF REF DOCUMENT : KG COUNTRY OF REF DOCUMENT : TJ COUNTRY OF REF DOCUMENT : TM
EA032539 B1	20341031	PEXP		Calculated Patent Term Expiry	
EA201690810 A1	20161130	LSPB	+	published / reissued	
EP3062771 A2	20160907	LSPB	+	published / reissued	
EP3062771 A2	20160907	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20160509
EP3062771 A2	20180704	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20180601
EP3062771 A2	20190626	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20190603
EP3062771 B1	20191113	LSGT	+	granted / extensions (spc, cpc, pte)	
EP3062771 B1	20191113	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : THAKKAR, JATIN VASANT
EP3062771 B1	20191115	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP3062771 B1	20191115	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 1200939 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20191115
EP3062771 B1	20191205	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602014056910 COUNTRY OF REF DOCUMENT : DE
EP3062771 B1	20191211	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP3062771 B1	20200325	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : LT REF LEGAL EVENT CODE : MG4D
EP3062771 B1	20200501	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 : 20191113
EP3062771 B1	20200501	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 : 20191113
EP3062771 B1	20200501	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 : 20200213
EP3062771 B1	20200501	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 : 20200313
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EP3062771 B1	20200501	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 : 20200214
EP3062771 B1	20200501	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 : 20191113
EP3062771 B1	20200501	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 : 20191113
EP3062771 B1	20200501	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 : 20200213
EP3062771 B1	20200529	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 : 20200313
EP3062771 B1	20200529	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 : 20191113
EP3062771 B1	20200529	LSLE	-PG25	LAPSED IN A CONTRACTING STATE	COUNTRY OF REF DOCUMENT : RS

				[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 : 20191113
EP3062771 B1	20200630	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 : 20191113
EP3062771 B1	20341031	PEXP		Calculated Patent Term Expiry	
IN01590MU2013 A	20150807	LSPB	+	published / reissued	
IN201627014374 A	20160819	LSPB	+	published / reissued	
JP2016535028 T2	20161110	LSPB	+	published / reissued	
JP2016535028 T2	20171002	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20171002
JP2016535028 T2	20180612	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20180612
JP2016535028 T2	20180903	LSRE	A524	WRITTEN SUBMISSION OF COPY OF AMENDMENT UNDER SECTION 19 (PCT)	TEXT : JAPANESE INTERMEDIATE CODE: A524 EFFECTIVE DATE : 20180903
JP2016535028 T2	20181105	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2016535028 T2	20181113	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20181113
JP2016535028 T2	20181206	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20181128
JP2016535028 T2	20181207	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 6445002 COUNTRY OF REF DOCUMENT : JP
JP6445002 B2	20181226	LSGT	+	granted / extensions (spc, cpc, pte)	
JP6445002 B2	20181115	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP6445002 B2	20181204	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP6445002 B2	20181207	LSGT	+R150	特許証 (Patent certificate)	
JP6445002 B2	20341031	PEXP		Calculated Patent Term Expiry	
KR20160079035 A	20160705	LSPB	+	published / reissued	
PH2016500793 A	20160627	LSPB	+	published / reissued	
PH2016500793 B	20160627	LSGT	+	granted / extensions (spc, cpc, pte)	
TH159856 A	20170127	LSPB	+	published / reissued	
US2016235803 AA	20160818	LSPB	+	published / reissued	
US2016235803 AA	20171219	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2016235803 AA	20180221	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US9913873 BB	20180313	LSGT	+	granted / extensions (spc, cpc, pte)	
US9913873 BB	20180221	LSGT	PAT1	Patented Case	

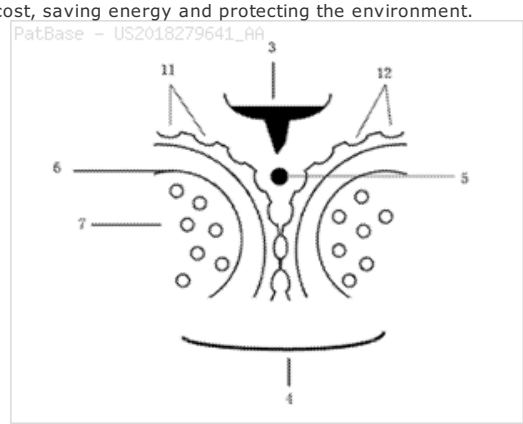
US9913873 BB	20350306	PEXP		Calculated Patent Term Expiry (PTA 126 days)	
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WO15075745 A3	20160426	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2016526270 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO15075745 A3	20160428	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 12016500793 COUNTRY OF REF DOCUMENT : PH
WO15075745 A3	20160429	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2929312 COUNTRY OF REF DOCUMENT : CA
WO15075745 A3	20160502	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE	REF COUNTRY CODE : DE
WO15075745 A3	20160509	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2014845008 COUNTRY OF REF DOCUMENT : EP
WO15075745 A3	20160518	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 201690810 COUNTRY OF REF DOCUMENT : EA
WO15075745 A3	20160526	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 20167014036 COUNTRY OF REF DOCUMENT : KR KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :

93) Family number: 65343042 (US2018279641A)

Title: METHOD USING ROLLING MOLD TO PREPARE FREEZE-DRIED EXCIPIENT, AND PRODUCT THEREOF

Abstract: The invention relates to the fields of medicines, chemistry, and food products, and specifically relates to a rolling mold combination device, a method using a rolling mold to prepare a freeze-dried excipient, and a product thereof. The method has the advantage of being able to engrave any character or pattern at any part of a mold, and correspondingly, can produce the character or pattern at any part of a manufactured product, including a product name or trademark, and such an effect cannot be obtained in existing freeze-dried excipient products. The manufactured product can be designed to be any shape and does not readily break inside packaging, reducing loss of medicines and enabling accurate dosages thereof. The method of preparing a freeze-dried excipient adopts mold-release freeze-drying, and a mold does not re-enter a freeze-drying step, improving production efficiency, decreasing production cost, saving energy and protecting the environment.

Classifications:
International (IPC 8-9): A23G3/02 A23G3/48 A23G3/50 A23L2/395 A23L3/44 A23L33/00 A23L33/105 A23P30/10 A61J3/06 A61K36/07 A61K36/258 A61K47/36 A61K8/02 A61K8/11 A61K8/36 A61K8/55 A61K8/60 A61K8/65 A61K8/67 A61K8/73 A61K8/81 A61K8/9728 A61K9/19 A61Q19/00 (Advanced/Invention)
CPC: A61K8/0216 A61K8/732 A61K2800/84 A23G3/48 A23G3/50 A23L2/395 A23V2002/00 A61K8/676 A61K9/19 A61K2800/10 A61Q19/00 A23G3/0268 A23G3/0289 A23P30/10 A23L33/00 A61J3/06 A61K8/02 A61K8/67 A61K8/73 A23G3/0278 A23L3/44 A23L33/105 A61K8/11 A61K8/361 A61K8/553 A61K8/602 A61K8/65 A61K8/735 A61K8/8182 A61K8/9728 A61K36/07 A61K36/258 A61K47/36 A61K2800/805
US: 1/1 424/401



Family:

Publication number	Publication date	Application number	Application date
CN106551804 A	20170405	CN201510641264	20150930
EP3357478 A1	20180808	EP20160850396	20160930
EP3357478 A4	20190911	EP20160850396	20160930
US2018279641 AA	20181004	US20160764659	20160930
WO17054772 A1	20170406	WO2016CN101154	20160930

Priority:
CN201510641264 20150930 WO2016CN101154 20160930

Probable Assignee: CHANGZHOU YOUDO INDUSTRIAL INVEST CO LTD
Assignee(s): (std): CHANGZHOU YOUDO INDUSTRIAL INVEST CO LTD ; DONG LING
Assignee(s): CHANGZHOU YOUDO INDUSTRIAL INVESTMENT CO LTD ; CHANGZHOU YOUDO INDUSTRIAL INVESTMENT CO
Inventor(s): (std): DONG LING
Agent(s): TERGAU AND WALKENHORST PATENTANWAELTE PARTGMBB; UNITALEN ATTORNEYS AT LAW
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 DJ 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 KW 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)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
CN106551804 A	20170405	LSPB	+	published / reissued	
CN106551804 A	20170405	LSPB	PB01	PUBLICATION	
CN106551804 A	20180223	LSAS	TA01	TRANSFER OF PATENT APPLICATION RIGHT	
CN106551804 A	20180223	LSAS	TA01	专利申请权的转移 (Transfer of patent application right)	TEXT : 专利申请权、专利权的转移 (TRANSFER OF PATENT APPLICATION OR PATENT RIGHT) APPLICANT AFTER CHANGE : 常州柚盾实业投资有限公司 (CHANGZHOU GRAPEFRUIT SHIELD INDUSTRIAL INVESTMENT CO LTD) APPLICANT BEFORE CHANGE : 董玲 (DONG LING) EFFECTIVE DATE : 20180201
CN106551804 A	20180831	LSRE	CI02	发明专利申请更正 (Correction of application for invention)	TEXT : 发明专利更正 (INVENTION PATENT CORRECTIONS) GAZETTE VOLUME : 34 GAZETTE NUMBER : 08-01 CORRECTION ITEM : 申请人; 地址 (APPLICANT; ADDRESS) INCORRECT ITEM : 常州柚盾实业投资有限公司; 213000 江苏省常州市天宁区河海东路9号 (CHANGZHOU GRAPEFRUIT

					SHIELD INDUSTRIAL INVESTMENT CO., LTD.; 213000 JIANGSU CHANGZHOU TIANNING ZONE HOHAI EAST ROAD NO. 9) CORRECTED ITEM : 董玲; 100024 北京市房山区北京中医药大学生命科学学院 (DONG LING; 100024 FANGSHAN DISTRICT OF BEIJING UNIVERSITY COLLEGE OF LIFE SCIENCES)
CN106551804 A	20180831	LSRE	CI02	CORRECTION OF INVENTION PATENT APPLICATION	
EP3357478 A1	20180808	LSPB	+	published / reissued	
EP3357478 A1	20180808	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20180427
EP3357478 A4	20190911	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	EFFECTIVE DATE : 20190813
US2018279641 AA	20181004	LSPB	+	published / reissued	
US2018279641 AA	20180330	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CHANGZHOU YOUDO INDUSTRIAL INVESTMENT CO., LTD, CH OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:DONG, LING; REEL/FRAME:045788/0987 EFFECTIVE DATE : 20180326
US2018279641 AA	20200317	LSES	NFA1	Non Final Action Mailed	
US2018279641 AA	20200608	LSES	NFA1	Non Final Action Mailed	
WO17054772 A1	20170406	LSPB	+	published / reissued	
WO17054772 A1	20180329	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 15764659 COUNTRY OF REF DOCUMENT : US
WO17054772 A1	20180404	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE	REF COUNTRY CODE : DE
WO17054772 A1	20180430	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2016850396 COUNTRY OF REF DOCUMENT : EP

94) Family number: 30377042 (US5817028A)

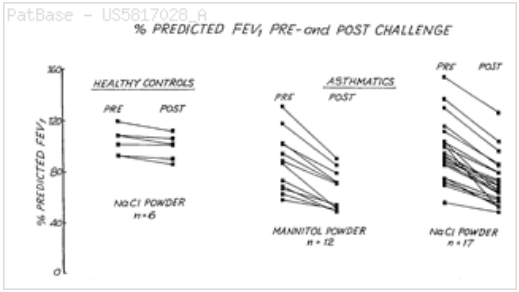
Title: METHOD AND DEVICE FOR THE PROVOCATION OF AIR PASSAGE NARROWING AND/OR THE INDUCTION OF SPUTUM

Abstract: PCT No. PCT/AU95/00086 Sec. 371 Date Nov. 4, 1996 Sec. 102(e) Date Nov. 4, 1996 PCT Filed Feb. 23, 1995 PCT Pub. No. WO95/22993 PCT Pub. Date Aug. 31, 1995A method as described for testing the susceptibility of a person to asthma. The person inhales an effective amount of sodium chloride, mannitol or another substance capable of altering the osmolarity of airway surface liquid in the subject. The substance is in the form of a dispersible dry powder containing an effective proportion of particles of a respirable size. The subject is then measured to detect airway narrowing which is indicative of a propensity for asthma. The same technique of dry powder inhalation can be used to test for the susceptibility of a person to rhinitus, to induce sputum and promote mucociliary clearance.

FDA Data:

Application number	Active ingredient	Proprietary name	Applicant	Date of approval
022368	MANNITOL	ARIDOL KIT	PHARMAXIS	Oct 5, 2010
022368	MANNITOL	ARIDOL KIT	PHARMAXIS LTD	Oct 5, 2010

Classifications:
International (IPC 8-9): A61J3/07 A61K31/047 A61K31/70 A61K31/7004 A61K31/721 A61K33/14 A61K47/02 A61K47/10 A61K47/12 A61K47/26 A61K49/00 A61K9/00 A61K9/12 A61K9/14 A61K9/72 A61P11/00 A61P11/02 A61P11/04 A61P11/06 A61P11/10 A61P11/12 (Advanced/Invention);
A61K31/70 A61K33/14 A61K49/00 A61K9/72 (Advanced/Non-invention)
International (IPC 1-7): A61J3/07 A61K31/70 A61K33/14 A61K33/44 A61K49/00 A61K9/14 A61K9/72 A61M11/00
CPC: A61K9/0075 A61K31/047 A61K31/7004 A61K49/0004 A61P11/00 A61P11/02 A61P11/04 A61P11/06 A61P11/10 A61P11/12
European: A61K31/047 A61K31/7004 A61K49/00H A61K9/00M20B A61K9/00M20B3
US: 128/200.14 128/200.23 600/529



Family:

Publication number	Publication date	Application number	Application date
AT474583 E	20100815	AT19950910331T	19950223
AU199517482 A1	19950911	AU19950017482	19950223
AU411494 A0	19940324	AU1994PM04114	19940225
AU682756 B2	19971016	AU19950017482	19950223
CA2183471 AA	19960815	CA19952183471	19950223
CA2183471 C	20080729	CA19952183471	19950223
CN1075737 C	20011205	CN19951091808	19950223
CN1142190 A	19970205	CN19951091808	19950223
DE122011000004 I1	20110505	DE201112000004	19950223
DE69536090 D1	20100902	DE199560360907	19950223
DE69536090 D1	20100902	DE19956036090	19950223
DK0748228 T3	20101011	DK19950910331T	19950223
EP0748228 A1	19961218	EP19950910331	19950223
EP0748228 A4	19991222	EP19950910331	19950223
EP0748228 B1	20100721	EP19950910331	19950223
EP0748228 B8	20100825	EP19950910331	19950223
ES2349027 T3	20101221	ES19950910331T	19950223
JP10501790 T2	19980217	JP19950522021T	19950223
JP2007056039 A2	20070308	JP20060317692	20061124
JP2007056040 A2	20070308	JP20060317693	20061124
JP2011148839 A2	20110804	JP20110103746	20110506
JP2011148840 A2	20110804	JP20110103747	20110506
JP2013049708 A2	20130314	JP20120257721	20121126
JP2013136564 A2	20130711	JP20120257722	20121126
JP3979660 B2	20070919	JP19950522021T	19950223
KR100385675 B1	20031010	KR19960704666	19950223
KR19970701068 A	19970317	KR19960704666	19960824
KR19977001068 A	19970317	KR19967004666	19950223
NZ281522 A	19980924	NZ19950281522	19950223
PT748228 T	20100915	PT19950910331T	19950223
US5817028 A	19981006	US19960696987	19961104
VN2677 A1	20020725	VN19960090131	19960821
WO9522993 A1	19950831	WO1995AU00086	19950223

Priority:

AU1994PM04114 19940225 AU19950017482 19950223 JP19950522021 19950223
JP20060317692 19950223 JP20060317693 19950223 JP20110103746 19950223
JP20110103747 19950223 WO1995AU00086 19950223

Probable Assignee: SYDNEY SOUTH WEST AREA HEALTH SERVICE

Assignee(s): (std): SYDNEY SOUTH WEST AREA HEALTH ; SYDNEY SOUTH WEST AREA HEALTH SERVICE ; CENTRAL SYNDNEY AREA HEALTH SE ; CENTRAL SYDNEY HEALTH SERVICE ; CENTRAL SYDNEY AREA HEALTH SERVICE ; CENT SYDNEY AREA HEALTH SERV ; ANDERSON SANDRA DOREEN

Assignee(s): CENTRAL SYNDNEY AREA HEALTH SERVICE ; CENTRAL SYDNEY AREA HEALTH SERVICE MISSENDEN ROAD ; CENTRAL SYDNEY AREA HEALTH SERVICE CAMPERDOWN

Inventor(s): (std): SAUDRA DOREEN ANDERSON ; SANDRA DOREEN ANDERSON ; ANDERSON SAUDRA DOREEN ; ANDERSON SANDRA DOREEN

Agent(s): FB RICE; FB RICE PTY LTD; ROBIC; CORNISH KRISTINA VICTORIA JOY

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 MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SN SZ TD TG TJ TT UA UG US UZ VN

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT474583 E	20100815	LSGT	+	granted / extensions (spc, cpc, pte)	
AT474583 E	20101215	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	REF DOCUMENT NUMBER : 0748228 COUNTRY OF REF DOCUMENT : EP
AT474583 E	20150223	PEXP		Calculated Patent Term Expiry	
AU199517482 A1	19950911	LSPB	+	published / reissued	
AU682756 B2	19971016	LSGT	+	granted / extensions (spc, cpc, pte)	
AU682756 B2	20031016	LSLI	GD	LICENCE REGISTERED	PARTYTYPE : LICENSEE LICENSEE : PHARMAXIS LTD
AU682756 B2	20150223	PEXP		Calculated Patent Term Expiry	
CA2183471 AA	19960815	LSPB	+	published / reissued	
CA2183471 AA	20020118	LSES	+EEER	EXAMINATION REQUEST	
CA2183471 C	20080729	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2183471 C	20150427	LSLE	-MKEX	EXPIRY	EFFECTIVE DATE : 20150223
CA2183471 C	20150223	PEXP		Calculated Patent Term Expiry	
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CN1075737 C	20011205	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN1075737 C	20150408	LSLE	-C17	CESSATION OF PATENT RIGHT	
CN1075737 C	20150223	PEXP		Calculated Patent Term Expiry	
CN1142190 A	19970205	LSPB	+	published / reissued	
CN1142190 A	19970205	LSPB	+C06	PUBLICATION	
DE122011000004 I1	20200223	LSLE	-R071	EXPIRY OF RIGHT	
DE69536090 D1	20100720	LSAS	R081	CHANGE OF APPLICANT/PATENTEE	PARTYTYPE : OWNER OWNER : SYDNEY SOUTH WEST AREA HEALTH SERVICE, NSW 2170 LIVERPOOL, NEW SOUTH WALES, AU OLDPARTY : CENTRAL SYDNEY AREA HEALTH SERVICE, CAMPERDOWN, NEUSÜDWALES, AU
DE69536090 D1	20100720	LSAS	R081	CHANGE OF APPLICANT/PATENTEE	PARTYTYPE : OWNER OWNER : SYDNEY SOUTH WEST AREA HEALTH SERVICE, NSW 2170 LIVERPOOL, NEW SOUTH WALES, AU OLDPARTY : CENTRAL SYDNEY AREA HEALTH SERVICE, CAMPERDOWN, NEUSÜDWALES, AU
DE69536090 D1	20101014	LSAS	8327	CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER	PARTYTYPE : OWNER OWNER : SYDNEY SOUTH WEST AREA HEALTH SERVICE, LIVERPO, AU
DE69536090 D1	20101014	LSAS	8327	CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER	PARTYTYPE : OWNER OWNER : SYDNEY SOUTH WEST AREA HEALTH SERVICE, LIVERPO, AU
DE69536090 D1	20101014	LSAS	8327	CHANGE IN THE	PARTYTYPE : OWNER

				PERSON/NAME/ADDRESS OF THE PATENT OWNER	OWNER : SYDNEY SOUTH WEST AREA HEALTH SERVICE, LIVERPO, AU
DE69536090 D1	20101014	LSAS	8327	CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER	PARTYTYPE : OWNER OWNER : SYDNEY SOUTH WEST AREA HEALTH SERVICE, LIVERPO, AU
DE69536090 D1	20110505	LSGT	+R065	REQUEST FOR GRANT OF SUPPLEMENTARY PROTECTION CERTIFICATE VALIDLY FILED	TEXT : PRODUCT NAME: MANNITOL TROCKENPULVER ZUR INHALATION; NAT. REGISTRATION NO/DATE: 68119.00.00 20080428; FIRST REGISTRATION: SCHWEDEN 22708 20061020 SUPPLEMENTARY PROTECTION CERTIFICATE : 122011000004 FILING DATE : 20110120 EXTENSION DATE : 20200223 EXPIRY DATE : 20150224 EFFECTIVE DATE : 20110223
DE69536090 D1	20110505	LSGT	+R065	REQUEST FOR GRANT OF SUPPLEMENTARY PROTECTION CERTIFICATE VALIDLY FILED	TEXT : PRODUCT NAME: MANNITOL TROCKENPULVER ZUR INHALATION; NAT. REGISTRATION NO/DATE: 68119.00.00 20080428; FIRST REGISTRATION: SCHWEDEN 22708 20061020 SUPPLEMENTARY PROTECTION CERTIFICATE : 122011000004 FILING DATE : 20110120 EXTENSION DATE : 20200223 EXPIRY DATE : 20150224 EFFECTIVE DATE : 20110223
DE69536090 D1	20110505	LSGT	+R065	REQUEST FOR GRANT OF SUPPLEMENTARY PROTECTION CERTIFICATE VALIDLY FILED	TEXT : PRODUCT NAME: MANNITOL TROCKENPULVER ZUR INHALATION; NAT. REGISTRATION NO/DATE: 68119.00.00 20080428; FIRST REGISTRATION: SCHWEDEN 22708 20061020 SUPPLEMENTARY PROTECTION CERTIFICATE : 122011000004 FILING DATE : 20110120 EXTENSION DATE : 20200223 EXPIRY DATE : 20150224 EFFECTIVE DATE : 20110223
DE69536090 D1	20110505	LSGT	+R065	REQUEST FOR GRANT OF SUPPLEMENTARY PROTECTION CERTIFICATE VALIDLY FILED	TEXT : PRODUCT NAME: MANNITOL TROCKENPULVER ZUR INHALATION; NAT. REGISTRATION NO/DATE: 68119.00.00 20080428; FIRST REGISTRATION: SCHWEDEN 22708 20061020 SUPPLEMENTARY PROTECTION CERTIFICATE : 122011000004 FILING DATE : 20110120 EXTENSION DATE : 20200223 EXPIRY DATE : 20150224 EFFECTIVE DATE : 20110223
DE69536090 D1	20120910	LSGT	+R067	EXAMINING DIVISION DECISION GRANTING SUPPLEMENTARY PROTECTION CERTIFICATE	TEXT : PRODUCT NAME: MANNITOL TROCKENPULVER ZUR INHALATION; NAT. REGISTRATION NO/DATE: 68119.00.00 20080428; FIRST REGISTRATION: SCHWEDEN 22708 20061020 SUPPLEMENTARY PROTECTION CERTIFICATE : 122011000004 FILING DATE : 20110120 EXTENSION DATE : 20200223 EXPIRY DATE : 20150224

DE69536090 D1	20120910	LSGT	+R067	EXAMINING DIVISION DECISION GRANTING SUPPLEMENTARY PROTECTION CERTIFICATE	TEXT : PRODUCT NAME: MANNITOL TROCKENPULVER ZUR INHALATION; NAT. REGISTRATION NO/DATE: 68119.00.00 20080428; FIRST REGISTRATION: SCHWEDEN 22708 20061020 SUPPLEMENTARY PROTECTION CERTIFICATE : 122011000004 FILING DATE : 20110120 EXTENSION DATE : 20200223 EXPIRY DATE : 20150224
DE69536090 D1	20120910	LSGT	+R067	EXAMINING DIVISION DECISION GRANTING SUPPLEMENTARY PROTECTION CERTIFICATE	TEXT : PRODUCT NAME: MANNITOL TROCKENPULVER ZUR INHALATION; NAT. REGISTRATION NO/DATE: 68119.00.00 20080428; FIRST REGISTRATION: SCHWEDEN 22708 20061020 SUPPLEMENTARY PROTECTION CERTIFICATE : 122011000004 FILING DATE : 20110120 EXTENSION DATE : 20200223 EXPIRY DATE : 20150224
DE69536090 D1	20120910	LSGT	+R067	EXAMINING DIVISION DECISION GRANTING SUPPLEMENTARY PROTECTION CERTIFICATE	TEXT : PRODUCT NAME: MANNITOL TROCKENPULVER ZUR INHALATION; NAT. REGISTRATION NO/DATE: 68119.00.00 20080428; FIRST REGISTRATION: SCHWEDEN 22708 20061020 SUPPLEMENTARY PROTECTION CERTIFICATE : 122011000004 FILING DATE : 20110120 EXTENSION DATE : 20200223 EXPIRY DATE : 20150224
DE69536090 D1	20130117	LSGT	+R069	SUPPLEMENTARY PROTECTION CERTIFICATE GRANTED	TEXT : PRODUCT NAME: MANNITOL TROCKENPULVER ZUR INHALATION; NAT. REGISTRATION NO/DATE: 68119.00.00 20080428; FIRST REGISTRATION: SCHWEDEN 22708 20061020 SUPPLEMENTARY PROTECTION CERTIFICATE : 122011000004 FILING DATE : 20110120 EXTENSION DATE : 20200223 EXPIRY DATE : 20150224 EFFECTIVE DATE : 20121018
DE69536090 D1	20130117	LSGT	+R069	SUPPLEMENTARY PROTECTION CERTIFICATE GRANTED	TEXT : PRODUCT NAME: MANNITOL TROCKENPULVER ZUR INHALATION; NAT. REGISTRATION NO/DATE: 68119.00.00 20080428; FIRST REGISTRATION: SCHWEDEN 22708 20061020 SUPPLEMENTARY PROTECTION CERTIFICATE : 122011000004 FILING DATE : 20110120 EXTENSION DATE : 20200223 EXPIRY DATE : 20150224 EFFECTIVE DATE : 20121018
DE69536090 D1	20130117	LSGT	+R069	SUPPLEMENTARY PROTECTION CERTIFICATE GRANTED	TEXT : PRODUCT NAME: MANNITOL TROCKENPULVER ZUR INHALATION; NAT. REGISTRATION NO/DATE: 68119.00.00 20080428; FIRST REGISTRATION: SCHWEDEN 22708 20061020 SUPPLEMENTARY PROTECTION CERTIFICATE : 122011000004 FILING DATE : 20110120 EXTENSION DATE :

					20200223 EXPIRY DATE : 20150224 EFFECTIVE DATE : 20121018
DE69536090 D1	20130117	LSGT	+R069	SUPPLEMENTARY PROTECTION CERTIFICATE GRANTED	TEXT : PRODUCT NAME: MANNITOL TROCKENPULVER ZUR INHALATION; NAT. REGISTRATION NO/DATE: 68119.00.00 20080428; FIRST REGISTRATION: SCHWEDEN 22708 20061020 SUPPLEMENTARY PROTECTION CERTIFICATE : 122011000004 FILING DATE : 20110120 EXTENSION DATE : 20200223 EXPIRY DATE : 20150224 EFFECTIVE DATE : 20121018
DE69536090 D1	20150223	LSLE	-R071	EXPIRY OF RIGHT	
DE69536090 D1	20150223	LSLE	-R071	EXPIRY OF RIGHT	
DK0748228 T3	20101011	LSGT	+	granted / extensions (spc, cpc, pte)	
DK0748228 T3	20150223	PEXP		Calculated Patent Term Expiry	
EP0748228 A1	19961218	LSPB	+	published / reissued	
EP0748228 A1	19961218	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19960918
EP0748228 A4	19991222	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	EFFECTIVE DATE : 19991110
EP0748228 A4	20030730	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20030612
EP0748228 A4	20100106	LSRE	RTI1	TITLE (CORRECTION)	TEXT : POWDER FOR THE PROVOCATION OF AIR PASSAGE NARROWING AND/OR THE INDUCTION OF SPUTUM
EP0748228 B1	20100721	LSGT	+	granted / extensions (spc, cpc, pte)	
EP0748228 B1	20100721	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP0748228 B1	20100728	LSLI	111L	LICENCE RECORDED	TEXT : 0101 PHARMAXIS LTD. EFFECTIVE DATE : 20100513
EP0748228 B1	20100730	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP0748228 B1	20100818	LSAS	RAP2	RIGHTS OF A PATENT TRANSFERRED	PARTYTYPE : OWNER OWNER : SYDNEY SOUTH WEST AREA HEALTH SERVICE
EP0748228 B1	20100818	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP0748228 B1	20150223	PEXP		Calculated Patent Term Expiry	
EP0748228 B1	20200222	PEXP		Calculated Patent Term Expiry	
EP0748228 B1	20200222	PEXP		Calculated Patent Term Expiry	
EP0748228 B1	20200223	PEXP		Calculated Patent Term Expiry	
EP0748228 B1	20200223	PEXP		Calculated Patent Term Expiry	
EP0748228 B8	20100915	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : T3

EP0748228 B8	20101118	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : EP REF DOCUMENT NUMBER : 20100402467 COUNTRY OF REF DOCUMENT : GR
EP0748228 B8	20101221	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A EFFECTIVE DATE : 20101209
EP0748228 B8	20110121	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : CP TEXT : PRODUCT NAME: POUDRE SECHE DE MANNITOL POUR INHALATION; NAT. REGISTRATION NO/DATE: NL 34557 20080819; FIRST REGISTRATION: SE - 22708 20061020 SUPPLEMENTARY PROTECTION CERTIFICATE : 11C0002 FILING DATE : 20110121
EP0748228 B8	20110121	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : CP TEXT : PRODUCT NAME: MANNITOL; NAT. REGISTRATION NO/DATE: NL 34557 20080819; FIRST REGISTRATION: SE - 22708 20061020 SUPPLEMENTARY PROTECTION CERTIFICATE : 11C0002 FILING DATE : 20110121
EP0748228 B8	20110209	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : CTFF TEXT : PRODUCT NAME: MANNITOL DRY POWDER FOR INHALATION; REGISTERED: SE 22708 20061020; UK PL 27944/0001-0001 20071218 SUPPLEMENTARY PROTECTION CERTIFICATE : SPC/GB11/004 FILING DATE : 20110120
EP0748228 B8	20110225	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : CP
EP0748228 B8	20110225	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : CR TEXT : PRODUCT NAME: POUDRE ECHE DE MANNITOL POUR INHALATION; REGISTRATION NO/DATE IN FRANCE: NL 34557 DU 20080819; REGISTRATION NO/DATE AT EEC: 22708 DU 20061020 SUPPLEMENTARY PROTECTION CERTIFICATE : 11C0002 FILING DATE : 20110121
EP0748228 B8	20110629	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20110426
EP0748228 B8	20110818	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 69536090 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20110426
EP0748228 B8	20130724	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : CTFG TEXT : PRODUCT NAME: MANNITOL; REGISTERED: SE 22708 20061020; UK PL 27944/0001-0001

					20071218 SUPPLEMENTARY PROTECTION CERTIFICATE : SPC/GB11/004 FILING DATE : 20110120 EXTENSION DATE : 20200222 EFFECTIVE DATE : 20130701
EP0748228 B8	20140131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20131231 YEAR OF FEE PAYMENT : 20
EP0748228 B8	20140228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20131227 YEAR OF FEE PAYMENT : 20
EP0748228 B8	20140430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20140211 YEAR OF FEE PAYMENT : 20
EP0748228 B8	20140430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20140211 YEAR OF FEE PAYMENT : 20
EP0748228 B8	20140430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20140212 YEAR OF FEE PAYMENT : 20
EP0748228 B8	20140430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20140211 YEAR OF FEE PAYMENT : 20
EP0748228 B8	20140430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20140208 YEAR OF FEE PAYMENT : 20
EP0748228 B8	20140530	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20140218 YEAR OF FEE PAYMENT : 20
EP0748228 B8	20140530	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20140120 YEAR OF FEE PAYMENT : 20
EP0748228 B8	20140530	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20140211 YEAR OF FEE PAYMENT : 20
EP0748228 B8	20140530	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20140128 YEAR OF FEE PAYMENT : 20
EP0748228 B8	20140530	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20140113 YEAR OF FEE PAYMENT : 20
EP0748228 B8	20140530	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20140214 YEAR OF FEE PAYMENT : 20
EP0748228 B8	20140630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20140220 YEAR OF FEE PAYMENT : 20
EP0748228 B8	20140630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20140219 YEAR OF FEE PAYMENT : 20
EP0748228 B8	20140829	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20140417 YEAR OF FEE PAYMENT : 20
EP0748228 B8	20150223	LSLE	REG	REFERENCE TO A	REF COUNTRY CODE : DE

				NATIONAL CODE	REF LEGAL EVENT CODE : R071 REF DOCUMENT NUMBER : 69536090 COUNTRY OF REF DOCUMENT : DE
EP0748228 B8	20150224	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R071 REF DOCUMENT NUMBER : 69536090 COUNTRY OF REF DOCUMENT : DE
EP0748228 B8	20150302	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DK REF LEGAL EVENT CODE : EUP EFFECTIVE DATE : 20150223
EP0748228 B8	20150302	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : PT REF LEGAL EVENT CODE : MM4A TEXT : MAXIMUM VALIDITY LIMIT REACHED EFFECTIVE DATE : 20150223
EP0748228 B8	20150304	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : V4 EFFECTIVE DATE : 20150223
EP0748228 B8	20150313	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP0748228 B8	20150318	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : CTFE TEXT : PRODUCT NAME: MANNITOL; REGISTERED: SE 22708 20061020; UK PL 27944/0001-0001 20071218 SUPPLEMENTARY PROTECTION CERTIFICATE : SPC/GB11/004 FILING DATE : 20110120 EXTENSION DATE : 20200222 EXPIRY DATE : 20150223
EP0748228 B8	20150318	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : PE20 EXPIRY DATE : 20150222
EP0748228 B8	20150325	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MK9A
EP0748228 B8	20150331	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SE REF LEGAL EVENT CODE : EUG
EP0748228 B8	20150415	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MK07 REF DOCUMENT NUMBER : 474583 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20150223
EP0748228 B8	20150424	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : MA REF DOCUMENT NUMBER : 20100402467 COUNTRY OF REF DOCUMENT : GR EFFECTIVE DATE : 20150224
EP0748228 B8	20150430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF EXPIRATION OF PROTECTION

				EPO]	LAPSED DATE : 20150223
EP0748228 B8	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 : 20150302
EP0748228 B8	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 : 20150222
EP0748228 B8	20150826	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20150826
EP0748228 B8	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 : 20150224
EP0748228 B8	20160325	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : CT TEXT : PRODUCT NAME: MANNITOL; NAT. REGISTRATION NO/DATE: NL 34557 20080819; FIRST REGISTRATION: SE - 22708 20061020 SUPPLEMENTARY PROTECTION CERTIFICATE : 11C0002 FILING DATE : 20110121 EXTENSION DATE : 20200222
EP0748228 B8	20200223	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R071 REF DOCUMENT NUMBER : 69536090 COUNTRY OF REF DOCUMENT : DE TEXT : PRODUCT NAME: MANNITOL TROCKENPULVER ZUR INHALATION; NAT. REGISTRATION NO/DATE: 68119.00.00 20080428; FIRST REGISTRATION: SCHWEDEN 22708 20061020 SUPPLEMENTARY PROTECTION CERTIFICATE : 122011000004 FILING DATE : 20110120 EXTENSION DATE : 20200223 EXPIRY DATE : 20150224
EP0748228 B8	20200318	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : SPCE TEXT : PRODUCT NAME: MANNITOL; REGISTERED: SE 22708 20061020; UK PL 27944/0001-0001 20071218 SUPPLEMENTARY PROTECTION CERTIFICATE : SPC/GB11/004 FILING DATE : 20110120 EXTENSION DATE : 20200222 EXPIRY DATE : 20150223
ES2349027 T3	20101221	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2349027 T3	20150223	PEXP		Calculated Patent Term Expiry	
JP10501790 T2	19980217	LSPB	+	published / reissued	
JP10501790 T2	20060523	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE :

					20060523
JP10501790 T2	20061109	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20061017
JP10501790 T2	20061212	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20061212
JP10501790 T2	20070310	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20070309
JP10501790 T2	20070425	LSAL	A911	TRANSFER OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A911 EFFECTIVE DATE : 20070426
JP10501790 T2	20070523	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP10501790 T2	20070530	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20070529
JP10501790 T2	20070705	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20070626
JP10501790 T2	20070706	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP10501790 T2	20070709	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP2007056039 A2	20070308	LSPB	+	published / reissued	
JP2007056039 A2	20061222	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20061221
JP2007056039 A2	20100602	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20100601
JP2007056039 A2	20110105	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20110104
JP2007056039 A2	20110507	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20110506
JP2007056040 A2	20070308	LSPB	+	published / reissued	
JP2007056040 A2	20061222	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20061221
JP2007056040 A2	20100602	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20100601
JP2007056040 A2	20110105	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20110104
JP2007056040 A2	20110507	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE

					INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20110506
JP2011148839 A2	20110804	LSPB	+	published / reissued	
JP2011148839 A2	20110604	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20110603
JP2011148839 A2	20111221	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20111220
JP2011148839 A2	20120621	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20120620
JP2011148839 A2	20120725	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20120724
JP2011148840 A2	20110804	LSPB	+	published / reissued	
JP2011148840 A2	20110604	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20110603
JP2011148840 A2	20111221	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20111220
JP2011148840 A2	20120621	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20120620
JP2011148840 A2	20120725	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20120724
JP2013049708 A2	20130314	LSPB	+	published / reissued	
JP2013049708 A2	20121226	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20121225
JP2013049708 A2	20130612	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20130611
JP2013049708 A2	20140311	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20140310
JP2013136564 A2	20130711	LSPB	+	published / reissued	
JP2013136564 A2	20140108	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20140107
JP2013136564 A2	20140924	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20140922
JP3979660 B2	20070919	LSGT	+	granted / extensions (spc, cpc, pte)	
JP3979660 B2	20070531	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP3979660 B2	20070703	LSFE	R100	特許料納付書 (Patent fee payment form)	

JP3979660 B2	20100701	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP3979660 B2	20100706	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 4
JP3979660 B2	20110630	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 4
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JP3979660 B2	20130627	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP3979660 B2	20130702	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP3979660 B2	20140703	LSFE	R20	特許料納付書 (Patent fee payment form)	
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JP3979660 B2	20150223	LSLE	-EXPY	CANCELLATION BECAUSE OF COMPLETION OF TERM	
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KR100385675 B1	20031010	LSGT	+	granted / extensions (spc, cpc, pte)	
KR100385675 B1	19991213	LSES	A201	REQUEST FOR EXAMINATION	
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KR100385675 B1	20020219	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
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KR100385675 B1	20030516	LSGT	+GRNT	WRITTEN DECISION TO GRANT	
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KR100385675 B1	20140421	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20140421 YEAR OF FEE PAYMENT : 12
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KR100385675 B1	20160824	PEXP		Calculated Patent Term Expiry	
KR19970701068 A	19970317	LSPB	+	published / reissued	
KR19977001068 A	19970317	LSPB	+	published / reissued	
NZ281522 A	19980924	LSPB	+	published / reissued	
NZ281522 A	20020328	LSFE	+RENW	RENEWAL (RENEWAL FEES ACCEPTED)	
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NZ281522 A	20150227	LSLE	-EXPY	PATENT EXPIRED	
PT748228 T	20100915	LSGT	+	granted / extensions (spc, cpc, pte)	
PT748228 T	20250915	PEXP		Calculated Patent Term Expiry	
US5817028 A	19981006	LSGT	+	granted / extensions (spc, cpc, pte)	
US5817028 A	19961112	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CENTRAL SYDNEY AREA HEALTH SERVICE, AUSTRALIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ANDERSON, SANDRA DOREEN; REEL/FRAME:008216/0324 EFFECTIVE DATE : 19960821
US5817028 A	19990801	LSGT	PAT1	Patented Case	
US5817028 A	19990801	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5817028 A	19990824	LSRE	CC	CERTIFICATE OF CORRECTION	
US5817028 A	20020321	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5817028 A	20060313	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5817028 A	20100331	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5817028 A	20101203	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SYDNEY SOUTH WEST AREA HEALTH SERVICE, AUSTRALIA OLDPARTY : CHANGE OF NAME; ASSIGNOR:CENTRAL SYDNEY AREA HEALTH SERVICE; REEL/FRAME:025451/0747 EFFECTIVE DATE : 20041020
US5817028 A	20151006	PEXP		Calculated Patent Term Expiry	
VN2677 A1	20020725	LSGT	+	granted / extensions (spc, cpc, pte)	
WO9522993 A1	19950831	LSPB	+	published / reissued	
WO9522993 A1	19950223	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 95191808.7 COUNTRY OF REF DOCUMENT : CN
WO9522993 A1	19960815	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2183471 COUNTRY OF REF DOCUMENT : CA
WO9522993 A1	19960821	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1199690131 COUNTRY OF REF DOCUMENT : VN
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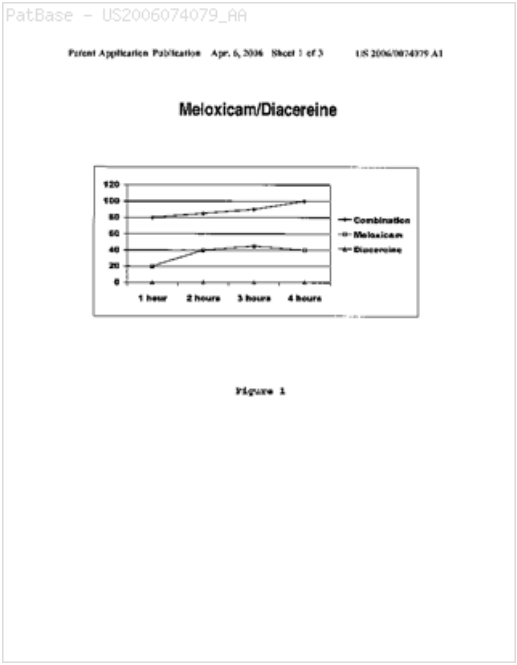
WO9522993 A1	19960918	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1995910331 COUNTRY OF REF DOCUMENT : EP
WO9522993 A1	19961104	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 08696987 COUNTRY OF REF DOCUMENT : US
WO9522993 A1	19961218	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1995910331 COUNTRY OF REF DOCUMENT : EP
WO9522993 A1	19970102	LSWD	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : 8642

95) Family number: 32803042 (US2006074079A)

Title: SOLID PHARMACEUTICAL FORMULATIONS COMPRISING DIACEREINE AND MELOXICAM

Abstract: This invention relates to formulations in solid pharmaceutical forms containing diacereine and meloxicam. The present invention provides novel formulations comprising: (a) Diacereine, (b) Meloxicam, (c) one or more anti-adherent agents, (d) one or more disintegrating agents, (e) one or more binder agents, (f) one or more lubricants, (g) one or more diluents, (h) one or more solvents, and (i) any other additive which assists in formulation. The present invention also provides a method for treatment of osteoarthritis, rheumatoid arthritis, gout arthritis, multiple sclerosis, amyotrophic lateral sclerosis and related diseases, in addition of inflammatory processes originated from various etiologies, by administering suitable doses.

Classifications:
International (IPC 8-9): A61J3/06 A61K31/192 A61K31/222 A61K31/54 A61K31/5415 A61P19/02 A61P29/00 (Advanced/Invention); A61J3/06 A61K31/185 A61K31/21 A61K31/54 A61K31/5415 A61P19/00 A61P29/00 (Core/Invention)
International (IPC 1-7): A61J3/06 A61K31/222 A61K31/222 A61K31/5415 A61K31/5415 A61K9/20 A61K9/20 A61P19/02 A61P29/00 A61P29/00
CPC: A61K31/222 A61K31/5415 A61K45/06 A61P19/02 A61P29/00
European: A61K31/222 A61K31/5415 A61K45/06
US: 514/226.5 514/226.500P 514/569 514/569S



Family:

Publication number	Publication date	Application number	Application date
AR051318 AA	20070103	AR2005P104184	20051003
AT439832 E	20090915	AT20050076453T	20050622
CY1109647 T1	20140813	CY20091101203T	20091118
DE602005016055 D1	20091001	DE200560016055T	20050622
EP1655026 A1	20060510	EP20050076453	20050622
EP1655026 B1	20090819	EP20050076453	20050622
ES2332225 T3	20100129	ES20050076453T	20050622
MXPA04009698 A1	20060405	MX2004PA09698	20041004
PL1655026 T3	20100129	PL20050076453T	20050622
US2006074079 AA	20060406	US20050186031	20050930

Priority:
MX2004PA09698 20041004 EP20050076453 20050622

Probable Assignee: ESPINOSA ABDALA LEOPOLDO

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Assignee(s): WORLD TRADE IMPORT EXPORT WTIE A G ; WORLD TRADE IMPORT EXPORT WTIE AG ; REPRESENTACIONES E INVESTIGACIONES MEDICAS DE CV SA

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Inventor(s): ARMENTA MARIA ELENA GARCIA ; OCHOA VICTOR GUILLERMO ; MURILLO JOSEFINA ; MENDOZA CONSUELO ; ARMENTA MARIA ELENA ; MENDOZA CONSUELO FLORES ; OCHOA VICTOR GUILLERMO ALVAREZ ; JOSEFINA SANTOS MURILLO

Agent(s): CARVAJAL Y URQUIJO ISABEL; LEYDIG VOIT AND MAYER LTD

Designated states: AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
AR051318 AA	20070103	LSPB	+	published / reissued	
AR051318 AA	20170417	LSRV	-FC	REFUSAL	
AT439832 E	20090915	LSGT	+	granted / extensions (spc, cpc, pte)	
AT439832 E	20100215	LSLE	-RER	CEASED AS TO	

				PARAGRAPH 5 LIT. 3 LAW INTRODUCING PATENT TREATIES	
AT439832 E	20250622	PEXP		Calculated Patent Term Expiry	
CY1109647 T1	20140813	LSGT	+	granted / extensions (spc, cpc, pte)	
CY1109647 T1	20291118	PEXP		Calculated Patent Term Expiry	
DE602005016055 D1	20090723	LSAS	R081	CHANGE OF APPLICANT/PATENTEE	PARTYTYPE : OWNER OLDPARTY : ESPINOSA ABDALA, LEOPOLDO, ZAPOPAN, JALISCO, MX
DE602005016055 D1	20100519	LSOP	R026	OPPOSITION FILED AGAINST PATENT	
DE602005016055 D1	20100805	LSOP	-8363	OPPOSITION AGAINST THE PATENT	
DE602005016055 D1	20140220	LSAS	R081	CHANGE OF APPLICANT/PATENTEE	PARTYTYPE : OWNER OWNER : PPTM INTERNATIONAL S.À.R.L., LUXEMBURG, LU OLDPARTY : WORLD TRADE IMPORT-EXPORT, WTIE A.G., ZUG, CH
DE602005016055 D1	20190101	LSDW	-R119	APPLICATION DEEMED WITHDRAWN, OR IP RIGHT LAPSED, DUE TO NON-PAYMENT OF RENEWAL FEE	
EP1655026 A1	20060510	LSPB	+	published / reissued	
EP1655026 A1	20061115	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20061003
EP1655026 A1	20070117	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20061214
EP1655026 A1	20070117	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 : IS COUNTRY OF REF DOCUMENT : IT COUNTRY OF REF DOCUMENT : LI COUNTRY OF REF DOCUMENT : LT 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
EP1655026 A1	20090812	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : WORLD TRADE IMPORT-EXPORT, WTIE A.G.
EP1655026 A1	20151030	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY PAYMENT DATE : 20150617 YEAR OF FEE PAYMENT : 11
EP1655026 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20160622 YEAR OF FEE PAYMENT : 12
EP1655026 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20160622 YEAR OF FEE PAYMENT : 12
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EP1655026 A1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20160628 YEAR OF FEE PAYMENT : 12
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EP1655026 B1	20090819	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
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EP1655026 B1	20091116	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : RO REF LEGAL EVENT CODE : EPE
EP1655026 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 FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20090819
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EP1655026 B1	20100226	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 : 20090819
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EP1655026 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 FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20090819
EP1655026 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 : 20091120
EP1655026 B1	20110131	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 : 20100630
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EP1655026 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 : 20100622
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EP1655026 B1	20110630	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : CH OWNER : WORLD TRADE IMPORT-EXPORT, WTIE A.G. REF LEGAL EVENT CODE : PFA OLDPARTY : WORLD TRADE IMPORT-EXPORT, WTIE A.G.#BAARERSTRASSE 73#6302 ZUG (CH) -TRANSFER TO- WORLD TRADE IMPORT-EXPORT, WTIE A.G.#GRIENBACHSTRASSE 11#6302 ZUG (CH)
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				IN CONTRACTING STATE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	CH REINSTATED DATE : 20110622
EP1655026 B1	20111019	LSRE	+27C	OPPOSITION PROCEEDINGS TERMINATED	EFFECTIVE DATE : 20110529
EP1655026 B1	20120731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20120514 YEAR OF FEE PAYMENT : 8
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EP1655026 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 : 20100622
EP1655026 B1	20140131	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP1655026 B1	20140228	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : ES OWNER : PPTM INTERNATIONAL S.A.R.L. REF LEGAL EVENT CODE : PC2A EFFECTIVE DATE : 20140224
EP1655026 B1	20140403	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : DE OWNER : PPTM INTERNATIONAL S.A.R.L., LU REF LEGAL EVENT CODE : R081 REF DOCUMENT NUMBER : 602005016055 COUNTRY OF REF DOCUMENT : DE OLDPARTY : FORMER OWNER: WORLD TRADE IMPORT-EXPORT, WTIE A.G., ZUG, CH EFFECTIVE DATE : 20140220
EP1655026 B1	20140403	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : DE OWNER : REPRESENTACIONES E INVESTIGACIONES MEDICAS S.A, MX REF LEGAL EVENT CODE : R081 REF DOCUMENT NUMBER : 602005016055 COUNTRY OF REF DOCUMENT : DE OLDPARTY : FORMER OWNER: WORLD TRADE IMPORT-EXPORT, WTIE A.G., ZUG, CH EFFECTIVE DATE : 20140220
EP1655026 B1	20140411	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : FR OWNER : PPTM INTERNATIONAL SARL, LU REF LEGAL EVENT CODE : TP EFFECTIVE DATE : 20140311
EP1655026 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 : 20130630
EP1655026 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 : 20130630
EP1655026 B1	20140829	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20140619 YEAR OF FEE PAYMENT : 10
EP1655026 B1	20160229	LSLE	-PG25	LAPSED IN A CONTRACTING STATE	COUNTRY OF REF DOCUMENT : CZ

				[ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20150622
EP1655026 B1	20160628	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
EP1655026 B1	20161129	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : DE OWNER : REPRESENTACIONES E INVESTIGACIONES MEDICAS S.A, MX REF LEGAL EVENT CODE : R081 REF DOCUMENT NUMBER : 602005016055 COUNTRY OF REF DOCUMENT : DE OLDPARTY : FORMER OWNER: PPTM INTERNATIONAL S.A.R.L., LUXEMBURG, LU
EP1655026 B1	20170217	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : FR OWNER : REPRESENTACIONES E INVESTIGACIONES MEDICAS, S., MX REF LEGAL EVENT CODE : TP EFFECTIVE DATE : 20170102
EP1655026 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY PAYMENT DATE : 20160628 YEAR OF FEE PAYMENT : 12
EP1655026 B1	20170628	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 13
EP1655026 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170628 YEAR OF FEE PAYMENT : 13
EP1655026 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LT PAYMENT DATE : 20170615 YEAR OF FEE PAYMENT : 13
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EP1655026 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20170614 YEAR OF FEE PAYMENT : 13
EP1655026 B1	20170929	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20170616 YEAR OF FEE PAYMENT : 13
EP1655026 B1	20171005	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : ES OWNER : REPRESENTACIONES E INVESTIGACIONES MEDICAS S.A. DE REF LEGAL EVENT CODE : PC2A EFFECTIVE DATE : 20170929
EP1655026 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170621 YEAR OF FEE PAYMENT : 13
EP1655026 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20170707 YEAR OF FEE PAYMENT : 13
EP1655026 B1	20180228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA	COUNTRY OF REF DOCUMENT : CY NOTIFICATIONOFLAPSE :

				POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20170622
EP1655026 B1	20190101	LSDW	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R119 REF DOCUMENT NUMBER : 602005016055 COUNTRY OF REF DOCUMENT : DE
EP1655026 B1	20190110	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : LT REF LEGAL EVENT CODE : MM4D EFFECTIVE DATE : 20180622
EP1655026 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 NON-PAYMENT OF DUE FEES LAPSED DATE : 20180622
EP1655026 B1	20190131	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 : 20180622
EP1655026 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 : 20180622
EP1655026 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
EP1655026 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
EP1655026 B1	20190916	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20190916
EP1655026 B1	20191031	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 : 20180623
EP1655026 B1	20191129	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 : 20180622
EP1655026 B1	20250622	PEXP		Calculated Patent Term Expiry	
ES2332225 T3	20100129	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2332225 T3	20250622	PEXP		Calculated Patent Term Expiry	
MXPA04009698 A1	20060405	LSPB	+	published / reissued	
MXPA04009698 A1	20070913	LSAS	GB	TRANSFER OR RIGHTS	
MXPA04009698 A1	20080926	LSAS	GB	TRANSFER OR RIGHTS	
MXPA04009698 A1	20100524	LSGT	+FG	GRANT OR REGISTRATION	
MXPA04009698 A1	20110601	LSLI	GD	LICENCE GRANTED	
MXPA04009698 A1	20111006	LSLI	GD	LICENCE GRANTED	
MXPA04009698 A1	20140113	LSAS	GB	TRANSFER OR RIGHTS	
MXPA04009698 A1	20140205	LSLI	GD	LICENCE GRANTED	

PL1655026 T3	20100129	LSGT	+	granted / extensions (spc, cpc, pte)	
US2006074079 AA	20060406	LSPB	+	published / reissued	
US2006074079 AA	20050809	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ESPINOSA ABDALA, LEOPOLDO, MEXICO OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:GARCIA ARMENTA, MARIA ELENA; SANTOS MURILLO, JOSEFINA; ALVAREZ OCHOA, VICTOR GUILLERMO; AND OTHERS; REEL/FRAME:016371/0475 EFFECTIVE DATE : 20050628
US2006074079 AA	20090621	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	

96) Family number: 60395042 (US2015265652A)

Title: PRODUCTION OF MIDBRAIN DOPAMINERGIC NEURONS AND METHODS FOR THE USE THEREOF

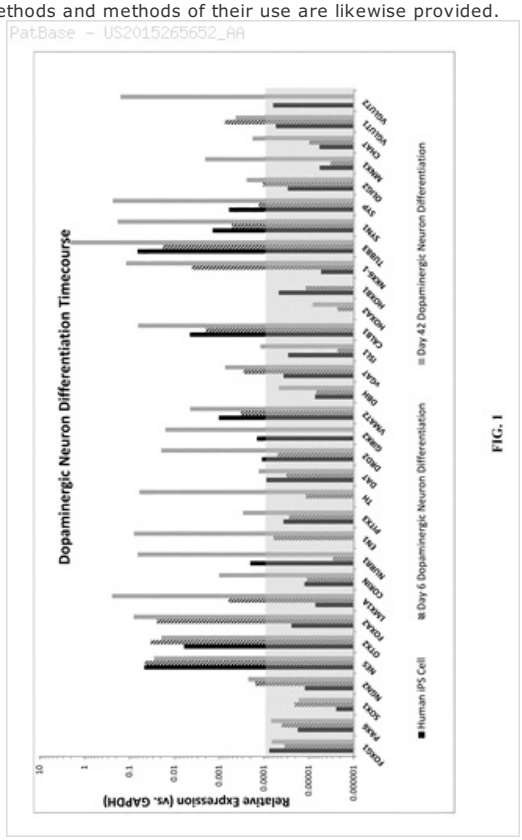
Abstract: Methods are provided for efficient production of midbrain dopaminergic (DA) neurons. In some aspects, methods involve differentiation and selection of DA neurons for a transgenic pluripotent cell population (e.g., cells comprising a selectable marker gene). Cell populations produced by the instant methods and methods of their use are likewise provided.

Classifications:

International (IPC 8-9)**:** A61J1/00 A61K35/30 A61K48/00 A61P25/16 B65D25/20 C12N15/09 C12N5/071 C12N5/079 C12N5/0793 C12N5/10 C12N9/02 C12Q1/06 C12Q1/68 G01N33/50 (Advanced/Invention)

CPC: A61K35/30 C12N9/0071 C12Q1/6876 G01N33/5058 A61J1/00 B65D25/205 C12N2501/727 C12Y114/16002 C12Q2600/158 C12Q2600/136 G01N2333/4706 A61P25/16 C12N5/0619 C12N2501/15 C12N2501/155 C12N2501/41 C12N2501/415 C12N2506/45

US: 1/1 206/438 424/93.21 435/29 435/325 435/368 435/377 435/6.12



Family:

Publication number	Publication date	Application number	Application date
EP3119881 A1	20170125	EP20150718000	20150320
JP2017511153 T2	20170420	JP20170501135T	20150320
JP6718431 B2	20200708	JP20170501135T	20150320
US2015265652 AA	20150924	US20150664245	20150320
US2018021383 AA	20180125	US20170614755	20170606
US9694036 BB	20170704	US20150664245	20150320
WO15143342 A1	20150924	WO2015US21783	20150320

Priority:

US20140968838P 20140321 US20150664245 20150320 WO2015US21783 20150320 US20170614755 20170606

Probable Assignee: FUJIFILM CELLULAR DYNAMICS INC

Assignee(s): (std)**:** CELLULAR DYNAMICS INT INC

Assignee(s): FUJIFILM CELLULAR DYNAMICS INC

Inventor(s): (std)**:** CHASE LUCAS ; CHAVEZ CARRIE ; GEORGE MATT ; MCMAHON CHRIS ; SWANSON BRAD ; WANG WEN BO

Agent(s): SONN AND PARTNER PATENTANWAELTE; SIKS AND CO; PARKER HIGHLANDER PLLC; BYRD MARSHALL P

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
EP3119881 A1	20170125	LSPB	+	published / reissued	
EP3119881 A1	20170125	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20160923
EP3119881 A1	20171129	LSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 20171030

				DESPATCHED	
EP3119881 A1	20180613	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : FUJIFILM CELLULAR DYNAMICS, INC.
JP2017511153 T2	20170420	LSPB	+	published / reissued	
JP2017511153 T2	20180319	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20180319
JP2017511153 T2	20180319	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20180319
JP2017511153 T2	20190312	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20190312
JP2017511153 T2	20190805	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20190805
JP2017511153 T2	20200107	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20200107
JP2017511153 T2	20200317	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20200317
JP2017511153 T2	20200521	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2017511153 T2	20200526	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20200526
JP2017511153 T2	20200616	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20200612
JP2017511153 T2	20200616	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 6718431 COUNTRY OF REF DOCUMENT : JP
JP6718431 B2	20200708	LSGT	+	granted / extensions (spc, cpc, pte)	
JP6718431 B2	20350320	PEXP		Calculated Patent Term Expiry	
US2015265652 AA	20150924	LSPB	+	published / reissued	
US2015265652 AA	20160426	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CELLULAR DYNAMICS INTERNATIONAL, INC., WISCONSIN OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:GEORGE, MATT; CHAVEZ, CARRIE; MCMAHON, CHRIS; AND OTHERS; SIGNING DATES FROM 20160310 TO 20160421; REEL/FRAME:038522/0934
US2015265652 AA	20170302	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2015265652 AA	20170601	LSFE	+PPR1	Publications -- Issue Fee Payment Received	
US2015265652 AA	20170602	LSFE	+PPV1	Publications -- Issue Fee Payment Verified	
US2015265652 AA	20170614	LSGT	STCF	INFORMATION	TEXT : PATENTED CASE

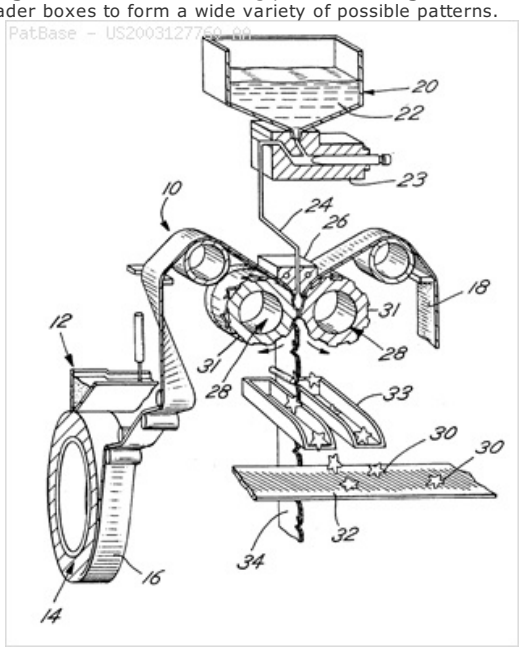
				ON STATUS: PATENT GRANT	
US2018021383 AA	20180125	LSPB	+	published / reissued	
US2018021383 AA	20180503	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : FUJIFILM CELLULAR DYNAMICS, INC., WISCONSIN OLDPARTY : CHANGE OF NAME; ASSIGNOR:CELLULAR DYNAMICS INTERNATIONAL, INC.; REEL/FRAME:046069/0525 EFFECTIVE DATE : 20180323
US2018021383 AA	20190920	LSES	NFA1	Non Final Action Mailed	
US2018021383 AA	20200303	LSES	NFA1	Non Final Action Mailed	
US2018021383 AA	20200630	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US9694036 BB	20170704	LSGT	+	granted / extensions (spc, cpc, pte)	
US9694036 BB	20151218	LSES	NFA1	Non Final Action Mailed	
US9694036 BB	20170614	LSGT	PAT1	Patented Case	
US9694036 BB	20180503	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : FUJIFILM CELLULAR DYNAMICS, INC., WISCONSIN OLDPARTY : CHANGE OF NAME; ASSIGNOR:CELLULAR DYNAMICS INTERNATIONAL, INC.; REEL/FRAME:046069/0525 EFFECTIVE DATE : 20180323
US9694036 BB	20350320	PEXP		Calculated Patent Term Expiry	
WO15143342 A1	20150924	LSPB	+	published / reissued	
WO15143342 A1	20160920	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE	REF DOCUMENT NUMBER : 2017501135 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO15143342 A1	20160921	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE	REF COUNTRY CODE : DE
WO15143342 A1	20160923	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2015718000 COUNTRY OF REF DOCUMENT : EP

97) Family number: 12045044 (US2003127760A)

Title: APPARATUS AND METHODS FOR FORMING PATTERNED SOFT **GELATIN** CAPSULES

Abstract: An apparatus and a process useful for producing patterned **gelatin** ribbons for forming patterned soft **gelatin** capsules are disclosed. The apparatus and process use multiple spreader boxes to form a wide variety of possible patterns.

Classifications:
International (IPC 8-9): A61J3/07 A61K9/64 B29C39/12 B29C39/20 B29C41/32 (Advanced/Invention); B29K86/00 (Advanced/Non-invention)
International (IPC 1-7): A01J25/12 A23L1/0562 A23P1/12 A61J3/07 A61K9/64 B29C3/912 B29C31/10 B29C39/12 B29C39/20 B29C4/704 B29C41/32 B29C47/04 B29K86/00
CPC: Y10S264/37 Y10S425/804 A61J3/07 B29C39/126 B29C39/20 B29C41/32 B29K2089/00
European: A61J3/07 B29C39/12B2 B29C39/20 B29C41/32 L29K89/00
US: 264/4 264/4P 264/75 264/75S 264/DIG.37 42/5.5 424/456 424/456P 425/133.5 425/133.500S 425/375 425/375S 425/447 425/447S 425/5 425/5S 425/804 425/804S



Family:

Publication number	Publication date	Application number	Application date
AU199350027 A1	19940303	AU19930050027	19930809
AU669568 B2	19960613	AU19930050027	19930809
BRPI9306866 A	19981208	BR1993PI06866	19930809
CA2142124 AA	19950209	CA19932142124	19930809
CA2142124 C	20010227	CA19932142124	19930809
DE69309934 D1	19970522	DE19936009934	19930809
DE69309934 D1	19970522	DE19936009934T	19930809
DE69309934 T2	19971106	DE19936009934T	19930809
EP0653979 A1	19950524	EP19940906739	19930809
EP0653979 B1	19970416	EP19940906739	19930809
JP3205340 B2	20010904	JP19940505617T	19930809
JP8502698 T2	19960326	JP19940505617T	19930809
KR100286077 B1	20010416	KR19950700491	19950210
KR19950702901 A	19950823	KR19950700491	19930809
KR950702901 A	19950823	KR19950700491	19950210
US2003127760 AA	20030710	US20030373158	20030224
US2004170679 AA	20040902	US20040794235	20040305
US5672300 A	19970930	US19920927604	19920810
US6022499 A	20000208	US19970937693	19970929
US6569363 BA	20030527	US19990399308	19990920
US6805818 BB	20041019	US20030373158	20030224
WO9403316 A1	19940217	WO1993US07492	19930809

Priority:

US19920927604 19920810 WO1993US07492 19930809 US19970937693 19970929
US19990399308 19990920 US20030373158 20030224 US20040794235 20040305

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Inventor(s): (std): BAKER LAWRENCE ; BAKER LAWRENCE A ; BEZAIRE BUD ; MIKALIAN ROBERT ; RATKO MICHAEL ; SCHURIG GREGORY ; SCHURIG GREGORY A

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Agent(s): SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD; SMART AND BIGGAR; DONALD NICKEY; ANDREW ROZYCKI; STEVEN SARUSSI

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

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AU199350027 A1	19940303	LSPB	+	published / reissued	
AU669568 B2	19960613	LSGT	+	granted / extensions (spc, cpc, pte)	
AU669568 B2	20130809	PEXP		Calculated Patent Term Expiry	
BRPI9306866 A	19981208	LSPB	+	published / reissued	
BRPI9306866 A	19990921	LSGT	+FF	DECISION: INTENTION TO GRANT	
BRPI9306866 A	20000321	LSGT	+FG9A	PATENT OR CERTIFICATE OF ADDITION GRANTED	
BRPI9306866 A	20101103	LSFE	B24C	PATENT ANNUAL FEE: REQUEST FOR FOR RESTORATION	TEXT : REFERENTE A 13A, 14A, 15A, 16A E 17A ANUIDADE(S).
BRPI9306866 A	20110906	LSAS	B25D	REQUESTED CHANGE OF NAME OF APPLICANT APPROVED	PARTYTYPE : OWNER OWNER : CARDINAL HEALTH 409, INC. (US) OLDPARTY : NOME ALTERADO DE: R.P. SCHERER CORPORATION
BRPI9306866 A	20110920	LSAS	B25D	REQUESTED CHANGE OF NAME OF APPLICANT APPROVED	PARTYTYPE : OWNER OWNER : CATALENT PHARMA SOLUTIONS, INC. (US) OLDPARTY : NOME ALTERADO DE: CARDINAL HEALTH 409, INC.
BRPI9306866 A	20140826	LSLE	-B24H	LAPSE BECAUSE OF NON-PAYMENT OF ANNUAL FEES (DEFINITIVELY: ART 78 IV LPI)	
CA2142124 AA	19950209	LSPB	+	published / reissued	
CA2142124 AA	19970616	LSES	+EEER	EXAMINATION REQUEST	
CA2142124 C	20010227	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2142124 C	20110809	LSLE	-MKLA	LAPSED	
CA2142124 C	20130809	PEXP		Calculated Patent Term Expiry	
DE69309934 D1	19980514	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE69309934 D1	19980514	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE69309934 D1	20060614	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
DE69309934 D1	20060614	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
DE69309934 T2	19971106	LSGT	+	granted / extensions (spc, cpc, pte)	
DE69309934 T2	19980514	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE69309934 T2	20060614	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
DE69309934 T2	20130809	PEXP		Calculated Patent Term Expiry	
EP0653979 A1	19950524	LSPB	+	published / reissued	
EP0653979 A1	19950524	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19950301
EP0653979 A1	19960605	LSES	+17Q	FIRST EXAMINATION	EFFECTIVE DATE : 19960423

				REPORT DESPATCHED	
EP0653979 B1	19970416	LSGT	+	granted / extensions (spc, cpc, pte)	
EP0653979 B1	19970430	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP0653979 B1	19980408	LSGT	+26N	NO OPPOSITION FILED	
EP0653979 B1	20030721	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20030721 YEAR OF FEE PAYMENT : 11
EP0653979 B1	20030825	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20030825 YEAR OF FEE PAYMENT : 11
EP0653979 B1	20040819	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20040819 YEAR OF FEE PAYMENT : 12
EP0653979 B1	20040831	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 : 20040831
EP0653979 B1	20040831	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 : 20040831
EP0653979 B1	20040930	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20040930 YEAR OF FEE PAYMENT : 12
EP0653979 B1	20050301	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 : 20050301
EP0653979 B1	20050415	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP0653979 B1	20050502	LSLE	-NLV4	NL: LAPSED OR ANULLED DUE TO NON-PAYMENT OF THE ANNUAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20050301
EP0653979 B1	20060301	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 : 20060301
EP0653979 B1	20060428	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 : 20060428
EP0653979 B1	20060526	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20060428
EP0653979 B1	20091130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20090825 YEAR OF FEE PAYMENT : 17
EP0653979 B1	20100430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20090828 YEAR OF FEE PAYMENT : 17

EP0653979 B1	20110427	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20100809
EP0653979 B1	20110531	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 : 20100809
EP0653979 B1	20110831	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 : 20100809
EP0653979 B1	20130809	PEXP		Calculated Patent Term Expiry	
JP3205340 B2	20010904	LSGT	+	granted / extensions (spc, cpc, pte)	
JP3205340 B2	20040706	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP3205340 B2	20050705	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP3205340 B2	20060629	LSLE	-LAPS	CANCELLATION BECAUSE OF NO PAYMENT OF ANNUAL FEES	
JP3205340 B2	20130809	PEXP		Calculated Patent Term Expiry	
JP8502698 T2	19960326	LSPB	+	published / reissued	
KR100286077 B1	20010416	LSGT	+	granted / extensions (spc, cpc, pte)	
KR100286077 B1	20160416	PEXP		Calculated Patent Term Expiry	
KR19950702901 A	19950823	LSPB	+	published / reissued	
KR950702901 A	19950823	LSPB	+	published / reissued	
US2003127760 AA	20030710	LSPB	+	published / reissued	
US2003127760 AA	20030729	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : R.P. SCHERER TECHNOLOGIES, INC., NEVADA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:R.P. SCHERER CORPORATION; REEL/FRAME:013835/0151 EFFECTIVE DATE : 20030728
US2003127760 AA	20031204	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PURSUIT MARKETING, INC., ILLINOIS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:R.P. SCHERER TECHNOLOGIES, INC.; REEL/FRAME:014770/0382 EFFECTIVE DATE : 20031201
US2003127760 AA	20040120	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BANK ONE, N.A., ILLINOIS OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:PURSUIT MARKETING, INC.; REEL/FRAME:015676/0496 EFFECTIVE DATE : 20031201
US2004170679 AA	20040902	LSPB	+	published / reissued	
US2004170679 AA	20061214	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BANK OF AMERICA, N.A., AS ADMINISTRATIVE AGENT, CA OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:AJ INTERMEDIATE HOLDINGS LLC; AJ ACQUISITION HOLDINGS, INC.; AJ ACQUISITION I LLC;

					AND OTHERS; REEL/FRAME:018635/0117 EFFECTIVE DATE : 20061117
US2004170679 AA	20061214	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BANK OF AMERICA, N.A., AS ADMINISTRATIVE AGENT,CAL OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:AJ INTERMEDIATE HOLDINGS LLC; AJ ACQUISITION HOLDINGS, INC.; AJ ACQUISITION I LLC; AND OTHERS; REEL/FRAME:018635/0117 EFFECTIVE DATE : 20061117
US2004170679 AA	20070106	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2004170679 AA	20070111	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AJ ACQUISITION II LLC, NEW YORK OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:PURSUIT MARKETING, INC.; REEL/FRAME:018746/0293 EFFECTIVE DATE : 20061117
US2004170679 AA	20150721	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KEE ACTION SPORTS HOLDINGS, INC. (F/K/A AJ ACQUISI OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:AG PAINTBALL HOLDINGS LLC, AS SUCCESSOR ADMINISTRATIVE AGENT TO BANK OF AMERICA, N.A.; REEL/FRAME:036145/0129 EFFECTIVE DATE : 20150720
US2004170679 AA	20150721	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KEE ACTION SPORTS I LLC (F/K/A AJ ACQUISITION I LL OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:AG PAINTBALL HOLDINGS LLC, AS SUCCESSOR ADMINISTRATIVE AGENT TO BANK OF AMERICA, N.A.; REEL/FRAME:036145/0129 EFFECTIVE DATE : 20150720
US2004170679 AA	20150721	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KEE ACTION SPORTS II CANADA LLC (F/K/A AJ ACQUISIT OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:AG PAINTBALL HOLDINGS LLC, AS SUCCESSOR ADMINISTRATIVE AGENT TO BANK OF AMERICA, N.A.; REEL/FRAME:036145/0129 EFFECTIVE DATE : 20150720
US2004170679 AA	20150721	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KEE ACTION SPORTS CANADA, INC. (F/K/A AJ ACQUISITI OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:AG PAINTBALL HOLDINGS LLC, AS SUCCESSOR ADMINISTRATIVE AGENT TO BANK OF AMERICA, N.A.; REEL/FRAME:036145/0129 EFFECTIVE DATE : 20150720
US2004170679 AA	20150721	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KEE ACTION SPORTS LLC (F/K/A AJ INTERMEDIATE HOLDI OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:AG PAINTBALL HOLDINGS LLC, AS SUCCESSOR ADMINISTRATIVE AGENT TO BANK OF AMERICA, N.A.; REEL/FRAME:036145/0129 EFFECTIVE DATE : 20150720
US2004170679 AA	20150721	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KEE ACTION SPORTS II LLC (F/K/A AJ ACQUISITION II OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:AG PAINTBALL HOLDINGS LLC, AS SUCCESSOR ADMINISTRATIVE AGENT TO BANK OF AMERICA, N.A.; REEL/FRAME:036145/0129 EFFECTIVE DATE : 20150720
US5672300 A	19970930	LSGT	+	granted /	

				extensions (spc, cpc, pte)	
US5672300 A	19930920	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : R.P. SCHERER CORPORATION, MICHIGAN OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:SCHURIG, GREGORY A.; REEL/FRAME:006697/0231 EFFECTIVE DATE : 19920928
US5672300 A	19930920	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : R.P. SCHERER CORPORATION, MICHIGAN OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:BAKER, LAWRENCE A.; REEL/FRAME:006705/0174 EFFECTIVE DATE : 19920925
US5672300 A	19930920	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : R.P. SCHERER CORPORATION, MICHIGAN OLDPARTY : EMPLOYEE CONTRACT AGREEMENT; ASSIGNOR:MIKALIAN, ROBERT; REEL/FRAME:006705/0179 EFFECTIVE DATE : 19880226
US5672300 A	19930920	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : R.P. SCHERER CORPORATION, MICHIGAN OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:RATKO, MICHAEL; REEL/FRAME:006705/0198 EFFECTIVE DATE : 19921125
US5672300 A	19930920	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : R. P. SCHERER CORPORATION, MICHIGAN OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:BEZAIRE, BUD; REEL/FRAME:006705/0201 EFFECTIVE DATE : 19921118
US5672300 A	19970916	LSGT	PAT1	Patented Case	
US5672300 A	19970916	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5672300 A	20010308	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5672300 A	20021126	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : R.P. SCHERER TECHNOLOGIES, INC., NEVADA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:R.P. SCHERER CORPORATION; REEL/FRAME:013525/0652 EFFECTIVE DATE : 20021121
US5672300 A	20031204	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PURSUIT MARKETING, INC., ILLINOIS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:R.P. SCHERER TECHNOLOGIES, INC.; REEL/FRAME:014770/0382 EFFECTIVE DATE : 20031201
US5672300 A	20040120	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BANK ONE, N.A., ILLINOIS OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:PURSUIT MARKETING, INC.; REEL/FRAME:015676/0496 EFFECTIVE DATE : 20031201
US5672300 A	20050330	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5672300 A	20061214	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BANK OF AMERICA, N.A., AS ADMINISTRATIVE AGENT, CA OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:AJ INTERMEDIATE HOLDINGS LLC; AJ ACQUISITION HOLDINGS, INC.; AJ ACQUISITION I LLC; AND OTHERS; REEL/FRAME:018635/0117 EFFECTIVE DATE : 20061117

US5672300 A	20061214	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BANK OF AMERICA, N.A., AS ADMINISTRATIVE AGENT,CAL OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:AJ INTERMEDIATE HOLDINGS LLC; AJ ACQUISITION HOLDINGS, INC.; AJ ACQUISITION I LLC; AND OTHERS; REEL/FRAME:018635/0117 EFFECTIVE DATE : 20061117
US5672300 A	20070111	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AJ ACQUISITION II LLC, NEW YORK OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:PURSUIT MARKETING, INC.; REEL/FRAME:018746/0293 EFFECTIVE DATE : 20061117
US5672300 A	20070719	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KEE ACTION SPORTS II LLC, NEW YORK OLDPARTY : CHANGE OF NAME; ASSIGNOR:AJ ACQUISITION II LLC; REEL/FRAME:019573/0683 EFFECTIVE DATE : 20070202
US5672300 A	20090330	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5672300 A	20150721	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KEE ACTION SPORTS I LLC (F/K/A AJ ACQUISITION I LL OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:AG PAINTBALL HOLDINGS LLC, AS SUCCESSOR ADMINISTRATIVE AGENT TO BANK OF AMERICA, N.A.; REEL/FRAME:036145/0129 EFFECTIVE DATE : 20150720
US5672300 A	20150721	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KEE ACTION SPORTS II CANADA LLC (F/K/A AJ ACQUISIT OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:AG PAINTBALL HOLDINGS LLC, AS SUCCESSOR ADMINISTRATIVE AGENT TO BANK OF AMERICA, N.A.; REEL/FRAME:036145/0129 EFFECTIVE DATE : 20150720
US5672300 A	20150721	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KEE ACTION SPORTS II LLC (F/K/A AJ ACQUISITION II OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:AG PAINTBALL HOLDINGS LLC, AS SUCCESSOR ADMINISTRATIVE AGENT TO BANK OF AMERICA, N.A.; REEL/FRAME:036145/0129 EFFECTIVE DATE : 20150720
US5672300 A	20150721	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KEE ACTION SPORTS CANADA, INC. (F/K/A AJ ACQUISITI OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:AG PAINTBALL HOLDINGS LLC, AS SUCCESSOR ADMINISTRATIVE AGENT TO BANK OF AMERICA, N.A.; REEL/FRAME:036145/0129 EFFECTIVE DATE : 20150720
US5672300 A	20150721	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KEE ACTION SPORTS LLC (F/K/A AJ INTERMEDIATE HOLDI OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:AG PAINTBALL HOLDINGS LLC, AS SUCCESSOR ADMINISTRATIVE AGENT TO BANK OF AMERICA, N.A.; REEL/FRAME:036145/0129 EFFECTIVE DATE : 20150720
US5672300 A	20150721	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KEE ACTION SPORTS HOLDINGS, INC. (F/K/A AJ ACQUISI OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:AG PAINTBALL HOLDINGS LLC, AS SUCCESSOR ADMINISTRATIVE AGENT TO BANK OF AMERICA,

					N.A.; REEL/FRAME:036145/0129 EFFECTIVE DATE : 20150720
US5672300 A	20140930	PEXP		Calculated Patent Term Expiry	
US6022499 A	20000208	LSGT	+	granted / extensions (spc, cpc, pte)	
US6022499 A	20021126	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : R.P. SCHERER TECHNOLOGIES, INC., NEVADA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:R.P. SCHERER CORPORATION; REEL/FRAME:013525/0652 EFFECTIVE DATE : 20021121
US6022499 A	20030808	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6022499 A	20031204	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PURSUIT MARKETING, INC., ILLINOIS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:R.P. SCHERER TECHNOLOGIES, INC.; REEL/FRAME:014770/0382 EFFECTIVE DATE : 20031201
US6022499 A	20040120	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BANK ONE, N.A., ILLINOIS OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:PURSUIT MARKETING, INC.; REEL/FRAME:015676/0496 EFFECTIVE DATE : 20031201
US6022499 A	20061214	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BANK OF AMERICA, N.A., AS ADMINISTRATIVE AGENT, CA OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:AJ INTERMEDIATE HOLDINGS LLC; AJ ACQUISITION HOLDINGS, INC.; AJ ACQUISITION I LLC; AND OTHERS; REEL/FRAME:018635/0117 EFFECTIVE DATE : 20061117
US6022499 A	20061214	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BANK OF AMERICA, N.A., AS ADMINISTRATIVE AGENT,CAL OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:AJ INTERMEDIATE HOLDINGS LLC; AJ ACQUISITION HOLDINGS, INC.; AJ ACQUISITION I LLC; AND OTHERS; REEL/FRAME:018635/0117 EFFECTIVE DATE : 20061117
US6022499 A	20070111	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AJ ACQUISITION II LLC, NEW YORK OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:PURSUIT MARKETING, INC.; REEL/FRAME:018746/0293 EFFECTIVE DATE : 20061117
US6022499 A	20070713	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US6022499 A	20070719	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KEE ACTION SPORTS II LLC, NEW YORK OLDPARTY : CHANGE OF NAME; ASSIGNOR:AJ ACQUISITION II LLC; REEL/FRAME:019573/0683 EFFECTIVE DATE : 20070202
US6022499 A	20120208	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US6022499 A	20120305	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US6022499 A	20120305	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362

US6022499 A	20120327	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20120208
US6022499 A	20150721	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KEE ACTION SPORTS II LLC (F/K/A AJ ACQUISITION II OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:AG PAINTBALL HOLDINGS LLC, AS SUCCESSOR ADMINISTRATIVE AGENT TO BANK OF AMERICA, N.A.; REEL/FRAME:036145/0129 EFFECTIVE DATE : 20150720
US6022499 A	20150721	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KEE ACTION SPORTS I LLC (F/K/A AJ ACQUISITION I LL OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:AG PAINTBALL HOLDINGS LLC, AS SUCCESSOR ADMINISTRATIVE AGENT TO BANK OF AMERICA, N.A.; REEL/FRAME:036145/0129 EFFECTIVE DATE : 20150720
US6022499 A	20150721	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KEE ACTION SPORTS II CANADA LLC (F/K/A AJ ACQUISIT OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:AG PAINTBALL HOLDINGS LLC, AS SUCCESSOR ADMINISTRATIVE AGENT TO BANK OF AMERICA, N.A.; REEL/FRAME:036145/0129 EFFECTIVE DATE : 20150720
US6022499 A	20150721	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KEE ACTION SPORTS HOLDINGS, INC. (F/K/A AJ ACQUISI OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:AG PAINTBALL HOLDINGS LLC, AS SUCCESSOR ADMINISTRATIVE AGENT TO BANK OF AMERICA, N.A.; REEL/FRAME:036145/0129 EFFECTIVE DATE : 20150720
US6022499 A	20150721	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KEE ACTION SPORTS CANADA, INC. (F/K/A AJ ACQUISITI OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:AG PAINTBALL HOLDINGS LLC, AS SUCCESSOR ADMINISTRATIVE AGENT TO BANK OF AMERICA, N.A.; REEL/FRAME:036145/0129 EFFECTIVE DATE : 20150720
US6022499 A	20150721	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KEE ACTION SPORTS LLC (F/K/A AJ INTERMEDIATE HOLDI OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:AG PAINTBALL HOLDINGS LLC, AS SUCCESSOR ADMINISTRATIVE AGENT TO BANK OF AMERICA, N.A.; REEL/FRAME:036145/0129 EFFECTIVE DATE : 20150720
US6022499 A	20170929	PEXP		Calculated Patent Term Expiry	
US6569363 BA	20030527	LSGT	+	granted / extensions (spc, cpc, pte)	
US6569363 BA	20030729	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : R.P. SCHERER TECHNOLOGIES, INC., NEVADA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:R.P. SCHERER CORPORATION; REEL/FRAME:013835/0151 EFFECTIVE DATE : 20030728
US6569363 BA	20031204	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PURSUIT MARKETING, INC., ILLINOIS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:R.P. SCHERER TECHNOLOGIES, INC.; REEL/FRAME:014770/0382 EFFECTIVE DATE : 20031201

US6569363 BA	20040120	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BANK ONE, N.A., ILLINOIS OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:PURSUIT MARKETING, INC.; REEL/FRAME:015676/0496 EFFECTIVE DATE : 20031201
US6569363 BA	20061027	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6569363 BA	20061214	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BANK OF AMERICA, N.A., AS ADMINISTRATIVE AGENT, CA OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:AJ INTERMEDIATE HOLDINGS LLC; AJ ACQUISITION HOLDINGS, INC.; AJ ACQUISITION I LLC; AND OTHERS; REEL/FRAME:018635/0117 EFFECTIVE DATE : 20061117
US6569363 BA	20061214	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BANK OF AMERICA, N.A., AS ADMINISTRATIVE AGENT,CAL OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:AJ INTERMEDIATE HOLDINGS LLC; AJ ACQUISITION HOLDINGS, INC.; AJ ACQUISITION I LLC; AND OTHERS; REEL/FRAME:018635/0117 EFFECTIVE DATE : 20061117
US6569363 BA	20070111	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AJ ACQUISITION II LLC, NEW YORK OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:PURSUIT MARKETING, INC.; REEL/FRAME:018746/0293 EFFECTIVE DATE : 20061117
US6569363 BA	20070719	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KEE ACTION SPORTS II LLC, NEW YORK OLDPARTY : CHANGE OF NAME; ASSIGNOR:AJ ACQUISITION II LLC; REEL/FRAME:019573/0683 EFFECTIVE DATE : 20070202
US6569363 BA	20110527	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US6569363 BA	20110627	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US6569363 BA	20110627	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US6569363 BA	20110719	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20110527
US6569363 BA	20150721	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KEE ACTION SPORTS I LLC (F/K/A AJ ACQUISITION I LL OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:AG PAINTBALL HOLDINGS LLC, AS SUCCESSOR ADMINISTRATIVE AGENT TO BANK OF AMERICA, N.A.; REEL/FRAME:036145/0129 EFFECTIVE DATE : 20150720
US6569363 BA	20150721	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KEE ACTION SPORTS CANADA, INC. (F/K/A AJ ACQUISITI OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:AG PAINTBALL HOLDINGS LLC, AS SUCCESSOR ADMINISTRATIVE AGENT TO BANK OF AMERICA, N.A.; REEL/FRAME:036145/0129 EFFECTIVE DATE : 20150720
US6569363 BA	20150721	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KEE ACTION SPORTS II LLC (F/K/A AJ ACQUISITION II OLDPARTY : RELEASE BY

					SECURED PARTY; ASSIGNOR:AG PAINTBALL HOLDINGS LLC, AS SUCCESSOR ADMINISTRATIVE AGENT TO BANK OF AMERICA, N.A.; REEL/FRAME:036145/0129 EFFECTIVE DATE : 20150720
US6569363 BA	20150721	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KEE ACTION SPORTS HOLDINGS, INC. (F/K/A AJ ACQUISI OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:AG PAINTBALL HOLDINGS LLC, AS SUCCESSOR ADMINISTRATIVE AGENT TO BANK OF AMERICA, N.A.; REEL/FRAME:036145/0129 EFFECTIVE DATE : 20150720
US6569363 BA	20150721	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KEE ACTION SPORTS LLC (F/K/A AJ INTERMEDIATE HOLDI OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:AG PAINTBALL HOLDINGS LLC, AS SUCCESSOR ADMINISTRATIVE AGENT TO BANK OF AMERICA, N.A.; REEL/FRAME:036145/0129 EFFECTIVE DATE : 20150720
US6569363 BA	20150721	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KEE ACTION SPORTS II CANADA LLC (F/K/A AJ ACQUISIT OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:AG PAINTBALL HOLDINGS LLC, AS SUCCESSOR ADMINISTRATIVE AGENT TO BANK OF AMERICA, N.A.; REEL/FRAME:036145/0129 EFFECTIVE DATE : 20150720
US6569363 BA	20190920	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
US6805818 BB	20041019	LSGT	+	granted / extensions (spc, cpc, pte)	
US6805818 BB	20050222	LSRE	CC	CERTIFICATE OF CORRECTION	
US6805818 BB	20061214	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BANK OF AMERICA, N.A., AS ADMINISTRATIVE AGENT, CA OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:AJ INTERMEDIATE HOLDINGS LLC; AJ ACQUISITION HOLDINGS, INC.; AJ ACQUISITION I LLC; AND OTHERS; REEL/FRAME:018635/0117 EFFECTIVE DATE : 20061117
US6805818 BB	20061214	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BANK OF AMERICA, N.A., AS ADMINISTRATIVE AGENT,CAL OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:AJ INTERMEDIATE HOLDINGS LLC; AJ ACQUISITION HOLDINGS, INC.; AJ ACQUISITION I LLC; AND OTHERS; REEL/FRAME:018635/0117 EFFECTIVE DATE : 20061117
US6805818 BB	20070111	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AJ ACQUISITION II LLC, NEW YORK OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:PURSUIT MARKETING, INC.; REEL/FRAME:018746/0293 EFFECTIVE DATE : 20061117
US6805818 BB	20070719	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KEE ACTION SPORTS II LLC, NEW YORK OLDPARTY : CHANGE OF NAME; ASSIGNOR:AJ ACQUISITION II LLC; REEL/FRAME:019573/0683 EFFECTIVE DATE : 20070202
US6805818 BB	20080404	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6805818 BB	20121019	LSLE	-LAPS	LAPSE FOR FAILURE	

				TO PAY MAINTENANCE FEES	
US6805818 BB	20121119	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US6805818 BB	20121119	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US6805818 BB	20121211	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20121019
US6805818 BB	20150721	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KEE ACTION SPORTS LLC (F/K/A AJ INTERMEDIATE HOLDI OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:AG PAINTBALL HOLDINGS LLC, AS SUCCESSOR ADMINISTRATIVE AGENT TO BANK OF AMERICA, N.A.; REEL/FRAME:036145/0129 EFFECTIVE DATE : 20150720
US6805818 BB	20150721	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KEE ACTION SPORTS CANADA, INC. (F/K/A AJ ACQUISITI OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:AG PAINTBALL HOLDINGS LLC, AS SUCCESSOR ADMINISTRATIVE AGENT TO BANK OF AMERICA, N.A.; REEL/FRAME:036145/0129 EFFECTIVE DATE : 20150720
US6805818 BB	20150721	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KEE ACTION SPORTS II LLC (F/K/A AJ ACQUISITION II OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:AG PAINTBALL HOLDINGS LLC, AS SUCCESSOR ADMINISTRATIVE AGENT TO BANK OF AMERICA, N.A.; REEL/FRAME:036145/0129 EFFECTIVE DATE : 20150720
US6805818 BB	20150721	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KEE ACTION SPORTS I LLC (F/K/A AJ ACQUISITION I LL OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:AG PAINTBALL HOLDINGS LLC, AS SUCCESSOR ADMINISTRATIVE AGENT TO BANK OF AMERICA, N.A.; REEL/FRAME:036145/0129 EFFECTIVE DATE : 20150720
US6805818 BB	20150721	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KEE ACTION SPORTS HOLDINGS, INC. (F/K/A AJ ACQUISI OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:AG PAINTBALL HOLDINGS LLC, AS SUCCESSOR ADMINISTRATIVE AGENT TO BANK OF AMERICA, N.A.; REEL/FRAME:036145/0129 EFFECTIVE DATE : 20150720
US6805818 BB	20150721	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KEE ACTION SPORTS II CANADA LLC (F/K/A AJ ACQUISIT OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:AG PAINTBALL HOLDINGS LLC, AS SUCCESSOR ADMINISTRATIVE AGENT TO BANK OF AMERICA, N.A.; REEL/FRAME:036145/0129 EFFECTIVE DATE : 20150720
US6805818 BB	20230516	PEXP		Calculated Patent Term Expiry (PTA 81 days and a terminal disclaimer has been filed)	
WO9403316 A1	19940217	LSPB	+	published / reissued	
WO9403316 A1	19950209	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2142124 COUNTRY OF REF DOCUMENT : CA
WO9403316 A1	19950301	LSNP	+WWE	WIPO	REF DOCUMENT NUMBER :

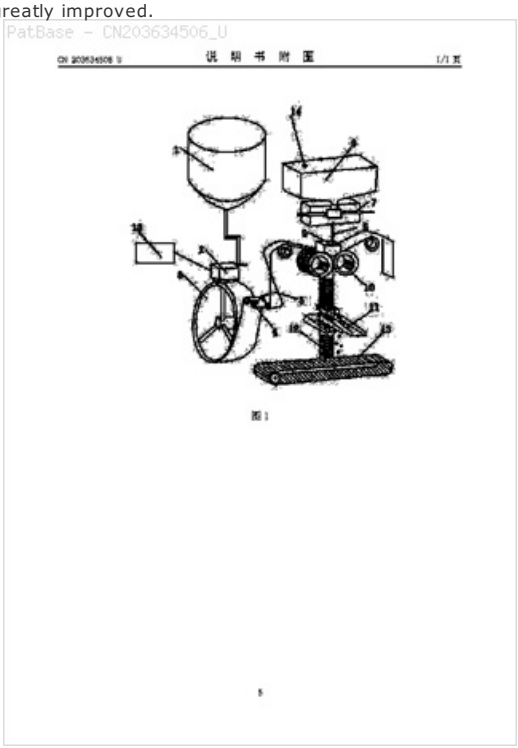
				INFORMATION: ENTRY INTO NATIONAL PHASE	1994906739 COUNTRY OF REF DOCUMENT : EP
WO9403316 A1	19950524	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1994906739 COUNTRY OF REF DOCUMENT : EP
WO9403316 A1	19970416	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1994906739 COUNTRY OF REF DOCUMENT : EP

98) Family number: 56631044 (CN203634506U)

Title: ROLLING-DIE-TYPE SOFT CAPSULE MACHINE

Abstract: The utility model relates to the technical field of medicine and discloses a rolling-die-type soft capsule machine which comprises a glue barrel, a **gelatin** box, a rubber wheel, an oil rolling system, a rubber belt, a raw material box, an injection pump, a guide pipe, a spraying body, a pair of rolling dies, a chute, net glue, a conveying belt and a position sensor. The glue barrel is connected with the **gelatin** box, the rubber wheel is arranged below the **gelatin** box and connected with the rolling dies through the oil rolling system and the rubber belt, the spraying body is arranged above the rolling dies and connected with the injection pump through the guide pipe, the injection pump is connected with the raw material box, the net glue is arranged between the rolling dies, the chute is arranged in the middle of the net glue, the conveying belt is arranged at the bottom of the net glue, and the position sensor is arranged in the raw material box and connected with a PLC (programmable logic controller). The rolling-die-type soft capsule machine has the advantages of high control accuracy, high reliability and low energy resource loss, and production efficiency is greatly improved.

Classifications:
International (IPC 8-9): A23P1/04 A23P10/30 A61J3/07 (Advanced/Invention)



Family:

Publication number	Publication date	Application number	Application date
CN203634506 U	20140611	CN201420039177U	20140122

Priority:
CN201420039177U 20140122

Probable Assignee: ZHEJIANG QUANJIN PHARMACEUTICAL CO LTD
Assignee(s): (std): ZHEJIANG QUANJIN PHARMACEUTICAL CO LTD
Assignee(s): ZHEJIANG PHARMACEUTICAL CO LTD ALL GOLD ; ZHEJIANG QUANJIN PHARMACEUTICAL CO
Inventor(s): (std): YANG XUEBIN ; HU LESHENG ; WU SHUDI ; ZHANG GUOQING ; TAN DONGMEI

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
CN203634506 U	20140611	LSGT	+	granted / extensions (spc, cpc, pte)	
CN203634506 U	20140611	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN203634506 U	20140618	LSAS	C56	CHANGE IN THE NAME OR ADDRESS OF THE PATENTEE	
CN203634506 U	20140618	LSAS	C56	CHANGE IN THE NAME OR ADDRESS OF THE PATENTEE	PARTYTYPE : OWNER OWNER : BEST WORLD (ZHEJIANG) PHARMACEUTICAL INDUSTRY CO., OLDPARTY : FORMER NAME: ZHEJIANG QUANJIN PHARMACEUTICAL CO., LTD.
CN203634506 U	20180330	LSAS	CP03	CHANGE OF NAME, TITLE OR ADDRESS	
CN203634506 U	20240122	PEXP		Calculated Patent Term Expiry	

99) Family number: 32204045 (US2005196436A)

Title: BLENDS OF DIFFERENT ACYL GELLAN GUMS AND STARCH

Abstract: The present invention relates to a method of producing a film forming blend of different acyl gellan gums with starch having similar textural and functional properties compared to **gelatin**. Films prepared using such blends have a high modulus and excellent strength and elongation. The present invention also relates to soft capsules prepared using such blends or films, which have good sealability.

Classifications:
International (IPC 8-9): A23L1/00 A23L1/05 A23L29/20 A61J3/07 A61K9/48 C08K5/00 C08L3/00 C08L3/02 C08L5/00 (Advanced/Invention);
A23L1/05 (Advanced/Non-invention);
A23L1/00 A23L1/05 A61J3/07 A61K9/00 A61K9/48 C08K5/00 C08L3/00 C08L5/00 (Core/Invention)
International (IPC 1-7): A23L1/00 A23L1/05 A61J3/07 A61K9/48 C08K5/00 C08L3/00 C08L3/02
CPC: A61K9/4816
European: A61K9/48B
US: 424/451 426/573

Family:

Publication number	Publication date	Application number	Application date
AT524164 E	20110915	AT20050004319T	20050228
CN100528950 C	20090819	CN200510052468	20050228
CN1663989 A	20050907	CN200510052468	20050228
DE602005029964 D1	20111201	DE200560029964T	20050228
DK1570843 T3	20111031	DK20050004319T	20050228
EP1570843 A1	20050907	EP20050004319	20050228
EP1570843 B1	20110914	EP20050004319	20050228
ES2373443 T3	20120203	ES20050004319T	20050228
JP2005281687 A2	20051013	JP20050054657	20050228
JP4959948 B2	20120627	JP20050054657	20050228
KR101239269 B1	20130306	KR20050016671	20050228
KR20060043253 A	20060515	KR20050016671	20050228
PL1570843 T3	20120430	PL20050004319T	20050228
PT1570843 T	20111230	PT20050004319T	20050228
SI1570843 T1	20120430	SI20050031427T	20050228
US2005196436 AA	20050908	US20040791478	20040302
US7494667 BB	20090224	US20040791478	20040302

Priority:
US20040791478 20040302 EP20050004319 20050228

Probable Assignee: CORN PRODUCTS DEVELOPMENT INC

Assignee(s): (std): BRUNOB II BV ; CHAKRABARTI SIBU ; CHANTRANUKUL ARJNARONG ; CORN PRODUCTS DEV INC ; LI ZHIXIN ; NAT STARCH CHEM INVEST ; OKONIEWSKA MONIKA K ; XIAO CHAODONG

Assignee(s): NATL STARCH AND CHEM INVESTMENT HOLDING CORP ; NATIONAL STARCH AND CHEMICAL INVESTMENT HOLDING ; NATIONAL STARCH AND CHEMICAL INVESTMENT HOLDING CO ; NATIONAL STARCH AND CHEMICAL INVESTMENT HOLDING CORP ; CORN PRODUCTS DEVELOPMENT INC ; CORN PRODUCTS DEVELOPMENT INC WESTCHESTER

Inventor(s): (std): CHANTRANUKUL ARJNARONG ; CHAODONG XIAO ; LI ZHIXIN ; ARJNARONG CHANTRANUKUL ; CHAKRABARTI SIBU ; OKONIEWSKA MONIKA K ; SIBU CHAKRABARTI ; XIAO CHAODONG ; ZHIXIN LI

Inventor(s): XIAO CHAODONG BOXBOROUGH ; OKONIEWSKA MONIKA K PRINCETON ; CHAKRABARTI SIBU RANDOLPH ; LI ZHIXIN BRIDGEWATER ; MONIKA K OKONIEWSKA ; OKONIEWSKA MONIKA

Agent(s): MEISSNER BOLTE AND PARTNER GBR; HELD STEPHAN; KAREN G KAISER NATIONAL STARCH AND CHEMICAL CO

Designated states: AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
AT524164 E	20110915	LSGT	+	granted / extensions (spc, cpc, pte)	
AT524164 E	20120215	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	REF DOCUMENT NUMBER : 1570843 COUNTRY OF REF DOCUMENT : EP
AT524164 E	20250228	PEXP		Calculated Patent Term Expiry	
CN100528950 C	20090819	LSGT	+	granted / extensions (spc, cpc, pte)	
CN100528950 C	20090819	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN100528950 C	20090819	LSGT	+GR01	授权 (The grant of patent right)	TEXT : 授权 (AUTHORIZATION)
CN100528950 C	20120627	LSAS	ASS	SUCCESSION OR ASSIGNMENT OF PATENT RIGHT	PARTYTYPE : OWNER OWNER : CORN PRODUCTS DEVELOPMENT, INC. OLDPARTY : FORMER OWNER: BRUNOB II B. V.

					EFFECTIVE DATE : 20120516
CN100528950 C	20120627	LSAS	C41	TRANSFER OF PATENT APPLICATION OR PATENT RIGHT OR UTILITY MODEL	
CN100528950 C	20120627	LSAS	TR01	专利权的转移 (Transfer of patent right)	TEXT : 专利申请权、专利权的转移 (TRANSFER OF PATENT APPLICATION OR PATENT RIGHT) PATENTEE AFTER CHANGE : 玉米产品开发股份有限公司 (CORN PRODUCTS DEVELOPMENT CO LTD) PATENTEE BEFORE CHANGE : 布鲁诺布二世有限公司 (BRUNO CLOTH SECOND BOSE CO., LTD.) EFFECTIVE DATE : 20120516
CN100528950 C	20131204	LSLI	EE01	专利实施许可合同备案的生效 (Enforcement of record for patent exploitation license contracts)	TEXT : 专利实施许可合同备案的生效、变更及注销 (PATENT IMPLEMENTATION, TAKING EFFECT, CHANGE AND CANCELLATION OF SUBMISSION FOR RECORD OF LICENSE CONTRACT.) CONTRACT RECORD NUMBER : 2013990000665 LICENSOR : 玉米产品开发股份有限公司 (CORN PRODUCTS DEVELOPMENT CO LTD) LICENSEE : 国民淀粉工业(上海)有限公司 (NATIONAL STARCH INDUSTRIAL (SHANGHAI) CO., LTD.) LICENSE TYPE : 普通许可 (ORDINARY LICENSE) RECORD DATE : 20131012
CN100528950 C	20131204	LSLI	LICC	ENFORCEMENT, CHANGE AND CANCELLATION OF RECORD OF CONTRACTS ON THE LICENCE FOR EXPLOITATION OF A PATENT OR UTILITY MODEL	
CN100528950 C	20200414	LSAS	CP01	CHANGE IN THE NAME OR TITLE OF A PATENT HOLDER	
CN100528950 C	20200414	LSAS	CP01	专利权人姓名或者名称的变更 (Change of name of patentee)	TEXT : 专利权人的姓名或者名称、地址的变更 (THE NAME OR ADDRESS OF A PATENTEE) PATENTEE AFTER CHANGE : 玉米产品开发公司 (CORN PRODUCTS DEVELOPMENT COMPANY) PATENTEE BEFORE CHANGE : 玉米产品开发股份有限公司 (CORN PRODUCTS DEVELOPMENT CO LTD)
CN100528950 C	20250228	PEXP		Calculated Patent Term Expiry	
CN1663989 A	20050907	LSPB	+	published / reissued	
CN1663989 A	20050907	LSPB	+C06	PUBLICATION	
CN1663989 A	20050907	LSPB	PB01	公开 (The publication of application)	TEXT : 公开 (DISCLOSURE)
CN1663989 A	20090415	LSAS	C41	TRANSFER OF PATENT APPLICATION OR PATENT RIGHT OR UTILITY MODEL	
CN1663989 A	20090415	LSAS	TA01	专利申请权的转移 (Transfer of patent application right)	TEXT : 专利申请权、专利权的转移 (专利申请权的转移) (ANY TRANSFER OF THE RIGHT OF PATENT APPLICATION (PATENT APPLICATION OF TRANSFER)) APPLICANT AFTER CHANGE : 布鲁诺布二世有限公司 (BRUNO CLOTH SECOND BOSE CO., LTD.) APPLICANT BEFORE CHANGE : 国家淀粉及化学投资控股公司 (NATIONAL STARCH AND CHEMICAL INVESTMENT HOLDING CORP) EFFECTIVE DATE : 20090313
CN1663989 A	20090430	LSAS	ASS	SUCCESSION OR ASSIGNMENT OF PATENT RIGHT	PARTYTYPE : OWNER OWNER : BRUNOBU II AUGUSTUS CO., LTD.

					OLDPARTY : FORMER OWNER: NAT STARCH CHEM INVEST EFFECTIVE DATE : 20090313
DE602005029964 D1	20111012	LSAS	R081	CHANGE OF APPLICANT/PATENTEE	PARTYTYPE : OWNER OWNER : BRUNOB II B.V., ARNHEM, NL OLDPARTY : NATIONAL STARCH AND CHEMICAL INVESTMENT HOLDING CORPORATION, NEW CASTLE, DEL., US
DE602005029964 D1	20120702	LSAS	R081	CHANGE OF APPLICANT/PATENTEE	PARTYTYPE : OWNER OWNER : CORN PRODUCTS DEVELOPMENT INC., WESTCHESTER, IL 60154, US OLDPARTY : BRUNOB II B.V., ARNHEM, NL
DK1570843 T3	20111031	LSGT	+	granted / extensions (spc, cpc, pte)	
DK1570843 T3	20250228	PEXP		Calculated Patent Term Expiry	
EP1570843 A1	20050907	LSPB	+	published / reissued	
EP1570843 A1	20060315	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20060111
EP1570843 A1	20060524	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 : IS COUNTRY OF REF DOCUMENT : IT COUNTRY OF REF DOCUMENT : LI COUNTRY OF REF DOCUMENT : LT 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
EP1570843 A1	20081015	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : BRUNOB II B.V.
EP1570843 A1	20081203	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20081104
EP1570843 A1	20160129	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM	COUNTRY OF REF DOCUMENT : BG PAYMENT DATE : 20151218

				NATIONAL OFFICE TO EPO]	YEAR OF FEE PAYMENT : 12
EP1570843 A1	20160229	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20151217 YEAR OF FEE PAYMENT : 12
EP1570843 A1	20160429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20160201 YEAR OF FEE PAYMENT : 12
EP1570843 A1	20160429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20160126 YEAR OF FEE PAYMENT : 12
EP1570843 A1	20160429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20160212 YEAR OF FEE PAYMENT : 12
EP1570843 A1	20160429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20160302 YEAR OF FEE PAYMENT : 12
EP1570843 A1	20160429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20160126 YEAR OF FEE PAYMENT : 12
EP1570843 A1	20160429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20160125 YEAR OF FEE PAYMENT : 12
EP1570843 A1	20160429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20160210 YEAR OF FEE PAYMENT : 12
EP1570843 A1	20160429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20160204 YEAR OF FEE PAYMENT : 12
EP1570843 A1	20160531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20160208 YEAR OF FEE PAYMENT : 12
EP1570843 A1	20160531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20160205 YEAR OF FEE PAYMENT : 12
EP1570843 A1	20160531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20160218 YEAR OF FEE PAYMENT : 12
EP1570843 A1	20160531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20160208 YEAR OF FEE PAYMENT : 12
EP1570843 A1	20160531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20160126 YEAR OF FEE PAYMENT : 12
EP1570843 A1	20160531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20160125 YEAR OF FEE PAYMENT : 12
EP1570843 A1	20160531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20160127 YEAR OF FEE PAYMENT : 12
EP1570843 A1	20160531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20160114 YEAR OF FEE PAYMENT : 12
EP1570843 A1	20160531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20160125 YEAR OF FEE PAYMENT : 12

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EP1570843 B1	20110914	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1570843 B1	20110914	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP1570843 B1	20110915	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1570843 B1	20111012	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP1570843 B1	20111201	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602005029964 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20111201
EP1570843 B1	20111208	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : RO REF LEGAL EVENT CODE : EPE
EP1570843 B1	20120104	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : T3
EP1570843 B1	20120203	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2373443 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) : EFFECTIVE DATE : 20120203
EP1570843 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 : 20110914
EP1570843 B1	20120329	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : EP REF DOCUMENT NUMBER : 20110403017 COUNTRY OF REF DOCUMENT : GR EFFECTIVE DATE : 20120206
EP1570843 B1	20120430	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 : 20120114
EP1570843 B1	20120502	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HU REF LEGAL EVENT CODE : AG4A REF DOCUMENT NUMBER : E012502 COUNTRY OF REF DOCUMENT : HU
EP1570843 B1	20120615	LSAS	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : EE REF LEGAL EVENT CODE : GB1A REF DOCUMENT NUMBER : E006233 COUNTRY OF REF DOCUMENT : EE
EP1570843 B1	20120822	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20120615
EP1570843 B1	20120822	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : PT OWNER : CORN PRODUCTS DEVELOPMENT, INC., US REF LEGAL EVENT CODE : PC4A EFFECTIVE DATE : 20120816

EP1570843 B1	20120823	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : DE OWNER : CORN PRODUCTS DEVELOPMENT INC., US REF LEGAL EVENT CODE : R081 REF DOCUMENT NUMBER : 602005029964 COUNTRY OF REF DOCUMENT : DE OLDPARTY : FORMER OWNER: BRUNOB II B.V., ARNHEM, NL EFFECTIVE DATE : 20120702
EP1570843 B1	20120823	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : DE OWNER : CORN PRODUCTS DEVELOPMENT INC., WESTCHESTER, US REF LEGAL EVENT CODE : R081 REF DOCUMENT NUMBER : 602005029964 COUNTRY OF REF DOCUMENT : DE OLDPARTY : FORMER OWNER: BRUNOB II B.V., ARNHEM, NL EFFECTIVE DATE : 20120702
EP1570843 B1	20120823	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : DE OWNER : CORN PRODUCTS DEVELOPMENT INC., WESTCHESTER, US REF LEGAL EVENT CODE : R081 REF DOCUMENT NUMBER : 602005029964 COUNTRY OF REF DOCUMENT : DE OLDPARTY : FORMER OWNER: NATIONAL STARCH AND CHEMICAL INVESTMENT HOLDING CORPORATION, NEW CASTLE, DEL., US EFFECTIVE DATE : 20111012
EP1570843 B1	20120823	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : DE OWNER : CORN PRODUCTS DEVELOPMENT INC., US REF LEGAL EVENT CODE : R081 REF DOCUMENT NUMBER : 602005029964 COUNTRY OF REF DOCUMENT : DE OLDPARTY : FORMER OWNER: NATIONAL STARCH AND CHEMICAL INVESTMENT HOLDING CORPORATION, NEW CASTLE, US EFFECTIVE DATE : 20111012
EP1570843 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
EP1570843 B1	20121011	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 602005029964 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20120615
EP1570843 B1	20121031	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : CH OWNER : CORN PRODUCTS DEVELOPMENT INC. INCORPORATED IN DE REF LEGAL EVENT CODE : PUE OLDPARTY : BRUNOB II B.V.#VELPERWEG 76#6824 BM ARNHEM (NL) -TRANSFER TO- CORN PRODUCTS DEVELOPMENT INC. INCORPORATED IN DELAWARE#5 WESTBROOK CORPORATE CENTER#WESTCHESTER, ILLINOIS 60154 (US)
EP1570843 B1	20130228	LSAS	REG	REFERENCE TO A	PARTYTYPE : OWNER

				NATIONAL CODE	REF COUNTRY CODE : SI OWNER : CORN PRODUCTS DEVELOPMENT, INC.; US REF LEGAL EVENT CODE : SP73 EFFECTIVE DATE : 20130110
EP1570843 B1	20130430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LT PAYMENT DATE : 20130205 YEAR OF FEE PAYMENT : 9
EP1570843 B1	20130430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE PAYMENT DATE : 20130129 YEAR OF FEE PAYMENT : 9
EP1570843 B1	20130531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20130128 YEAR OF FEE PAYMENT : 9
EP1570843 B1	20130531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20130226 YEAR OF FEE PAYMENT : 9
EP1570843 B1	20130531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK PAYMENT DATE : 20130123 YEAR OF FEE PAYMENT : 9
EP1570843 B1	20130628	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20130129 YEAR OF FEE PAYMENT : 9
EP1570843 B1	20131202	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : SK OWNER : CORN PRODUCTS DEVELOPMENT INC., WESTCHESTER, I, US REF LEGAL EVENT CODE : PC4A REF DOCUMENT NUMBER : E 10746 COUNTRY OF REF DOCUMENT : SK OLDPARTY : FORMER OWNER: BRUNOB II B.V., ARNHEM, NL EFFECTIVE DATE : 20130423
EP1570843 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 : 20120228
EP1570843 B1	20140909	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 : 20140901
EP1570843 B1	20141015	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : EE REF LEGAL EVENT CODE : MM4A REF DOCUMENT NUMBER : E006233 COUNTRY OF REF DOCUMENT : EE EFFECTIVE DATE : 20140228
EP1570843 B1	20141023	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : ML REF DOCUMENT NUMBER : 20110403017 COUNTRY OF REF DOCUMENT : GR EFFECTIVE DATE : 20140903
EP1570843 B1	20141024	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : FR OWNER : CORN PRODUCTS DEVELOPMENT, INC., BR REF LEGAL EVENT CODE : TP EFFECTIVE DATE : 20140923
EP1570843 B1	20141027	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : LT REF LEGAL EVENT CODE : MM4D EFFECTIVE DATE : 20140228

EP1570843 B1	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 : 20140903
EP1570843 B1	20141031	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 : 20140228
EP1570843 B1	20141031	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 : 20140228
EP1570843 B1	20141104	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SK REF LEGAL EVENT CODE : MM4A REF DOCUMENT NUMBER : E 10746 COUNTRY OF REF DOCUMENT : SK EFFECTIVE DATE : 20140228
EP1570843 B1	20141128	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 : 20140301
EP1570843 B1	20141128	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 : 20140228
EP1570843 B1	20141128	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SI REF LEGAL EVENT CODE : KO00 EFFECTIVE DATE : 20141009
EP1570843 B1	20141231	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 : 20140901
EP1570843 B1	20150324	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : ES OWNER : CORN PRODUCTS DEVELOPMENT, INC. REF LEGAL EVENT CODE : PC2A EFFECTIVE DATE : 20150317
EP1570843 B1	20160125	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
EP1570843 B1	20161015	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : AT OWNER : CORN PRODUCTS DEVELOPMENT INC., US REF LEGAL EVENT CODE : PC REF DOCUMENT NUMBER : 524164 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20160831
EP1570843 B1	20170118	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
EP1570843 B1	20170228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20161221

				NATIONAL OFFICE TO EPO]	YEAR OF FEE PAYMENT : 13
EP1570843 B1	20170228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG PAYMENT DATE : 20161228 YEAR OF FEE PAYMENT : 13
EP1570843 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20170124 YEAR OF FEE PAYMENT : 13
EP1570843 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20170125 YEAR OF FEE PAYMENT : 13
EP1570843 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20170309 YEAR OF FEE PAYMENT : 13
EP1570843 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20170125 YEAR OF FEE PAYMENT : 13
EP1570843 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20170207 YEAR OF FEE PAYMENT : 13
EP1570843 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170227 YEAR OF FEE PAYMENT : 13
EP1570843 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170118 YEAR OF FEE PAYMENT : 13
EP1570843 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20170213 YEAR OF FEE PAYMENT : 13
EP1570843 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 : 13
EP1570843 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20170216 YEAR OF FEE PAYMENT : 13
EP1570843 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20170125 YEAR OF FEE PAYMENT : 13
EP1570843 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20170125 YEAR OF FEE PAYMENT : 13
EP1570843 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20170126 YEAR OF FEE PAYMENT : 13
EP1570843 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 : 13
EP1570843 B1	20170630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20170210 YEAR OF FEE PAYMENT : 13
EP1570843 B1	20170630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20170216 YEAR OF FEE PAYMENT : 13
EP1570843 B1	20170630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20170214 YEAR OF FEE PAYMENT : 13

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EP1570843 B1	20180118	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 14
EP1570843 B1	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20171219 YEAR OF FEE PAYMENT : 14
EP1570843 B1	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG PAYMENT DATE : 20171220 YEAR OF FEE PAYMENT : 14
EP1570843 B1	20180330	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20180209 YEAR OF FEE PAYMENT : 14
EP1570843 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20180302 YEAR OF FEE PAYMENT : 14
EP1570843 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20180125 YEAR OF FEE PAYMENT : 14
EP1570843 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20180126 YEAR OF FEE PAYMENT : 14
EP1570843 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20180117 YEAR OF FEE PAYMENT : 14
EP1570843 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 : 14
EP1570843 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 : 14
EP1570843 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180207 YEAR OF FEE PAYMENT : 14
EP1570843 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20180125 YEAR OF FEE PAYMENT : 14
EP1570843 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20180125 YEAR OF FEE PAYMENT : 14
EP1570843 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20180129 YEAR OF FEE PAYMENT : 14
EP1570843 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20180118 YEAR OF FEE PAYMENT : 14
EP1570843 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20180215 YEAR OF FEE PAYMENT : 14
EP1570843 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20180207 YEAR OF FEE PAYMENT : 14
EP1570843 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20180219 YEAR OF FEE PAYMENT : 14

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EP1570843 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20180126 YEAR OF FEE PAYMENT : 14
EP1570843 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20180126 YEAR OF FEE PAYMENT : 14
EP1570843 B1	20190131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20181227 YEAR OF FEE PAYMENT : 15
EP1570843 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 : 15
EP1570843 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG PAYMENT DATE : 20190213 YEAR OF FEE PAYMENT : 15
EP1570843 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20190131 YEAR OF FEE PAYMENT : 15
EP1570843 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 : 15
EP1570843 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 : 15
EP1570843 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20190124 YEAR OF FEE PAYMENT : 15
EP1570843 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20190212 YEAR OF FEE PAYMENT : 15
EP1570843 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20190128 YEAR OF FEE PAYMENT : 15
EP1570843 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20190115 YEAR OF FEE PAYMENT : 15
EP1570843 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20190117 YEAR OF FEE PAYMENT : 15
EP1570843 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20190129 YEAR OF FEE PAYMENT : 15
EP1570843 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20190129 YEAR OF FEE PAYMENT : 15
EP1570843 B1	20190531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20190206 YEAR OF FEE PAYMENT : 15
EP1570843 B1	20190531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20190318 YEAR OF FEE PAYMENT : 15
EP1570843 B1	20190531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20190125 YEAR OF FEE PAYMENT : 15

EP1570843 B1	20190531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20190218 YEAR OF FEE PAYMENT : 15
EP1570843 B1	20190531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20190128 YEAR OF FEE PAYMENT : 15
EP1570843 B1	20200131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20191218 YEAR OF FEE PAYMENT : 16
EP1570843 B1	20200131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20191230 YEAR OF FEE PAYMENT : 16
EP1570843 B1	20200131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20191218 YEAR OF FEE PAYMENT : 16
EP1570843 B1	20200131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20191230 YEAR OF FEE PAYMENT : 16
EP1570843 B1	20200228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20191226 YEAR OF FEE PAYMENT : 16
EP1570843 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20191231 YEAR OF FEE PAYMENT : 16
EP1570843 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20200128 YEAR OF FEE PAYMENT : 16
EP1570843 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20191220 YEAR OF FEE PAYMENT : 16
EP1570843 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20200110 YEAR OF FEE PAYMENT : 16
EP1570843 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG PAYMENT DATE : 20200108 YEAR OF FEE PAYMENT : 16
EP1570843 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20191220 YEAR OF FEE PAYMENT : 16
EP1570843 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20200305 YEAR OF FEE PAYMENT : 16
EP1570843 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20200109 YEAR OF FEE PAYMENT : 16
EP1570843 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20191230 YEAR OF FEE PAYMENT : 16
EP1570843 B1	20200501	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20200128 YEAR OF FEE PAYMENT : 16
EP1570843 B1	20200529	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20200117 YEAR OF FEE PAYMENT : 16

EP1570843 B1	20200529	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20200210 YEAR OF FEE PAYMENT : 16
EP1570843 B1	20200529	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20200106 YEAR OF FEE PAYMENT : 16
EP1570843 B1	20200630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20200116 YEAR OF FEE PAYMENT : 16
EP1570843 B1	20250228	PEXP		Calculated Patent Term Expiry	
ES2373443 T3	20120203	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2373443 T3	20250228	PEXP		Calculated Patent Term Expiry	
JP2005281687 A2	20051013	LSPB	+	published / reissued	
JP2005281687 A2	20080228	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20080227
JP2005281687 A2	20080228	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20080227
JP2005281687 A2	20081220	LSAS	A711	NOTIFICATION OF CHANGE IN APPLICANT	TEXT : JAPANESE INTERMEDIATE CODE: A711 EFFECTIVE DATE : 20081219
JP2005281687 A2	20110713	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20110712
JP2005281687 A2	20111012	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20111011
JP2005281687 A2	20111102	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20111101
JP2005281687 A2	20120202	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20120201
JP2005281687 A2	20120217	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2005281687 A2	20120222	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20120221
JP2005281687 A2	20120223	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01
JP2005281687 A2	20120329	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20120322
JP2005281687 A2	20120330	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP2005281687 A2	20120330	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP2005281687 A2	20120330	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 4959948 COUNTRY OF REF DOCUMENT : JP
JP4959948 B2	20120627	LSGT	+	granted / extensions (spc, cpc, pte)	
JP4959948 B2	20120327	LSFE	R100	特許料納付書 (Patent fee payment form)	

JP4959948 B2	20121107	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP4959948 B2	20121107	LSAS	S111	REQUEST FOR CHANGE OF OWNERSHIP OR PART OF OWNERSHIP	TEXT : JAPANESE INTERMEDIATE CODE: R313113
JP4959948 B2	20121128	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP4959948 B2	20121214	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP4959948 B2	20121225	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP4959948 B2	20121225	LSAS	S111	REQUEST FOR CHANGE OF OWNERSHIP OR PART OF OWNERSHIP	TEXT : JAPANESE INTERMEDIATE CODE: R313113
JP4959948 B2	20130108	LSAS	R350	WRITTEN NOTIFICATION OF REGISTRATION OF TRANSFER	TEXT : JAPANESE INTERMEDIATE CODE: R350
JP4959948 B2	20150305	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4959948 B2	20150310	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4959948 B2	20150319	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4959948 B2	20150401	LSRV	R260	却下理由通知書 (年金) (Rejection reason notice (pension))	
JP4959948 B2	20150701	LSLE	R270	手続却下の処分 (年金) (Disposition of procedure rejection (pension))	
JP4959948 B2	20160303	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4959948 B2	20160308	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4959948 B2	20170309	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4959948 B2	20170314	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4959948 B2	20180308	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4959948 B2	20180313	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4959948 B2	20190307	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4959948 B2	20190312	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4959948 B2	20200227	LSFE	R20	特許料納付書 (Patent fee payment form)	EFFECTIVE DATE : 20200226
JP4959948 B2	20200228	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4959948 B2	20250228	PEXP		Calculated Patent Term Expiry	
KR101239269 B1	20130306	LSGT	+	granted / extensions (spc, cpc, pte)	
KR101239269 B1	20151230	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20151230 YEAR OF FEE PAYMENT : 4
KR101239269 B1	20161229	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20161229 YEAR OF FEE PAYMENT : 5
KR101239269 B1	20171228	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20171228 YEAR OF FEE PAYMENT : 6

KR101239269 B1	20181227	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20181227 YEAR OF FEE PAYMENT : 7
KR101239269 B1	20250228	PEXP		Calculated Patent Term Expiry	
KR20060043253 A	20060515	LSPB	+	published / reissued	
KR20060043253 A	20080923	LSAS	N231	NOTIFICATION OF CHANGE OF APPLICANT	
KR20060043253 A	20100225	LSES	A201	REQUEST FOR EXAMINATION	
KR20060043253 A	20120802	LSAS	N231	NOTIFICATION OF CHANGE OF APPLICANT	
KR20060043253 A	20121129	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
KR20060043253 A	20130226	LSGT	+GRNT	WRITTEN DECISION TO GRANT	
PL1570843 T3	20120430	LSGT	+	granted / extensions (spc, cpc, pte)	
PT1570843 T	20111230	LSGT	+	granted / extensions (spc, cpc, pte)	
PT1570843 T	20250228	PEXP		Calculated Patent Term Expiry	
SI1570843 T1	20120430	LSGT	+	granted / extensions (spc, cpc, pte)	
SI1570843 T1	20250228	PEXP		Calculated Patent Term Expiry	
US2005196436 AA	20050908	LSPB	+	published / reissued	
US2005196436 AA	20080612	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BRUNOB II B.V., NETHERLANDS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:NATIONAL STARCH AND CHEMICAL INVESTMENT HOLDING CORPORATION; REEL/FRAME:021096/0293 EFFECTIVE DATE : 20080401
US2005196436 AA	20080612	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BRUNOB II B.V.,NETHERLANDS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:NATIONAL STARCH AND CHEMICAL INVESTMENT HOLDING CORPORATION; REEL/FRAME:021096/0293 EFFECTIVE DATE : 20080401
US2005196436 AA	20090204	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US7494667 BB	20090224	LSGT	+	granted / extensions (spc, cpc, pte)	
US7494667 BB	20040607	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : NATIONAL STARCH AND CHEMICAL INVESTMENT HOLDING CO OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:CHAKRABARTI, SIBU; XIAO, CHAODONG; LI, ZHIXIN; AND OTHERS; REEL/FRAME:014703/0292; SIGNING DATES FROM 20040319 TO 20040331
US7494667 BB	20040714	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : NATIONAL STARCH AND CHEMICAL INVESTMENT HOLDING CO OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:CHANTRANUKUL, ARJNARONG; REEL/FRAME:014857/0150 EFFECTIVE DATE : 20040602
US7494667 BB	20090204	LSGT	PAT1	Patented Case	
US7494667 BB	20120202	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CORN PRODUCTS DEVELOPMENT, INC.,

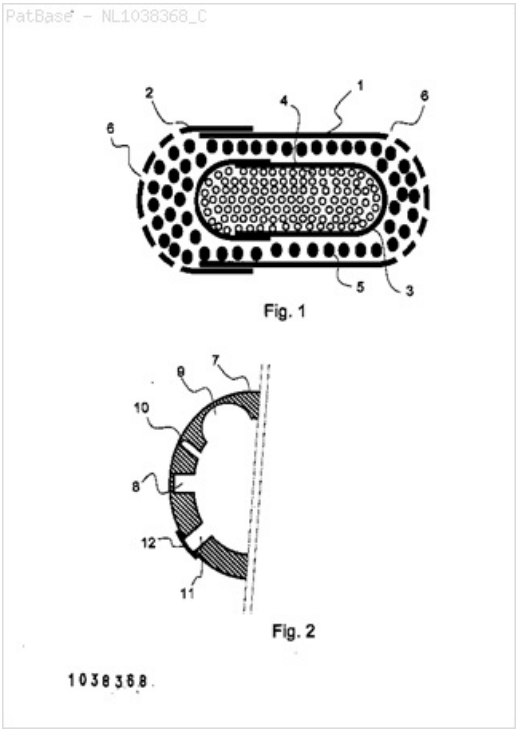
					ILLINOIS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:NATIONAL STARCH LLC; BRUNOB II B.V.; REEL/FRAME:027645/0724 EFFECTIVE DATE : 20111219
US7494667 BB	20120927	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US7494667 BB	20160725	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US7494667 BB	20200714	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US7494667 BB	20260119	PEXP		Calculated Patent Term Expiry (PTA 688 days)	

100) Family number: 51329045 (NL1038368C)

Title: WERKWIJZE VOOR DE TOEDIENING VAN GENEESMIDDELEN, VOEDINGSSUPPLEMENTEN, DIAGNOSTICA EN BIOTICA EN EEN MIDDEL VOOR TOEPASSING VAN DEZE WERKWIJZE.

Abstract: Source: NL1038368C [NL] DE ONDERHAVIGE UITVINDING HEEFT BETREKKING OP EEN WERKWIJZE VOOR DE GELIJKTIJDIGE INNAME VAN TEN MINSTE TWEE STOFFEN MET ONDERLING VERSCHILLENDE FUNCTIONALITEITEN. DEZE STOFFEN KUNNEN BIJVOORBEELD GENEESMIDDELEN, DIAGNOSTICA, VOEDINGSSUPPLEMENTEN OF BIOTICA OMVATTEN. DE VERSCHILLENDE STOFFEN DIENEN OP VERSCHILLENDE PLAATSEN IN HET MAAG-DARMKANAAL BESCHIKBAAR TE KUNNEN KOMEN EN DIENEN DAN NOG EFFECTIEF HUN FUNCTIE TE KUNNEN VERVULLEN. ZO KAN HET ZIJN DAT VAN DE VERSCHILLENDE STOFFEN BIJVOORBEELD TEN MINSTE EEN STOF NIET IN AANRAKING MAG KOMEN MET DE MAAGSAPPEN, TERWIJL HET VOOR HET BEWERKSTELLIGEN VAN HET BEOOGDE EFFECT NOODZAKELIJK OF WENSELIJK IS DAT TEN MINSTE EEN ANDERE STOF WEL WORDT AANGEPAKT DOOR DE MAAGSAPPEN OF DE MAAG BESCHERMT. TEVENS HEEFT DE ONDERHAVIGE UITVINDING BETREKKING OP EEN MIDDEL VOOR DE TOEPASSING VAN DEZE WERKWIJZE. DIT OCTROOI IS VERLEEND ONGEACHT HET BIJGEVOEGDE RESULTAAT VAN HET ONDERZOEK NAARDE STAND VAN DE TECHNIEK EN SCHRIFTELIJKE OPINIE. HET OCTROOISCHRIFT WIJKT AF VAN DE OORSPRONKELIJK INGEDIENDE STUKKEN. ALLE INGEDIENDE STUKKEN KUNNEN BIJ NL OCTROOICENTRUM WORDEN INGEZIEN. **Machine translation:** THE PRESENT INVENTION RELATES TO A METHOD FOR SIMULTANEOUS INTAKE OF AT LEAST TWO MATERIALS WITH DIFFERENT EACH OTHER FEATURES. THESE MATERIALS ARE FOR EXAMPLE medicines, diagnostics, DIETARY SUPPLEMENTS OR INCLUDED biotics. THE VARIOUS MATERIALS SUBMITTED TO DIFFERENT PLACES IN THE STOMACH-TRACT AVAILABLE TO QUALIFY AND MUST HAVE EFFECTIVELY TO PERFORM THEIR DUTIES. SO IT MAY BE THAT THE VARIOUS MATERIALS SUCH AS AT LEAST ONE SUBSTANCE NOT TOUCH MAY COME WITH STOMACH SAPS, WHILE FOR ACHIEVING THE DESIRED EFFECT NECESSARY OR DESIRABLE THAT AT LEAST ONE OTHER SUBSTANCE IS ADDRESSED OR BY OR THE STOMACH SAPS STOMACH PROTECTS. ALSO HAS THE PRESENT INVENTION RELATES TO AN AGENT FOR THE PURPOSES OF THIS PROCESS. THIS PATENT GRANTED IN ANY ACCOMPANYING THE OUTCOME OF THE investigation into ART AND WRITTEN OPINION. The patent differs from the ORIGINAL DOCUMENTS SUBMITTED. ALL SUBMITTED DOCUMENTS MAY BE SEE with NL Patent Office.

Classifications:
International (IPC 8-9): A61J3/07 A61K9/48 (Advanced/Invention)



Family:

Publication number	Publication date	Application number	Application date
NL1038368 C	20120510	NL20101038368	20101109
NL1038368 C2	20120510	NL20101038368	20101109

Priority:
NL20101038368 20101109

Probable Assignee: VERVOORT MARINUS JACOBUS
Assignee(s): (std): VERVOORT MARINUS JACOBUS
Inventor(s): (std): VERVOORT MARINUS JACOBUS

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
NL1038368 C	20120510	LSGT	+	granted / extensions (spc, cpc, pte)	
NL1038368 C	20160803	LSLE	-MM	LAPSED BECAUSE OF NON-PAYMENT OF THE ANNUAL FEE	EFFECTIVE DATE : 20151201
NL1038368 C	20301109	PEXP		Calculated Patent Term Expiry	
NL1038368 C2	20120510	LSGT	+	granted / extensions (spc, cpc, pte)	
NL1038368 C2	20301109	PEXP		Calculated Patent Term Expiry	