

Search history

Search 1: FT=(PLASTIC~ CONTAINER~ AND SHIPPING~ AND PRODUCE~ ADN~ PAÑES~) (Results 0)

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Search 3: FT=(PLASTIC~ CONTAINER~ AND SHIPPING~ AND PALES) (Results 24)

Title: TWO STAGE SYSTEM AND METHOD FOR MOLDING CONTAINERS

Abstract: A method and system for hydraulic blow molding a container from a preform 24. A molding medium is injected into the preform from a nozzle 12 during a first molding stage. In the first molding stage, the molding medium is injected so as to be specifically directed at a closed end of the preform 24. During the first molding stage, the preform is axially stretched in response to the force exerted on the preform by the molding medium. The molding medium is also injected into the preform during a second molding stage, where the molding medium is injected at a flow rate greater than a flow rate during the first molding stage. During the second molding stage, the preform is radially expanded into the shape of the container.

Classifications:

International (IPC 8-9): B29C49/06 B29C49/08 B29C49/12 B29C49/16 B29C49/42 B29C49/46 B29C49/58 B29C49/68

B29C49/78 (Advanced/Invention);

B29C49/06 B29C49/12 B29C49/42 B29C49/46 B29C49/58 B29C49/68

B29L22/00 B29L31/00 (Advanced/Non-invention);

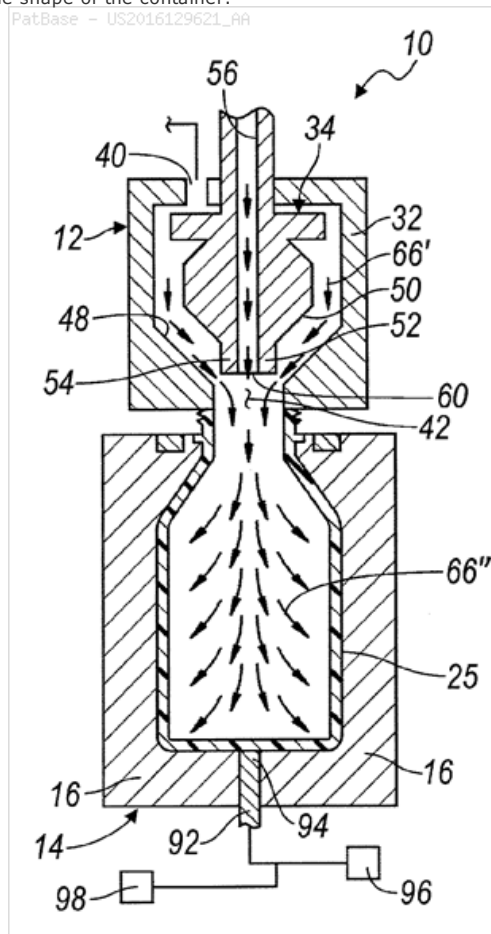
B29C49/12 (Core/Invention)

CPC: B29L2022/00 B29C49/06 B29L2031/7158 B29C49/16 B29C49/4289

B29C49/58 B29C49/68 B29C49/783 B29C2049/1219 B29C2049/4602

B29C2049/465 B29C2049/5803 B29C2791/007

US: 264/570 425/533

**Family:**

Publication number	Publication date	Application number	Application date
■ CN105283299 A	20160127	CN201380077454	20130628
■ CN105283299 B	20171121	CN201380077454	20130628
■ EP3013554 A1	20160504	EP20130736724	20130628
■ EP3013554 B1	20180801	EP20130736724	20130628
■ JP2016527105 T2	20160908	JP20160523715T	20130628
■ JP6216874 B2	20171018	JP20160523715T	20130628
■ TH157746 A	20161116	TH20151007837	20130628
■ US2016129621 AA	20160512	US20130900721	20130628
■ US9987787 BB	20180605	US20130900721	20130628
■ WO14209346 A1	20141231	WO2013US48512	20130628

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Probable Assignee: DISCMA AG

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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 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)
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Patent	Date recorded	Event group	Code	Event	Details
CN105283299 A	20160127	LSPB	+	published / reissued	
CN105283299 A	20160127	LSPB	+C06	PUBLICATION	
CN105283299 B	20171121	LSGT	+	granted / extensions (spc, cpc, pte)	
CN105283299 B	20171121	LSGT	+GR01	PATENT GRANT	
CN105283299 B	20330628	PEXP		Calculated Patent Term Expiry	
EP3013554 A1	20160504	LSPB	+	published / reissued	
EP3013554 A1	20160504	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20151228
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JP2016527105 T2	20170905	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20170905
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JP6216874 B2	20170926	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP6216874 B2	20170929	LSGT	+R150	特許証 (Patent certificate)	
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US2016129621 AA	20170929	LSES	NFA1	Non Final Action Mailed	
US2016129621 AA	20180131	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2016129621 AA	20180213	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : DISCMA AG, SWITZERLAND OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:AMCOR LTD.; AMCOR GROUP GMBH; REEL/FRAME:044916/0993 EFFECTIVE DATE : 20140306

US2016129621 AA	20180501	LSFE	+PPR1	Publications -- Issue Fee Payment Received	
US2016129621 AA	20180503	LSFE	+PPV1	Publications -- Issue Fee Payment Verified	
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US9987787 BB	20340101	PEXP		Calculated Patent Term Expiry (PTA 187 days)	
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WO14209346 A1	20151228	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2013736724 COUNTRY OF REF DOCUMENT : EP

Title: CONTAINER BASE STRUCTURE RESPONSIVE TO VACUUM RELATED FORCES

Abstract: A plastic container having a base portion adapted for vacuum pressure absorption. The base portion including a contact ring upon which the container is supported, an upstanding wall and a central portion. The upstanding wall being adjacent to and generally circumscribing the contact ring. The central portion being defined in at least part by a central pushup and an inversion ring which generally circumscribes the central pushup. The central pushup and the inversion ring being moveable to accommodate vacuum forces generated within the container.

Classifications:

International (IPC 8-9): B29C49/08 B65B1/00 B65D B65D1/00 B65D1/02 B65D1/14 B65D1/40 B65D1/42 B65D1/46 B65D23/00 B65D79/00 B65D90/02 B65D90/12 B65D90/32 B67C3/00

F17C5/00 (Advanced/Invention);

A61J1/06 B65D1/00 B65D1/02 B65D1/14 B65D79/00 (Advanced/Non-invention);

B65D1/00 B65D1/02 B65D1/40 B65D23/00 B65D79/00 B65D90/02

B65D90/12 (Core/Invention);

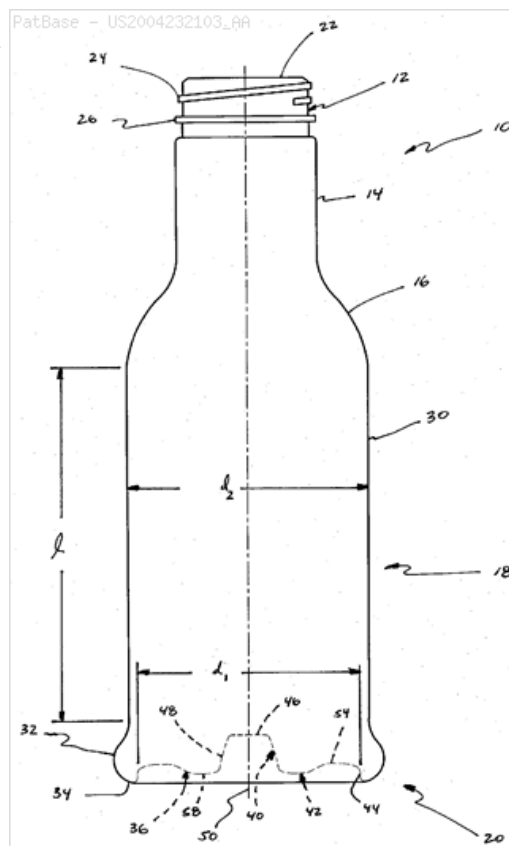
B65D (Subclass/Invention)

International (IPC 1-7): B65D1/00 B65D1/02 B65D1/40 B65D79/00 B65D90/12

CPC: B65D1/40 Y10T428/1352 B65D1/0261 B65D79/005 B65D1/0276 B65D2501/0036

European: B65D1/02D2 B65D1/02D2C B65D79/00B L65D501/02Y1C

US: 1/1 215/371 215/373 215/373P 215/374 215/381 220/605 220/606 220/609 220/672 220/675 428/35.7 428/35.700P

**Family:**

Publication number	Publication date	Application number	Application date
AT427889 E	20090415	AT20040750969T	20040430
AT476368 E	20100815	AT20050758519T	20050613
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Priority:

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Inventor(s): FREDERICK C BEUERIE ; DWAYNE G VALLIENCOURT ; GDAVID LISCH ; STEIH RICHARD J JACKSON ; DOWNING DAVID MANCHESTER ; WALTER J STRASSE ; LUKEA MAST ; VEJLLIENKOT DVEJN G. ; LISH G. DEJVID ; SIL'VERS KERRI U.

Agent(s): GRIFFITH HACK; WRAYS; MACRAE AND CO; SILVANA MARIA LOPEZ DIAZ; WITTE WELLER AND PARTNER PATENTANWAELTE MBB; GAHLERT STEFAN ET AL; GAHLERT STEFAN; WITTE WELLER AND PARTNER; ISERN JORGE; UNGRIA JAVIER; LIU SHEN AND ASSOCIATES; HARAKENZO WORLD PATENT AND TRADEMARK; HARNESS DICKEY AND PIERCE PLC; ERJAVAC STANLEY M ET AL; SNYDER JEFFREY L ET AL; SEITZ BRENT G 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 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 YU ZA ZM ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT427889 E	20090415	LSGT	+	granted / extensions (spc, cpc, pte)	
AT427889 E	20091215	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	REF DOCUMENT NUMBER : 1633640 COUNTRY OF REF DOCUMENT : EP
AT427889 E	20240430	PEXP		Calculated Patent Term Expiry	
AT476368 E	20100815	LSGT	+	granted / extensions (spc, cpc, pte)	
AT476368 E	20110315	LSPB	+UEP	PUBLICATION OF	REF DOCUMENT NUMBER :

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AU2004242590 BB	20181101	LSAS	PC		ASSIGNMENT REGISTERED	PARTYTYPE : OWNER OWNER : AMCOR RIGID PLASTICS USA, LLC OLDPARTY : FORMER OWNER(S): AMCOR GROUP GMBH
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BRPI0921092 A2	20160607	LSRV	B11Z	DISMISSAL: PETITION DISMISSAL - ARTICLE 216, PAR 2 OF INDUSTRIAL PROPERTY LAW	TEXT : PROMULGA-SE O ARQUIVAMENTO DA PETICAO DE ENTRADA NA FASE NACIONAL POR INTEMPESTIVIDADE DE APRESENTACAO DA PROCURACAO CONFORME APRESENTADO NO ART. 216 2O DA LPI (LEI 9279/1996) E DA RESOLUCAO INPI-PR NO 77/2013, ART. 31. DESTA DATA, CORRE O PRAZO DE 60 (SESSENTA) DIAS PARA EVENTUAL RECURSO DO INTERESSADO CONFORME APRESENTADO NO ART. 212 DA LPI (LEI 9279/1996) E DA RESOLUCAO INPI-PR NO 77/2013, ART. 31, PARAGRAFO UNICO.
BRPI0921092 A2	20160712	LSRE	+B11M	DISMISSAL: DECISION CANCELLED	TEXT : ANULACAO DA PUBLICACAO CODIGO 11.6.1 NA RPI NO 2370 DE 07/06/2016, POR TER SIDO INDEVIDA.
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CN102741126 B	20160224	LSGT	+	granted / extensions (spc, cpc, pte)	
CN102741126 B	20160224	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN102741126 B	20171215	LSAS	TR01	TRANSFER OF PATENT RIGHT	
CN102741126 B	20190205	LSAS	TR01	TRANSFER OF PATENT RIGHT	
CN102741126 B	20300730	PEXP		Calculated Patent Term Expiry	
CN1822989 A	20060823	LSPB	+	published / reissued	
CN1822989 A	20060823	LSPB	+C06	PUBLICATION	
CO20180013787 A2	20181228	LSPB	+	published / reissued	
CO6491100 A2	20120731	LSPB	+	published / reissued	
CO6491100 A2	20130826	LSGT	+FG	APPLICATION GRANTED	
DE602004020467 D1	20100429	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE602004020467 D1	20181030	LSAS	R081	CHANGE OF APPLICANT/PATENTEE	PARTYTYPE : OWNER OWNER : AMCOR GROUP GMBH, ZURICH, CH OLDPARTY : AMCOR LTD., ABBOTSFORD, VICTORIA, AU
DE602004020467 D1	20190226	LSAS	R081	CHANGE OF APPLICANT/PATENTEE	PARTYTYPE : OWNER OWNER : AMCOR RIGID PLASTICS USA, LLC, WILMINGTON, DE, US OLDPARTY : AMCOR GROUP GMBH, ZURICH, CH
DE602005022781 D1	20181030	LSAS	R081	CHANGE OF APPLICANT/PATENTEE	PARTYTYPE : OWNER OWNER : AMCOR GROUP GMBH, ZURICH, CH OLDPARTY : AMCOR LTD., ABBOTSFORD, VICTORIA, AU
DE602005022781 D1	20190221	LSAS	R081	CHANGE OF APPLICANT/PATENTEE	PARTYTYPE : OWNER OWNER : AMCOR RIGID PLASTICS USA, LLC, WILMINGTON, DE, US OLDPARTY : AMCOR GROUP GMBH, ZURICH, CH
DE602009038272 D1	20181030	LSAS	R081	CHANGE OF APPLICANT/PATENTEE	PARTYTYPE : OWNER OWNER : AMCOR GROUP GMBH, ZURICH, CH OLDPARTY : AMCOR LTD., HAWTHORN, VICTORIA, AU
DE602009038272 D1	20190326	LSAS	R081	CHANGE OF APPLICANT/PATENTEE	PARTYTYPE : OWNER OWNER : AMCOR RIGID PLASTICS USA, LLC, WILMINGTON, DE, US OLDPARTY : AMCOR GROUP GMBH, ZURICH, CH
DE602010050243 D1	20190328	LSAS	R081	CHANGE OF APPLICANT/PATENTEE	PARTYTYPE : OWNER OWNER : AMCOR RIGID PLASTICS USA, LLC, WILMINGTON, DE, US OLDPARTY : AMCOR GROUP GMBH, ZÜRICH, CH
DK1633640 T3	20090602	LSGT	+	granted / extensions (spc, cpc, pte)	
DK1633640 T3	20240430	PEXP		Calculated Patent	

				Term Expiry	
DK1893496 T3	20101108	LSGT	+	granted / extensions (spc, cpc, pte)	
				Calculated Patent Term Expiry	
DOP2012000023 A	20120531	LSPB	+	published / reissued	
ECSP12011697 A	20120330	LSPB	+	published / reissued	
EP1633640 A1	20060315	LSPB	+	published / reissued	
EP1633640 A1	20060315	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20051210
EP1633640 A1	20070711	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20060607
				TITLE (CORRECTION)	
EP1633640 A1	20081105	LSRE	RTI1	TEXT : CONTAINER WITH A BASE STRUCTURE RESPONSIVE TO VACUUM RELATED FORCES	
				ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	
EP1633640 A1	20160531	LSFE	+PGFP	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20160429 YEAR OF FEE PAYMENT : 13	
				ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	
EP1633640 A1	20160630	LSFE	+PGFP	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20160426 YEAR OF FEE PAYMENT : 13	
				ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	
EP1633640 A1	20160729	LSFE	+PGFP	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20160427 YEAR OF FEE PAYMENT : 13	
				ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	
EP1633640 A1	20160729	LSFE	+PGFP	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20160426 YEAR OF FEE PAYMENT : 13	
				ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	
EP1633640 A1	20160729	LSFE	+PGFP	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20160427 YEAR OF FEE PAYMENT : 13	
				ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	
EP1633640 A1	20160729	LSFE	+PGFP	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20160404 YEAR OF FEE PAYMENT : 13	
				ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	
EP1633640 A1	20160729	LSFE	+PGFP	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20160427 YEAR OF FEE PAYMENT : 13	
				ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	
EP1633640 A1	20160729	LSFE	+PGFP	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20160428 YEAR OF FEE PAYMENT : 13	
				ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	
EP1633640 A1	20160831	LSFE	+PGFP	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20160401 YEAR OF FEE PAYMENT : 13	
				ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	
EP1633640 A1	20160831	LSFE	+PGFP	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20160425 YEAR OF FEE PAYMENT : 13	
				ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	
EP1633640 A1	20160831	LSFE	+PGFP	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20160331 YEAR OF FEE PAYMENT : 13	
				ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	
EP1633640 A1	20160831	LSFE	+PGFP	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20160427 YEAR OF FEE PAYMENT : 13	
				ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	
EP1633640 A1	20160831	LSFE	+PGFP	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20160421 YEAR OF FEE PAYMENT : 13	

EP1633640 A1	20160831	LSFE	+PGFP	EPO] ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20160425 YEAR OF FEE PAYMENT : 13
EP1633640 B1	20090408	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1633640 B1	20090408	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP1633640 B1	20090415	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1633640 B1	20090513	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP1633640 B1	20090618	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2322265 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP1633640 B1	20091030	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME- LIMIT LAPSED DATE : 20090408
EP1633640 B1	20091030	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME- LIMIT LAPSED DATE : 20090908
EP1633640 B1	20091130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME- LIMIT LAPSED DATE : 20090408
EP1633640 B1	20100129	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME- LIMIT LAPSED DATE : 20090408
EP1633640 B1	20100129	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME- LIMIT LAPSED DATE : 20090408
EP1633640 B1	20100129	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME- LIMIT LAPSED DATE : 20090408
EP1633640 B1	20100226	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME- LIMIT

EP1633640 B1	20100226	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	LAPSED DATE : 20090408 COUNTRY OF REF DOCUMENT : SK NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20090408
EP1633640 B1	20100317	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20100111
EP1633640 B1	20100331	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20090708
EP1633640 B1	20101029	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20090709
EP1633640 B1	20110630	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20091009
EP1633640 B1	20110831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20090408
EP1633640 B1	20110930	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20090408
EP1633640 B1	20120820	LSLI	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : GD2A EFFECTIVE DATE : 20120820
EP1633640 B1	20160425	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
EP1633640 B1	20170322	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 14
EP1633640 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20170324 YEAR OF FEE PAYMENT : 14
EP1633640 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20170327 YEAR OF FEE PAYMENT : 14
EP1633640 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : MC

				[ANNOUNCED FROM NATIONAL OFFICE TO EPO]	PAYMENT DATE : 20170324 YEAR OF FEE PAYMENT : 14
EP1633640 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20170322 YEAR OF FEE PAYMENT : 14
EP1633640 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170322 YEAR OF FEE PAYMENT : 14
EP1633640 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20170324 YEAR OF FEE PAYMENT : 14
EP1633640 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20170322 YEAR OF FEE PAYMENT : 14
EP1633640 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20170322 YEAR OF FEE PAYMENT : 14
EP1633640 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20170323 YEAR OF FEE PAYMENT : 14
EP1633640 B1	20170630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20170322 YEAR OF FEE PAYMENT : 14
EP1633640 B1	20170630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20170323 YEAR OF FEE PAYMENT : 14
EP1633640 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170321 YEAR OF FEE PAYMENT : 14
EP1633640 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20170328 YEAR OF FEE PAYMENT : 14
EP1633640 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20170322 YEAR OF FEE PAYMENT : 14
EP1633640 B1	20170915	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : CH OWNER : AMCOR GROUP GMBH, CH REF LEGAL EVENT CODE : PUE OLDPARTY : FORMER OWNER: AMCOR LIMITED, AU
EP1633640 B1	20171108	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : ES OWNER : AMCOR GROUP GMBH REF LEGAL EVENT CODE : PC2A EFFECTIVE DATE : 20171102
EP1633640 B1	20171229	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : SI OWNER : AMCOR GROUP GMBH; CH REF LEGAL EVENT CODE : SP73 EFFECTIVE DATE : 20171122
EP1633640 B1	20180115	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : AT OWNER : AMCOR GROUP GMBH, CH REF LEGAL EVENT CODE : PC REF DOCUMENT NUMBER : 427889 COUNTRY OF REF DOCUMENT : AT

					KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20171207
EP1633640 B1	20180209	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : FR OWNER : AMCOR GROUP GMBH, CH REF LEGAL EVENT CODE : TP EFFECTIVE DATE : 20180104
EP1633640 B1	20180322	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 15
EP1633640 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20180322 YEAR OF FEE PAYMENT : 15
EP1633640 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20180321 YEAR OF FEE PAYMENT : 15
EP1633640 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20180323 YEAR OF FEE PAYMENT : 15
EP1633640 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20180326 YEAR OF FEE PAYMENT : 15
EP1633640 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20180326 YEAR OF FEE PAYMENT : 15
EP1633640 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20180322 YEAR OF FEE PAYMENT : 15
EP1633640 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20180326 YEAR OF FEE PAYMENT : 15
EP1633640 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20180326 YEAR OF FEE PAYMENT : 15
EP1633640 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20180326 YEAR OF FEE PAYMENT : 15
EP1633640 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20180323 YEAR OF FEE PAYMENT : 15
EP1633640 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20180504 YEAR OF FEE PAYMENT : 15
EP1633640 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180320 YEAR OF FEE PAYMENT : 15
EP1633640 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20180322 YEAR OF FEE PAYMENT : 15
EP1633640 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20180327 YEAR OF FEE PAYMENT : 15

EPO]					
EP1633640 B1	20181015	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : CH OWNER : AMCOR RIGID PLASTICS USA, LLC, US REF LEGAL EVENT CODE : PUE OLDPARTY : FORMER OWNER: AMCOR GROUP GMBH, CH
EP1633640 B1	20181030	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : DE OWNER : AMCOR GROUP GMBH, CH REF LEGAL EVENT CODE : R081 REF DOCUMENT NUMBER : 602004020467 COUNTRY OF REF DOCUMENT : DE OLDPARTY : FORMER OWNER: AMCOR LTD., ABBOTSFORD, VICTORIA, AU
EP1633640 B1	20181030	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : DE OWNER : AMCOR RIGID PLASTICS USA, LLC, WILMINGTON, US REF LEGAL EVENT CODE : R081 REF DOCUMENT NUMBER : 602004020467 COUNTRY OF REF DOCUMENT : DE OLDPARTY : FORMER OWNER: AMCOR LTD., ABBOTSFORD, VICTORIA, AU
EP1633640 B1	20181130	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : SI OWNER : AMCOR RIGID PLASTICS USA, LLC; US REF LEGAL EVENT CODE : SP73 EFFECTIVE DATE : 20181029
EP1633640 B1	20190115	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : AT OWNER : AMCOR RIGID PLASTICS USA, LLC, US REF LEGAL EVENT CODE : PC REF DOCUMENT NUMBER : 427889 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20181203
EP1633640 B1	20190201	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : ES OWNER : AMCOR RIGID PLASTICS USA, LLC REF LEGAL EVENT CODE : PC2A EFFECTIVE DATE : 20190128
EP1633640 B1	20190226	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : DE OWNER : AMCOR RIGID PLASTICS USA, LLC, WILMINGTON, US REF LEGAL EVENT CODE : R081 REF DOCUMENT NUMBER : 602004020467 COUNTRY OF REF DOCUMENT : DE OLDPARTY : FORMER OWNER: AMCOR GROUP GMBH, ZURICH, CH
EP1633640 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20190326 YEAR OF FEE PAYMENT : 16
EP1633640 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20190325 YEAR OF FEE PAYMENT : 16
EP1633640 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20190325 YEAR OF FEE PAYMENT : 16
EP1633640 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20190325 YEAR OF FEE PAYMENT : 16

EP1633640 B1	20190430	LSFE	+PGFP	NATIONAL OFFICE TO EPO] ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20190327 YEAR OF FEE PAYMENT : 16
EP1633640 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20190326 YEAR OF FEE PAYMENT : 16
EP1633640 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20190321 YEAR OF FEE PAYMENT : 16
EP1633640 B1	20240430	PEXP		Calculated Patent Term Expiry	
EP1893496 A1	20080305	LSPB	+	published / reissued	
EP1893496 A1	20080305	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20071121
EP1893496 A1	20090121	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20081218
EP1893496 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20160622 YEAR OF FEE PAYMENT : 12
EP1893496 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20160627 YEAR OF FEE PAYMENT : 12
EP1893496 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20160621 YEAR OF FEE PAYMENT : 12
EP1893496 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20160623 YEAR OF FEE PAYMENT : 12
EP1893496 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20160520 YEAR OF FEE PAYMENT : 12
EP1893496 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20160622 YEAR OF FEE PAYMENT : 12
EP1893496 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20160623 YEAR OF FEE PAYMENT : 12
EP1893496 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20160627 YEAR OF FEE PAYMENT : 12
EP1893496 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20160713 YEAR OF FEE PAYMENT : 12
EP1893496 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20160622 YEAR OF FEE PAYMENT : 12
EP1893496 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20160622 YEAR OF FEE PAYMENT : 12
EP1893496 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20160519 YEAR OF FEE PAYMENT : 12

EP1893496 A1	20160831	LSFE	+PGFP	NATIONAL OFFICE TO EPO] ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20160519 YEAR OF FEE PAYMENT : 12
EP1893496 A1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20160627 YEAR OF FEE PAYMENT : 12
EP1893496 B1	20100804	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1893496 B1	20100804	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP1893496 B1	20100813	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1893496 B1	20100825	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : T3
EP1893496 B1	20100915	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP1893496 B1	20101019	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2346668 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP1893496 B1	20110125	LSRV	-LTIE	LT: INVALIDATION OF EUROPEAN PATENT OR PATENT EXTENSION	REF COUNTRY CODE : EP EFFECTIVE DATE : 20100804
EP1893496 B1	20110131	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 : 20100804
EP1893496 B1	20110131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20100804
EP1893496 B1	20110228	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 : 20101204
EP1893496 B1	20110228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20100804
EP1893496 B1	20110228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20101206
EP1893496 B1	20110228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE	COUNTRY OF REF DOCUMENT : PL 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 : 20100804
EP1893496 B1	20110228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20101104
EP1893496 B1	20110331	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20100804
EP1893496 B1	20110331	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 : 20101105
EP1893496 B1	20110531	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 : 20100804
EP1893496 B1	20110531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20100804
EP1893496 B1	20110531	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 : 20100804
EP1893496 B1	20110531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20100804
EP1893496 B1	20110713	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20110506
EP1893496 B1	20110901	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 602005022781 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20110506
EP1893496 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 : 20100804

EP1893496 B1	20131031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20100804
EP1893496 B1	20160622	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 12
EP1893496 B1	20170523	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 13
EP1893496 B1	20170630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20170524 YEAR OF FEE PAYMENT : 13
EP1893496 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20170526 YEAR OF FEE PAYMENT : 13
EP1893496 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20170522 YEAR OF FEE PAYMENT : 13
EP1893496 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20170523 YEAR OF FEE PAYMENT : 13
EP1893496 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20170526 YEAR OF FEE PAYMENT : 13
EP1893496 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170523 YEAR OF FEE PAYMENT : 13
EP1893496 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20170529 YEAR OF FEE PAYMENT : 13
EP1893496 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170522 YEAR OF FEE PAYMENT : 13
EP1893496 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20170524 YEAR OF FEE PAYMENT : 13
EP1893496 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20170526 YEAR OF FEE PAYMENT : 13
EP1893496 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20170522 YEAR OF FEE PAYMENT : 13
EP1893496 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20170529 YEAR OF FEE PAYMENT : 13
EP1893496 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20170523 YEAR OF FEE PAYMENT : 13
EP1893496 B1	20170915	LSAS	REG	REFERENCE TO A	PARTY TYPE : OWNER

				NATIONAL CODE	REF COUNTRY CODE : CH OWNER : AMCOR GROUP GMBH, CH REF LEGAL EVENT CODE : PUE OLDPARTY : FORMER OWNER: AMCOR LIMITED, AU
EP1893496 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20170703 YEAR OF FEE PAYMENT : 13
EP1893496 B1	20171108	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : ES OWNER : AMCOR GROUP GMBH REF LEGAL EVENT CODE : PC2A EFFECTIVE DATE : 20171102
EP1893496 B1	20171229	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : SI OWNER : AMCOR GROUP GMBH; CH REF LEGAL EVENT CODE : SP73 EFFECTIVE DATE : 20171122
EP1893496 B1	20180115	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : AT OWNER : AMCOR GROUP GMBH, CH REF LEGAL EVENT CODE : PC REF DOCUMENT NUMBER : 476368 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20171207
EP1893496 B1	20180209	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : FR OWNER : AMCOR GROUP GMBH, CH REF LEGAL EVENT CODE : TP EFFECTIVE DATE : 20180104
EP1893496 B1	20180525	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 14
EP1893496 B1	20180629	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20180525 YEAR OF FEE PAYMENT : 14
EP1893496 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180522 YEAR OF FEE PAYMENT : 14
EP1893496 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20180528 YEAR OF FEE PAYMENT : 14
EP1893496 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20180524 YEAR OF FEE PAYMENT : 14
EP1893496 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20180528 YEAR OF FEE PAYMENT : 14
EP1893496 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20180522 YEAR OF FEE PAYMENT : 14
EP1893496 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20180525 YEAR OF FEE PAYMENT : 14
EP1893496 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20180523 YEAR OF FEE PAYMENT : 14

EP1893496 B1	20180831	LSFE	+PGFP	EPO] ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20180528 YEAR OF FEE PAYMENT : 14
EP1893496 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20180524 YEAR OF FEE PAYMENT : 14
EP1893496 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20180529 YEAR OF FEE PAYMENT : 14
EP1893496 B1	20180928	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20180525 YEAR OF FEE PAYMENT : 14
EP1893496 B1	20181015	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : CH OWNER : AMCOR RIGID PLASTICS USA, LLC, US REF LEGAL EVENT CODE : PUE OLDPARTY : FORMER OWNER: AMCOR GROUP GMBH, CH
EP1893496 B1	20181030	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : DE OWNER : AMCOR RIGID PLASTICS USA, LLC, WILMINGTON, US REF LEGAL EVENT CODE : R081 REF DOCUMENT NUMBER : 602005022781 COUNTRY OF REF DOCUMENT : DE OLDPARTY : FORMER OWNER: AMCOR LTD., ABBOTSFORD, VICTORIA, AU
EP1893496 B1	20181030	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : DE OWNER : AMCOR GROUP GMBH, CH REF LEGAL EVENT CODE : R081 REF DOCUMENT NUMBER : 602005022781 COUNTRY OF REF DOCUMENT : DE OLDPARTY : FORMER OWNER: AMCOR LTD., ABBOTSFORD, VICTORIA, AU
EP1893496 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20180702 YEAR OF FEE PAYMENT : 14
EP1893496 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20180522 YEAR OF FEE PAYMENT : 14
EP1893496 B1	20181130	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : SI OWNER : AMCOR RIGID PLASTICS USA, LLC; US REF LEGAL EVENT CODE : SP73 EFFECTIVE DATE : 20181029
EP1893496 B1	20190115	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : AT OWNER : AMCOR RIGID PLASTICS USA, LLC, US REF LEGAL EVENT CODE : PC REF DOCUMENT NUMBER : 476368 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20181203
EP1893496 B1	20190201	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : ES OWNER : AMCOR RIGID PLASTICS USA, LLC REF LEGAL EVENT CODE : PC2A EFFECTIVE DATE : 20190128

EP1893496 B1	20190221	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : DE OWNER : AMCOR RIGID PLASTICS USA, LLC, WILMINGTON, US REF LEGAL EVENT CODE : R081 REF DOCUMENT NUMBER : 602005022781 COUNTRY OF REF DOCUMENT : DE OLDPARTY : FORMER OWNER: AMCOR GROUP GMBH, ZURICH, CH
EP1893496 B1	20190628	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20190527 YEAR OF FEE PAYMENT : 15
EP1893496 B1	20190628	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20190524 YEAR OF FEE PAYMENT : 15
EP1893496 B1	20250613	PEXP		Calculated Patent Term Expiry	
EP2358602 A1	20110824	LSPB	+	published / reissued	
EP2358602 A1	20110824	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20110616
EP2358602 A1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20160928 YEAR OF FEE PAYMENT : 8
EP2358602 A1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20160927 YEAR OF FEE PAYMENT : 8
EP2358602 A1	20170228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20160930 YEAR OF FEE PAYMENT : 8
EP2358602 A4	20120328	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	EFFECTIVE DATE : 20120227
EP2358602 A4	20120328	LSRE	RIC1	INFORMATION PROVIDED ON IPC CODE ASSIGNED BEFORE GRANT	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : B65D 1/42 20060101ALI20120221BHEP
EP2358602 A4	20120328	LSRE	RIC1	INFORMATION PROVIDED ON IPC CODE ASSIGNED BEFORE GRANT	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : B65D 23/00 20060101ALI20120221BHEP
EP2358602 A4	20120328	LSRE	RIC1	INFORMATION PROVIDED ON IPC CODE ASSIGNED BEFORE GRANT	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : B65D 1/02 20060101AFI20120221BHEP
EP2358602 A4	20140219	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20140121
EP2358602 A4	20151216	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20151119
EP2358602 B1	20160427	LSGT	+	granted / extensions (spc, cpc, pte)	
EP2358602 B1	20160427	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP2358602 B1	20160429	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP2358602 B1	20160515	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 794503 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20160515

EP2358602 B1	20160518	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP2358602 B1	20160609	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602009038272 COUNTRY OF REF DOCUMENT : DE
EP2358602 B1	20160819	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2580170 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) : EFFECTIVE DATE : 20160819
EP2358602 B1	20160825	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : LT REF LEGAL EVENT CODE : MG4D
EP2358602 B1	20160915	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MK05 REF DOCUMENT NUMBER : 794503 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20160427
EP2358602 B1	20160927	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
EP2358602 B1	20160930	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160427
EP2358602 B1	20161031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160427
EP2358602 B1	20161031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160427
EP2358602 B1	20161031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NO NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160727
EP2358602 B1	20161031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LT NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160427
EP2358602 B1	20161130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160829

EP2358602 B1	20161130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160728
EP2358602 B1	20161130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LV NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160427
EP2358602 B1	20161130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160427
EP2358602 B1	20161130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160427
EP2358602 B1	20161130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HR NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160427
EP2358602 B1	20161230	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160427
EP2358602 B1	20170130	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 602009038272 COUNTRY OF REF DOCUMENT : DE
EP2358602 B1	20170131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160427
EP2358602 B1	20170131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160427
EP2358602 B1	20170131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160427

EP2358602 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
EP2358602 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
EP2358602 B1	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20161020 YEAR OF FEE PAYMENT : 8
EP2358602 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
EP2358602 B1	20170228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20161024 YEAR OF FEE PAYMENT : 8
EP2358602 B1	20170405	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20170130
EP2358602 B1	20170531	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 : 20160427
EP2358602 B1	20170531	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP2358602 B1	20170726	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP2358602 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 : 20161031
EP2358602 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 : 20161031
EP2358602 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 : 20161028
EP2358602 B1	20170921	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 9
EP2358602 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20170925 YEAR OF FEE PAYMENT : 9

EP2358602 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170921 YEAR OF FEE PAYMENT : 9
EP2358602 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20170921 YEAR OF FEE PAYMENT : 9
EP2358602 B1	20171108	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : ES OWNER : AMCOR GROUP GMBH REF LEGAL EVENT CODE : PC2A EFFECTIVE DATE : 20171102
EP2358602 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 : 20161028
EP2358602 B1	20180131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170920 YEAR OF FEE PAYMENT : 9
EP2358602 B1	20180209	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : FR OWNER : AMCOR GROUP GMBH, CH REF LEGAL EVENT CODE : TP EFFECTIVE DATE : 20180104
EP2358602 B1	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20171103 YEAR OF FEE PAYMENT : 9
EP2358602 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 : 20091028
EP2358602 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
EP2358602 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 : 20160427
EP2358602 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 : 20160427
EP2358602 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

EP2358602 B1	20180629	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IS NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME- LIMIT LAPSED DATE : 20160427
EP2358602 B1	20180629	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MT NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20161031
EP2358602 B1	20180731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME- LIMIT LAPSED DATE : 20160427
EP2358602 B1	20180928	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 10
EP2358602 B1	20181030	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : DE OWNER : AMCOR GROUP GMBH, CH REF LEGAL EVENT CODE : R081 REF DOCUMENT NUMBER : 602009038272 COUNTRY OF REF DOCUMENT : DE OLDPARTY : FORMER OWNER: AMCOR LTD., HAWTHORN, VICTORIA, AU
EP2358602 B1	20181030	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : DE OWNER : AMCOR RIGID PLASTICS USA, LLC, WILMINGTON, US REF LEGAL EVENT CODE : R081 REF DOCUMENT NUMBER : 602009038272 COUNTRY OF REF DOCUMENT : DE OLDPARTY : FORMER OWNER: AMCOR LTD., HAWTHORN, VICTORIA, AU
EP2358602 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20180928 YEAR OF FEE PAYMENT : 10
EP2358602 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20180928 YEAR OF FEE PAYMENT : 10
EP2358602 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20180928 YEAR OF FEE PAYMENT : 10
EP2358602 B1	20190131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180928 YEAR OF FEE PAYMENT : 10
EP2358602 B1	20190201	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : ES OWNER : AMCOR RIGID PLASTICS USA, LLC REF LEGAL EVENT CODE : PC2A EFFECTIVE DATE : 20190128
EP2358602 B1	20190228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20181102 YEAR OF FEE PAYMENT : 10
EP2358602 B1	20190326	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : DE

					OWNER : AMCOR RIGID PLASTICS USA, LLC, WILMINGTON, US REF LEGAL EVENT CODE : R081 REF DOCUMENT NUMBER : 602009038272 COUNTRY OF REF DOCUMENT : DE OLDPARTY : FORMER OWNER: AMCOR GROUP GMBH, ZURICH, CH
EP2358602 B1	20291028	PEXP		Calculated Patent Term Expiry	
EP2459456 A2	20120606	LSPB	+	published / reissued	
EP2459456 A2	20120606	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20120227
EP2459456 A4	20130109	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	EFFECTIVE DATE : 20121206
EP2459456 A4	20130109	LSRE	RIC1	INFORMATION PROVIDED ON IPC CODE ASSIGNED BEFORE GRANT	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : B65D 23/00 20060101ALI20121130BHEP
EP2459456 A4	20130109	LSRE	RIC1	INFORMATION PROVIDED ON IPC CODE ASSIGNED BEFORE GRANT	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : B65D 1/42 20060101ALI20121130BHEP
EP2459456 A4	20130109	LSRE	RIC1	INFORMATION PROVIDED ON IPC CODE ASSIGNED BEFORE GRANT	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : B65D 1/02 20060101AFI20121130BHEP
EP2459456 A4	20150429	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20150325
EP2459456 A4	20170125	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20170109
EP2459456 A4	20170705	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20170612
EP2459456 A4	20171213	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20171114
EP2459456 A4	20180228	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : AMCOR GROUP GMBH
EP2459456 B1	20180425	LSGT	+	granted / extensions (spc, cpc, pte)	
EP2459456 B1	20180425	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP2459456 B1	20180430	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP2459456 B1	20180515	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 992616 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20180515
EP2459456 B1	20180516	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP2459456 B1	20180524	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602010050243 COUNTRY OF REF DOCUMENT : DE
EP2459456 B1	20180525	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2669468 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) : EFFECTIVE DATE : 20180525
EP2459456 B1	20180621	LSFE	REG	REFERENCE TO A	REF COUNTRY CODE : FR

				NATIONAL CODE	REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 9
EP2459456 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20180621 YEAR OF FEE PAYMENT : 9
EP2459456 B1	20180910	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : LT REF LEGAL EVENT CODE : MG4D
EP2459456 B1	20180928	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20180425
EP2459456 B1	20181031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20180425
EP2459456 B1	20181031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20180425
EP2459456 B1	20181031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20180425
EP2459456 B1	20181031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LT NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20180425
EP2459456 B1	20181031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NO NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20180725
EP2459456 B1	20181031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20180725
EP2459456 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180620 YEAR OF FEE PAYMENT : 9
EP2459456 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20180801 YEAR OF FEE PAYMENT : 9
EP2459456 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20180621 YEAR OF FEE PAYMENT : 9

EP2459456 B1	20181031	LSFE	+PGFP	EPO] ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20180620 YEAR OF FEE PAYMENT : 9
EP2459456 B1	20181130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LV NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME- LIMIT LAPSED DATE : 20180425
EP2459456 B1	20181130	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 : 20180425
EP2459456 B1	20181130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME- LIMIT LAPSED DATE : 20180726
EP2459456 B1	20181215	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MK05 REF DOCUMENT NUMBER : 992616 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20180425
EP2459456 B1	20181231	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME- LIMIT LAPSED DATE : 20180827
EP2459456 B1	20190128	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 602010050243 COUNTRY OF REF DOCUMENT : DE
EP2459456 B1	20190131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME- LIMIT LAPSED DATE : 20180425
EP2459456 B1	20190131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME- LIMIT LAPSED DATE : 20180425
EP2459456 B1	20190131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME- LIMIT LAPSED DATE : 20180425
EP2459456 B1	20190131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA	COUNTRY OF REF DOCUMENT : SK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT

				POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME- LIMIT LAPSED DATE : 20180425
EP2459456 B1	20190131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME- LIMIT LAPSED DATE : 20180425
EP2459456 B1	20190131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME- LIMIT LAPSED DATE : 20180425
EP2459456 B1	20190201	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : ES OWNER : AMCOR RIGID PLASTICS USA, LLC REF LEGAL EVENT CODE : PC2A EFFECTIVE DATE : 20190128
EP2459456 B1	20190228	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 : 20180425
EP2459456 B1	20190228	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP2459456 B1	20190328	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : DE OWNER : AMCOR RIGID PLASTICS USA, LLC, WILMINGTON, US REF LEGAL EVENT CODE : R081 REF DOCUMENT NUMBER : 602010050243 COUNTRY OF REF DOCUMENT : DE OLDPARTY : FORMER OWNER: AMCOR GROUP GMBH, ZUERICH, CH
EP2459456 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 : 20180425
EP2459456 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 : 20180730
EP2459456 B1	20190403	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20190128
EP2459456 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
EP2459456 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 : 20180731

EP2459456 B1	20190501	LSLE	REG	EPO] REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP2459456 B1	20300730	PEXP		Calculated Patent Term Expiry	
EP3066010 A1	20160914	LSPB	+	published / reissued	
EP3066010 A1	20160914	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20160419
EP3066010 A4	20170517	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	EFFECTIVE DATE : 20170419
EP3066010 A4	20170517	LSRE	RIC1	INFORMATION PROVIDED ON IPC CODE ASSIGNED BEFORE GRANT	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : B65D 1/02 20060101AFI20170411BHEP
EP3066010 A4	20170517	LSRE	RIC1	INFORMATION PROVIDED ON IPC CODE ASSIGNED BEFORE GRANT	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : B65D 1/42 20060101ALI20170411BHEP
EP3066010 A4	20170517	LSRE	RIC1	INFORMATION PROVIDED ON IPC CODE ASSIGNED BEFORE GRANT	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : B65D 79/00 20060101ALI20170411BHEP
EP3066010 A4	20180228	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : AMCOR GROUP GMBH
ES2322265 T3	20090618	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2322265 T3	20240430	PEXP		Calculated Patent Term Expiry	
ES2346668 T3	20101019	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2346668 T3	20250613	PEXP		Calculated Patent Term Expiry	
ES2580170 T3	20160819	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2580170 T3	20291028	PEXP		Calculated Patent Term Expiry	
ES2669468 T3	20180525	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2669468 T3	20300730	PEXP		Calculated Patent Term Expiry	
HK1120248 A1	20090327	LSPB	+	published / reissued	
HK1120248 A1	20110225	LSPB	+	published / reissued	
HK1120248 A1	20281203	PEXP		Calculated Patent Term Expiry	
HK1120248 A1	20281203	PEXP		Calculated Patent Term Expiry	
HK1120248 A3	20090327	LSPB	+	published / reissued	
HK1120248 B	20110225	LSGT	+	granted / extensions (spc, cpc, pte)	
HK1120248 B	20281203	PEXP		Calculated Patent Term Expiry	
IN05338DN2005 A	20071005	LSPB	+	published / reissued	
IN08300DN2007 A	20080704	LSPB	+	published / reissued	
IN229629 B	20090306	LSGT	+	granted / extensions (spc, cpc, pte)	
IN229629 B	20251121	PEXP		Calculated Patent Term Expiry	
IN280688 B	20170303	LSGT	+	granted / extensions (spc, cpc, pte)	
IN280688 B	20271026	PEXP		Calculated Patent Term Expiry	
JP2006528116 T2	20070214	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20070213

JP2006528116 T2	20091105	LSSE	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20091104
JP2006528116 T2	20100130	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20100129
JP2006528116 T2	20100804	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20100803
JP2006528116 T2	20101202	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20101201
JP2006528116 T2	20101210	LSAL	A911	TRANSFER OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A911 EFFECTIVE DATE : 20101209
JP2006528116 T2	20110131	LSAL	-A912	REMOVAL OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A912 EFFECTIVE DATE : 20110128
JP2006528116 T2	20111015	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20111014
JP2006528116 T2	20111117	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01
JP2006528116 T2	20111215	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20111207
JP2006528116 T2	20111216	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP2006528116 T2	20111216	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP2008539141 T2	20100922	LSSE	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20100921
JP2008539141 T2	20101216	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20101215
JP2008539141 T2	20110216	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20110215
JP2008539141 T2	20110310	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20110304
JP2011079585 A2	20120905	LSSE	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20120904
JP2011079585 A2	20121205	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20121204
JP2011079585 A2	20130619	LSSE	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20130618
JP2011079585 A2	20130914	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20130913
JP2011079585 A2	20140319	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20140318

JP2011079585 A2	20140708	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20140707
JP2011079585 A2	20140725	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A821 EFFECTIVE DATE : 20140707
JP2011098780 A2	20120905	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20120904
JP2011098780 A2	20121205	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20121204
JP2011098780 A2	20130619	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20130618
JP2011098780 A2	20130919	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20130918
JP2011098780 A2	20140402	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20140401
JP2011098780 A2	20140627	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20140626
JP2011098780 A2	20140716	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20140715
JP2011098780 A2	20141107	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20141106
JP2011098780 A2	20141129	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A821 EFFECTIVE DATE : 20141111
JP2011098780 A2	20141204	LSAL	A911	TRANSFER OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A911 EFFECTIVE DATE : 20141203
JP2011098780 A2	20150105	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2011098780 A2	20150114	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20150113
JP2011098780 A2	20150205	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20150128
JP2011098780 A2	20150206	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 5689302 COUNTRY OF REF DOCUMENT : JP
JP2012509226 T2	20130109	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20130108
JP2012509226 T2	20130409	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20130408
JP2012509226 T2	20131002	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20131001
JP2012509226 T2	20131227	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20131226

JP2012509226 T2	20140530	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2012509226 T2	20140604	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20140603
JP2012509226 T2	20140703	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20140625
JP2012509226 T2	20140704	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 5571095 COUNTRY OF REF DOCUMENT : JP
JP2013500909 T2	20130706	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20130705
JP2013500909 T2	20140402	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20140401
JP2013500909 T2	20140701	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20140630
JP2013500909 T2	20140925	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20140924
JP2013500909 T2	20150126	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20150126
JP2013500909 T2	20150302	LSAL	A911	TRANSFER OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A911 EFFECTIVE DATE : 20150227
JP2013500909 T2	20150317	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2013500909 T2	20150325	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20150324
JP2013500909 T2	20150416	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20150413
JP2013500909 T2	20150417	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 5732458 COUNTRY OF REF DOCUMENT : JP
JP2014184987 A2	20140709	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20140707
JP2014184987 A2	20150708	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20150707
JP2014184987 A2	20150708	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20150707
JP2014184987 A2	20151007	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20151007
JP2014184987 A2	20151007	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20151007
JP2014184987 A2	20160510	LSES	-A131	NOTIFICATION OF REASONS FOR	TEXT : JAPANESE INTERMEDIATE CODE: A131

JP2014184987 A2	20160510	LSES	-A131	REFUSAL	EFFECTIVE DATE : 20160510
				NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20160510
JP2014184987 A2	20160809	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20160809
JP2014184987 A2	20160809	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20160809
JP2014184987 A2	20161208	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2014184987 A2	20161208	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2014184987 A2	20161220	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20161220
JP2014184987 A2	20161220	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20161220
JP2014184987 A2	20170119	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20170116
JP2014184987 A2	20170119	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20170116
JP2014184987 A2	20170120	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 6078500 COUNTRY OF REF DOCUMENT : JP
JP2014184987 A2	20170120	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 6078500 COUNTRY OF REF DOCUMENT : JP
JP2016534950 T2	20170824	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20170824
JP2016534950 T2	20171122	LSAS	A711	NOTIFICATION OF CHANGE IN APPLICANT	TEXT : JAPANESE INTERMEDIATE CODE: A711 EFFECTIVE DATE : 20171122
JP2016534950 T2	20181023	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20181023
JP2016534950 T2	20181220	LSAS	A711	NOTIFICATION OF CHANGE IN APPLICANT	TEXT : JAPANESE INTERMEDIATE CODE: A711 EFFECTIVE DATE : 20181220
JP2016534950 T2	20190123	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20190123
JP2016534950 T2	20190319	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20190319
JP4700728 B2	20110615	LSGT	+	granted / extensions (spc, cpc, pte)	
JP4700728 B2	20110217	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP4700728 B2	20110308	LSFE	R100	特許料納付書 (Patent fee payment form)	

JP4700728 B2	20110311	LSGT	+R150	特許証 (Patent certificate)	
JP4700728 B2	20140227	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4700728 B2	20140304	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4700728 B2	20150226	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4700728 B2	20150303	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4700728 B2	20160225	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4700728 B2	20160301	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4700728 B2	20170302	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4700728 B2	20170307	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4700728 B2	20170913	LSAS	S111	REQUEST FOR CHANGE OF OWNERSHIP OR PART OF OWNERSHIP	TEXT : JAPANESE INTERMEDIATE CODE: R313113
JP4700728 B2	20171101	LSAS	S111	REQUEST FOR CHANGE OF OWNERSHIP OR PART OF OWNERSHIP	TEXT : JAPANESE INTERMEDIATE CODE: R313113
JP4700728 B2	20171110	LSAS	R350	WRITTEN NOTIFICATION OF REGISTRATION OF TRANSFER	TEXT : JAPANESE INTERMEDIATE CODE: R350
JP4700728 B2	20180301	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4700728 B2	20180306	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4700728 B2	20181227	LSAS	S111	REQUEST FOR CHANGE OF OWNERSHIP OR PART OF OWNERSHIP	TEXT : JAPANESE INTERMEDIATE CODE: R313113
JP4700728 B2	20190110	LSAS	R350	WRITTEN NOTIFICATION OF REGISTRATION OF TRANSFER	TEXT : JAPANESE INTERMEDIATE CODE: R350
JP4700728 B2	20190228	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4700728 B2	20190305	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4700728 B2	20250613	PEXP		Calculated Patent Term Expiry	
JP4884970 B2	20120229	LSGT	+	granted / extensions (spc, cpc, pte)	
JP4884970 B2	20060927	LSRE	A529	WRITTEN SUBMISSION OF COPY OF AMENDMENT UNDER SECTION 34 (PCT)	TEXT : JAPANESE INTERMEDIATE CODE: A529 EFFECTIVE DATE : 20060120
JP4884970 B2	20061107	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A821 EFFECTIVE DATE : 20061006
JP4884970 B2	20111213	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP4884970 B2	20141211	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4884970 B2	20141216	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4884970 B2	20151210	LSFE	R20	特許料納付書 (Patent fee payment form)	

JP4884970 B2	20151215	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4884970 B2	20161201	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4884970 B2	20161206	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4884970 B2	20170913	LSAS	S111	REQUEST FOR CHANGE OF OWNERSHIP OR PART OF OWNERSHIP	TEXT : JAPANESE INTERMEDIATE CODE: R313113
JP4884970 B2	20171101	LSAS	S111	REQUEST FOR CHANGE OF OWNERSHIP OR PART OF OWNERSHIP	TEXT : JAPANESE INTERMEDIATE CODE: R313113
JP4884970 B2	20171110	LSAS	R350	WRITTEN NOTIFICATION OF REGISTRATION OF TRANSFER	TEXT : JAPANESE INTERMEDIATE CODE: R350
JP4884970 B2	20171130	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4884970 B2	20171212	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4884970 B2	20181129	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP4884970 B2	20181204	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4884970 B2	20181227	LSAS	S111	REQUEST FOR CHANGE OF OWNERSHIP OR PART OF OWNERSHIP	TEXT : JAPANESE INTERMEDIATE CODE: R313113
JP4884970 B2	20190110	LSAS	R350	WRITTEN NOTIFICATION OF REGISTRATION OF TRANSFER	TEXT : JAPANESE INTERMEDIATE CODE: R350
JP4884970 B2	20240430	PEXP		Calculated Patent Term Expiry	
JP5571095 B2	20140813	LSGT	+	granted / extensions (spc, cpc, pte)	
JP5571095 B2	20140605	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP5571095 B2	20140701	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP5571095 B2	20140704	LSGT	+R150	特許証 (Patent certificate)	
JP5571095 B2	20170629	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5571095 B2	20170704	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5571095 B2	20170913	LSAS	S111	REQUEST FOR CHANGE OF OWNERSHIP OR PART OF OWNERSHIP	TEXT : JAPANESE INTERMEDIATE CODE: R313113
JP5571095 B2	20171101	LSAS	S111	REQUEST FOR CHANGE OF OWNERSHIP OR PART OF OWNERSHIP	TEXT : JAPANESE INTERMEDIATE CODE: R313113
JP5571095 B2	20171110	LSAS	R350	WRITTEN NOTIFICATION OF REGISTRATION OF TRANSFER	TEXT : JAPANESE INTERMEDIATE CODE: R350
JP5571095 B2	20180628	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5571095 B2	20180703	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5571095 B2	20181227	LSAS	S111	REQUEST FOR	TEXT : JAPANESE INTERMEDIATE

JP5571095 B2	20190110	LSAS	R350	CHANGE OF OWNERSHIP OR PART OF OWNERSHIP WRITTEN NOTIFICATION OF REGISTRATION OF TRANSFER	CODE: R313113 TEXT : JAPANESE INTERMEDIATE CODE: R350
JP5571095 B2	20190627	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5571095 B2	20291028	PEXP		Calculated Patent Term Expiry	
JP5689302 B2	20150325	LSGT	+	granted / extensions (spc, cpc, pte)	
JP5689302 B2	20150115	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP5689302 B2	20150203	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP5689302 B2	20150206	LSGT	+R150	特許証 (Patent certificate)	
JP5689302 B2	20170913	LSAS	S111	REQUEST FOR CHANGE OF OWNERSHIP OR PART OF OWNERSHIP	TEXT : JAPANESE INTERMEDIATE CODE: R313113
JP5689302 B2	20171101	LSAS	S111	REQUEST FOR CHANGE OF OWNERSHIP OR PART OF OWNERSHIP	TEXT : JAPANESE INTERMEDIATE CODE: R313113
JP5689302 B2	20171110	LSAS	R350	WRITTEN NOTIFICATION OF REGISTRATION OF TRANSFER	TEXT : JAPANESE INTERMEDIATE CODE: R350
JP5689302 B2	20180201	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5689302 B2	20180206	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5689302 B2	20181227	LSAS	S111	REQUEST FOR CHANGE OF OWNERSHIP OR PART OF OWNERSHIP	TEXT : JAPANESE INTERMEDIATE CODE: R313113
JP5689302 B2	20190110	LSAS	R350	WRITTEN NOTIFICATION OF REGISTRATION OF TRANSFER	TEXT : JAPANESE INTERMEDIATE CODE: R350
JP5689302 B2	20190131	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5689302 B2	20190212	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5689302 B2	20301215	PEXP		Calculated Patent Term Expiry	
JP5732458 B2	20150610	LSGT	+	granted / extensions (spc, cpc, pte)	
JP5732458 B2	20150326	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP5732458 B2	20150414	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP5732458 B2	20150417	LSGT	+R150	特許証 (Patent certificate)	
JP5732458 B2	20170913	LSAS	S111	REQUEST FOR CHANGE OF OWNERSHIP OR PART OF OWNERSHIP	TEXT : JAPANESE INTERMEDIATE CODE: R313113
JP5732458 B2	20171101	LSAS	S111	REQUEST FOR CHANGE OF OWNERSHIP OR PART OF OWNERSHIP	TEXT : JAPANESE INTERMEDIATE CODE: R313113
JP5732458 B2	20171110	LSAS	R350	WRITTEN NOTIFICATION OF REGISTRATION OF TRANSFER	TEXT : JAPANESE INTERMEDIATE CODE: R350
JP5732458 B2	20180329	LSFE	R20	特許料納付書 (Patent	

fee payment form)					
JP5732458 B2	20180403	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5732458 B2	20181227	LSAS	S111	REQUEST FOR CHANGE OF OWNERSHIP OR PART OF OWNERSHIP	TEXT : JAPANESE INTERMEDIATE CODE: R313113
JP5732458 B2	20190110	LSAS	R350	WRITTEN NOTIFICATION OF REGISTRATION OF TRANSFER	TEXT : JAPANESE INTERMEDIATE CODE: R350
JP5732458 B2	20190328	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5732458 B2	20190402	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5732458 B2	20300730	PEXP		Calculated Patent Term Expiry	
JP6078500 B2	20170208	LSGT	+	granted / extensions (spc, cpc, pte)	
JP6078500 B2	20140709	LSSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20140707
JP6078500 B2	20161222	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP6078500 B2	20170117	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP6078500 B2	20170120	LSGT	+R150	特許証 (Patent certificate)	
JP6078500 B2	20170913	LSAS	S111	REQUEST FOR CHANGE OF OWNERSHIP OR PART OF OWNERSHIP	TEXT : JAPANESE INTERMEDIATE CODE: R313113
JP6078500 B2	20171101	LSAS	S111	REQUEST FOR CHANGE OF OWNERSHIP OR PART OF OWNERSHIP	TEXT : JAPANESE INTERMEDIATE CODE: R313113
JP6078500 B2	20171110	LSAS	R350	WRITTEN NOTIFICATION OF REGISTRATION OF TRANSFER	TEXT : JAPANESE INTERMEDIATE CODE: R350
JP6078500 B2	20181227	LSAS	S111	REQUEST FOR CHANGE OF OWNERSHIP OR PART OF OWNERSHIP	TEXT : JAPANESE INTERMEDIATE CODE: R313113
JP6078500 B2	20190110	LSAS	R350	WRITTEN NOTIFICATION OF REGISTRATION OF TRANSFER	TEXT : JAPANESE INTERMEDIATE CODE: R350
JP6078500 B2	20340707	PEXP		Calculated Patent Term Expiry	
KR101087622 B1	20111129	LSGT	+	granted / extensions (spc, cpc, pte)	
KR101087622 B1	20141105	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20141106 YEAR OF FEE PAYMENT : 4
KR101087622 B1	20151105	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20151106 YEAR OF FEE PAYMENT : 5
KR101087622 B1	20161025	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20161025 YEAR OF FEE PAYMENT : 6
KR101087622 B1	20171025	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20171025 YEAR OF FEE PAYMENT : 7
KR101087622 B1	20181025	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20181025 YEAR OF FEE PAYMENT : 8
KR101087622 B1	20240430	PEXP		Calculated Patent Term Expiry	
KR101205287 B1	20121127	LSGT	+	granted / extensions	

(spc, cpc, pte)					
KR101205287 B1	20151104	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20151105 YEAR OF FEE PAYMENT : 4
KR101205287 B1	20161025	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20161025 YEAR OF FEE PAYMENT : 5
KR101205287 B1	20171025	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20171025 YEAR OF FEE PAYMENT : 6
KR101205287 B1	20181025	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20181025 YEAR OF FEE PAYMENT : 7
KR101205287 B1	20250613	PEXP		Calculated Patent Term Expiry	
KR20060031606 A	20060412	LSPB	+	published / reissued	
KR20060031606 A	20090420	LSES	A201	REQUEST FOR EXAMINATION	
KR20060031606 A	20110308	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR20060031606 A	20110901	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
KR20060031606 A	20111122	LSGT	+GRNT	WRITTEN DECISION TO GRANT	
KR20080012904 A	20080212	LSPB	+	published / reissued	
KR20080012904 A	20100507	LSES	A201	REQUEST FOR EXAMINATION	
KR20080012904 A	20120829	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
KR20080012904 A	20121121	LSGT	+GRNT	WRITTEN DECISION TO GRANT	
MX2007013503 A1	20080121	LSPB	+	published / reissued	
MX2007013503 A1	20100125	LSGT	+FG	GRANT OR REGISTRATION	
MX2011004981 A1	20110616	LSPB	+	published / reissued	
MX2011004981 A1	20131125	LSGT	+FG	GRANT OR REGISTRATION	
MX2012001085 A1	20120522	LSPB	+	published / reissued	
MX2012001085 A1	20140728	LSGT	+FG	GRANT OR REGISTRATION	
MX2016003964 A1	20161021	LSPB	+	published / reissued	
MX2018014814 A1	20190314	LSPB	+	published / reissued	
MXPA05012633 A1	20060525	LSPB	+	published / reissued	
MXPA05012633 A1	20080130	LSGT	+FG	GRANT OR REGISTRATION	
NZ544001 A	20081128	LSPB	+	published / reissued	
NZ544001 A	20090430	LSGT	+PSEA	PATENT SEALED	
NZ544001 A	20090828	LSFE	+RENEW	RENEWAL (RENEWAL FEES ACCEPTED)	
NZ544001 A	20110527	LSFE	+RENEW	RENEWAL (RENEWAL FEES ACCEPTED)	
NZ544001 A	20140430	LSFE	+RENEW	RENEWAL (RENEWAL FEES ACCEPTED)	TEXT : PATENT RENEWED FOR 3 YEARS UNTIL 30 APR 2017 BY COMPUTER PACKAGES INC EFFECTIVE DATE : 20140429
NZ544001 A	20170331	LSFE	+RENEW	RENEWAL (RENEWAL FEES ACCEPTED)	TEXT : PATENT RENEWED FOR 1 YEAR UNTIL 30 APR 2018 BY CPA GLOBAL EFFECTIVE DATE : 20170318
NZ544001 A	20171027	LSAS	ASS	CHANGE OF OWNERSHIP	PARTYTYPE : OWNER OWNER : AMCOR GROUP GMBH, CH EFFECTIVE DATE : 20171005
NZ544001 A	20180323	LSFE	+RENEW	RENEWAL (RENEWAL	TEXT : PATENT RENEWED FOR 1

				FEES ACCEPTED)	YEAR UNTIL 30 APR 2019 BY CPA GLOBAL EFFECTIVE DATE : 20180315
NZ544001 A	20181026	LSAS	ASS	CHANGE OF OWNERSHIP	PARTYTYPE : OWNER OWNER : AMCOR RIGID PLASTICS USA, LLC, THE CORPORATION, US EFFECTIVE DATE : 20181015
NZ544001 A	20190329	LSFE	+RENEW	RENEWAL (RENEWAL FEES ACCEPTED)	TEXT : PATENT RENEWED FOR 1 YEAR UNTIL 30 APR 2020 BY CPA GLOBAL EFFECTIVE DATE : 20190314
NZ563637 A	20100625	LSPB	+	published / reissued	
NZ563637 A	20101029	LSGT	+PSEA	PATENT SEALED	
NZ563637 A	20110225	LSFE	+RENEW	RENEWAL (RENEWAL FEES ACCEPTED)	
NZ563637 A	20120727	LSFE	+RENEW	RENEWAL (RENEWAL FEES ACCEPTED)	
NZ563637 A	20150529	LSFE	+RENEW	RENEWAL (RENEWAL FEES ACCEPTED)	TEXT : PATENT RENEWED FOR 1 YEAR UNTIL 13 JUN 2016 BY COMPUTER PACKAGES INC EFFECTIVE DATE : 20150519
NZ563637 A	20160527	LSFE	+RENEW	RENEWAL (RENEWAL FEES ACCEPTED)	TEXT : PATENT RENEWED FOR 1 YEAR UNTIL 13 JUN 2017 BY COMPUTER PACKAGES INC EFFECTIVE DATE : 20160518
NZ563637 A	20170526	LSFE	+RENEW	RENEWAL (RENEWAL FEES ACCEPTED)	TEXT : PATENT RENEWED FOR 1 YEAR UNTIL 13 JUN 2018 BY CPA GLOBAL EFFECTIVE DATE : 20170512
NZ563637 A	20171027	LSAS	ASS	CHANGE OF OWNERSHIP	PARTYTYPE : OWNER OWNER : AMCOR GROUP GMBH, CH EFFECTIVE DATE : 20171005
NZ563637 A	20180525	LSFE	+RENEW	RENEWAL (RENEWAL FEES ACCEPTED)	TEXT : PATENT RENEWED FOR 1 YEAR UNTIL 13 JUN 2019 BY CPA GLOBAL EFFECTIVE DATE : 20180510
NZ563637 A	20181026	LSAS	ASS	CHANGE OF OWNERSHIP	PARTYTYPE : OWNER OWNER : AMCOR RIGID PLASTICS USA, LLC, THE CORPORATION, US EFFECTIVE DATE : 20181015
NZ592546 A	20130830	LSPB	+	published / reissued	
NZ592546 A	20131220	LSGT	+PSEA	PATENT SEALED	
NZ592546 A	20140228	LSFE	+RENEW	RENEWAL (RENEWAL FEES ACCEPTED)	TEXT : PATENT RENEWED FOR 3 YEARS UNTIL 28 OCT 2016 BY GRIFFITH HACK EFFECTIVE DATE : 20140217
NZ592546 A	20160930	LSFE	+RENEW	RENEWAL (RENEWAL FEES ACCEPTED)	TEXT : PATENT RENEWED FOR 1 YEAR UNTIL 28 OCT 2017 BY CPA GLOBAL EFFECTIVE DATE : 20160916
NZ592546 A	20170929	LSFE	+RENEW	RENEWAL (RENEWAL FEES ACCEPTED)	TEXT : PATENT RENEWED FOR 1 YEAR UNTIL 28 OCT 2018 BY CPA GLOBAL EFFECTIVE DATE : 20170914
NZ592546 A	20171027	LSAS	ASS	CHANGE OF OWNERSHIP	PARTYTYPE : OWNER OWNER : AMCOR GROUP GMBH, CH EFFECTIVE DATE : 20171005
NZ592546 A	20180928	LSFE	+RENEW	RENEWAL (RENEWAL FEES ACCEPTED)	TEXT : PATENT RENEWED FOR 1 YEAR UNTIL 28 OCT 2019 BY CPA GLOBAL EFFECTIVE DATE : 20180913
NZ592546 A	20181026	LSAS	ASS	CHANGE OF OWNERSHIP	PARTYTYPE : OWNER OWNER : AMCOR RIGID

					PLASTICS USA, LLC, THE CORPORATION, US EFFECTIVE DATE : 20181015	
PE11892012 A1	20120906	LSPB	+	published / reissued		
PE11892012 A1	20160920	LSGT	+FG	GRANT, REGISTRATION		
RU2005140293 A	20060510	LSPB	+	published / reissued		
RU2007144105 A	20090610	LSPB	+	published / reissued		
RU2318710 C2	20080310	LSGT	+	granted / extensions (spc, cpc, pte)		
RU2318710 C2	20240430	PEXP		Calculated Patent Term Expiry		
RU2381968 C2	20100220	LSGT	+	granted / extensions (spc, cpc, pte)		
RU2381968 C2	20250613	PEXP		Calculated Patent Term Expiry		
SI1633640 T1	20091031	LSGT	+	granted / extensions (spc, cpc, pte)		
SI1633640 T1	20240430	PEXP		Calculated Patent Term Expiry		
SI1893496 T1	20101231	LSGT	+	granted / extensions (spc, cpc, pte)		
SI1893496 T1	20250613	PEXP		Calculated Patent Term Expiry		
US2004232103 AA	20041125	LSPB	+	published / reissued		
US2004232103 AA	20050824	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE	
US2005196569 AA	20050908	LSPB	+	published / reissued		
US2005196569 AA	20061129	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE	
US2006006133 AA	20060112	LSPB	+	published / reissued		
US2006006133 AA	20060418	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMCOR LIMITED, AUSTRALIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:LISCH, G. DAVID; SILVERS, KERRY W.; PIESZCHALA, BRIAN L.; AND OTHERS; REEL/FRAME:017487/0770; SIGNING DATES FROM 20050819 TO 20050829	
US2006006133 AA	20081029	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE	
US2009159556 AA	20090625	LSPB	+	published / reissued		
US2009159556 AA	20120912	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE	
US2011017700 AA	20110127	LSPB	+	published / reissued		
US2011017700 AA	20131211	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE	
US2013001235 AA	20130103	LSPB	+	published / reissued		
US2013001235 AA	20140827	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE	
US2014061211 AA	20140306	LSPB	+	published / reissued		
US2014061211 AA	20141201	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMCOR LIMITED, AUSTRALIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:PATCHEAK, TERRY D.; DOWNING, DAVID; BEUERLE, FREDERICK C.; AND OTHERS; SIGNING DATES FROM 20141030 TO 20141111; REEL/FRAME:034290/0181	

US2014061211 AA	20160629	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2016311599 AA	20161027	LSPB	+	published / reissued	
US2016311599 AA	20170314	LSES	NFA1	Non Final Action Mailed	
US2016311599 AA	20170508	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2016311599 AA	20170601	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMCOR LIMITED, AUSTRALIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:STELZER, JAMES; LANE, MICHAEL T.; SIGNING DATES FROM 20170531 TO 20170601; REEL/FRAME:042565/0880
US2016311599 AA	20170601	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMCOR LIMITED, AUSTRALIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:STELZER, JAMES; LANE, MICHAEL T.; SIGNING DATES FROM 20170531 TO 20170601; REEL/FRAME:042565/0880
US2016311599 AA	20170610	LSFE	-AWA4	Awaiting TC Resp., Issue Fee Not Paid	
US2016311599 AA	20170612	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2016311599 AA	20170803	LSFE	+PPR1	Publications -- Issue Fee Payment Received	
US2016311599 AA	20170804	LSFE	+PPV1	Publications -- Issue Fee Payment Verified	
US2016311599 AA	20170816	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2016311599 AA	20170818	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMCOR GROUP GMBH, SWITZERLAND OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:AMCOR LIMITED; REEL/FRAME:043595/0444 EFFECTIVE DATE : 20170701
US6942116 BB	20050913	LSGT	+	granted / extensions (spc, cpc, pte)	
US6942116 BB	20030523	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMCOR LIMITED, AUSTRALIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:LISCH, G. DAVID; SILVERS, KERRY W.; VAILLIENCOURT, DWAYNE G.; REEL/FRAME:014114/0809 EFFECTIVE DATE : 20030519
US6942116 BB	20050824	LSGT	PAT1	Patented Case	
US6942116 BB	20090311	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6942116 BB	20130311	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US6942116 BB	20170222	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US6942116 BB	20170818	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMCOR GROUP GMBH, SWITZERLAND OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:AMCOR LIMITED; REEL/FRAME:043595/0444 EFFECTIVE DATE : 20170701

US6942116 BB	20181011	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMCOR RIGID PLASTICS USA, LLC, DELAWARE OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:AMCOR GROUP GMBH; REEL/FRAME:047215/0173 EFFECTIVE DATE : 20180621	
US6942116 BB	20230617	PEXP		Calculated Patent Term Expiry (PTA 25 days)		
US7150372 BB	20061219	LSGT	+	granted / extensions (spc, cpc, pte)		
US7150372 BB	20061129	LSGT	PAT1	Patented Case		
US7150372 BB	20080715	LSRE	CC	CERTIFICATE OF CORRECTION		
US7150372 BB	20100604	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4	
US7150372 BB	20140617	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8	
US7150372 BB	20170818	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMCOR GROUP GMBH, SWITZERLAND OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:AMCOR LIMITED; REEL/FRAME:043595/0444 EFFECTIVE DATE : 20170701	
US7150372 BB	20180522	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 12	
US7150372 BB	20181011	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMCOR RIGID PLASTICS USA, LLC, DELAWARE OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:AMCOR GROUP GMBH; REEL/FRAME:047215/0173 EFFECTIVE DATE : 20180621	
US7150372 BB	20250428	PEXP		Calculated Patent Term Expiry		
US7451886 BB	20081118	LSGT	+	granted / extensions (spc, cpc, pte)		
US7451886 BB	20081029	LSGT	PAT1	Patented Case		
US7451886 BB	20090505	LSRE	CC	CERTIFICATE OF CORRECTION		
US7451886 BB	20090526	LSRE	CC	CERTIFICATE OF CORRECTION		
US7451886 BB	20090623	LSRE	CC	CERTIFICATE OF CORRECTION		
US7451886 BB	20120515	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4	
US7451886 BB	20160311	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8	
US7451886 BB	20170818	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMCOR GROUP GMBH, SWITZERLAND OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:AMCOR LIMITED; REEL/FRAME:043595/0444 EFFECTIVE DATE : 20170701	
US7451886 BB	20181011	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMCOR RIGID PLASTICS USA, LLC, DELAWARE OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:AMCOR GROUP GMBH; REEL/FRAME:047215/0173 EFFECTIVE DATE : 20180621	
US7451886 BB	20261014	PEXP		Calculated Patent Term Expiry (PTA 487 days)		
US8276774 BB	20121002	LSGT	+	granted / extensions		

US8276774 BB	20090309	LSAS	AS	(spc, cpc, pte) ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMCOR LIMITED,AUSTRALIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:PATCHEAK, TERRY D.; DOWNING, DAVID; LISCH, G. DAVID; AND OTHERS; SIGNING DATES FROM 20081120 TO 20090211; REEL/FRAME:022365/0951
US8276774 BB	20090309	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMCOR LIMITED, AUSTRALIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:PATCHEAK, TERRY D.; DOWNING, DAVID; LISCH, G. DAVID; AND OTHERS; SIGNING DATES FROM 20081120 TO 20090211; REEL/FRAME:022365/0951
US8276774 BB	20120912	LSGT	PAT1	Patented Case	
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US8276774 BB	20170818	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMCOR GROUP GMBH, SWITZERLAND OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:AMCOR LIMITED; REEL/FRAME:043595/0444 EFFECTIVE DATE : 20170701
US8276774 BB	20181011	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMCOR RIGID PLASTICS USA, LLC, DELAWARE OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:AMCOR GROUP GMBH; REEL/FRAME:047215/0173 EFFECTIVE DATE : 20180621
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US8616395 BB	20131211	LSGT	PAT1	Patented Case	
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US8616395 BB	20170818	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMCOR GROUP GMBH, SWITZERLAND OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:AMCOR LIMITED; REEL/FRAME:043595/0444 EFFECTIVE DATE : 20170701
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US8616395 BB	20310209	PEXP		Calculated Patent Term Expiry (PTA	

194 days)					
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US8833579 BB	20140827	LSGT	PAT1	Patented Case	
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US9751679 BB	20360630	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
WO04106175 A1	20041209	LSPB	+	published / reissued	

WO04106175 A1	20040430	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 200480020189.5 COUNTRY OF REF DOCUMENT : CN
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WO11014759 A2	20100730	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 201080043838.9 COUNTRY OF REF DOCUMENT : CN
WO11014759 A3	20120120	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2010278853 COUNTRY OF REF DOCUMENT : AU
WO11014759 A3	20120120	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2768822 COUNTRY OF REF DOCUMENT : CA
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WO11014759 A3	20120127	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 000112-2012 COUNTRY OF REF DOCUMENT : PE
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WO18005816 A1	20190101	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
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Title: MODULAR INTERLOCKING CONTAINERS WITH ENHANCED LATERAL CONNECTIVITY FEATURES

Abstract: Described are devices and containers that are scalable, modular, and lockable laterally and vertically with other like containers for a variety of applications. A container is formed by a wall attached at first end to a top end section with an opening and attached at a second end by a bottom end section. A container may have one or more of a tongue, formed on the wall, having and interconnecting mechanism to be received and interlocked by a groove. Vertical interconnectivity is accomplished with mechanisms to stack containers and prevent swivel using a ridge and channel interlocking arrangement.

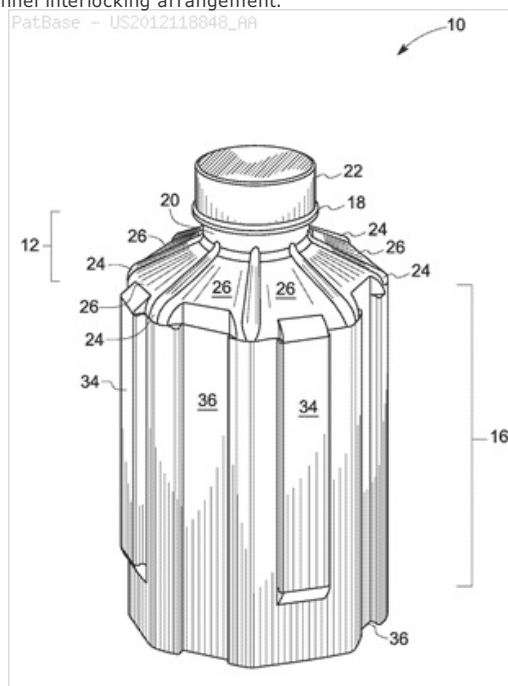
Classifications:

International (IPC 8-9): A47G19/00 B29C49/06 B29C49/48 B65D1/02 B65D1/40 B65D1/42 B65D21/00 B65D21/02 B65D21/024 B65D21/028 B65D21/032 B65D85/62 (Advanced/Invention)

CPC: B65D21/0231 B29C49/06 B65D21/0204

European: B65D21/02B2 B65D21/02E12B

US: 1/1 215/40 215/40P 264/531



Family:

Publication number	Publication date	Application number	Application date
BR112013007848 A2	20160607	BR20131107848	20111001
CA2850736 AA	20140331	CA20112850736	20111001
CA2850736 C	20171212	CA20112850736	20111001
CA2984228 AA	20120405	CA20112984228	20111001
CN103298702 A	20130911	CN201180055883	20111001
CN103298702 B	20160504	CN201180055883	20111001
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EP2621821 A2	20130807	EP20110830051	20111001
EP2621821 A4	20150812	EP20110830051	20111001
EP2621821 B1	20161123	EP20110830051	20111001
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IN03790DN2013 A	20160513	IN2013DN03790	20130430
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JP2016210514 A2	20161215	JP20160180412	20160915
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JP6356965 B2	20180711	JP20130531947T	20111001
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US2016229107 AA	20160811	US20160098289	20160413
US9346585 BB	20160524	US20110251249	20111001
WO12045061 A2	20120405	WO2011US54505	20111001
WO12045061 A3	20120816	WO2011US54505	20111001

Priority:

US2010038919P	20101001	CA20112850736	20111001	CN201180055883	20111001
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Inventor(s): TIMOTHY J CARLSON ; SEVERN CRAIG ; OTTMAR BRANDAU ; MICHAEL FREDERICK ; FREDERICK MICHAEL ; CRAIG SEVERN ; BRANDAU OTTMAR ; A IRENE HENDRICKSON

Agent(s): B EVERETT HENDRICKSON ; HENDRICKSON B EVERETT LOS ANGELES ; SEVERN CRAIG SHARON ONTARIO ; HENDRICKSON A IRENE LOS ANGELES ; CARLSON TIMOTHY J ARLINGTON ; FREDERICK MICHAEL SANTA MONICA CALIFORNIA ; BRANDAU OTTMAR WASAGA BEACH ONTARIO

Designated states: GELSING SANDER R; KILIAN KILIAN AND PARTNER; PLEBANI RINALDO; STUDIO TORTA SPA; MATSUOKA SHUHEI; KENDAL M; SHEETS KENDAL M

AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU 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)

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Patent	Date recorded	Event group	Code	Event	Details
CA2850736 AA	20140331	LSPB	+	published / reissued	
CA2850736 AA	20161008	LSES	+EEER	EXAMINATION REQUEST	EFFECTIVE DATE : 20161003
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CA2850736 C	20311001	PEXP		Calculated Patent Term Expiry	
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CN103298702 B	20160504	LSGT	+	granted / extensions (spc, cpc, pte)	
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CN105730825 A	20160706	LSPB	+	published / reissued	
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EP2621821 B1	20161130	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP2621821 B1	20161214	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP2621821 B1	20161215	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 847649 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20161215
EP2621821 B1	20170105	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602011032789 COUNTRY OF REF DOCUMENT : DE
EP2621821 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 : 20161123
EP2621821 B1	20170327	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : LT REF LEGAL EVENT CODE : MG4D
EP2621821 B1	20170415	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MK05 REF DOCUMENT NUMBER : 847649 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20161123
EP2621821 B1	20170426	LSAS	RAP2	RIGHTS OF A PATENT TRANSFERRED	PARTYTYPE : OWNER OWNER : FRIENDSHIP PRODUCTS LLC
EP2621821 B1	20170428	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 : 20161123
EP2621821 B1	20170428	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NO NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170223
EP2621821 B1	20170428	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20161123
EP2621821 B1	20170428	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170224
EP2621821 B1	20170428	LSLE	-PG25	LAPSED IN A	COUNTRY OF REF DOCUMENT : NL

				CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20161123
EP2621821 B1	20311001	PEXP		Calculated Patent Term Expiry	
EP2621821 B8	20170531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20161123
EP2621821 B8	20170531	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 : 20161123
EP2621821 B8	20170531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20161123
EP2621821 B8	20170531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RS NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20161123
EP2621821 B8	20170531	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 : 20161123
EP2621821 B8	20170531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170323
EP2621821 B8	20170531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20161123
EP2621821 B8	20170731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20161123
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EP2621821 B8	20170731	LSLE	-PG25	LAPSED IN A	COUNTRY OF REF DOCUMENT : SK

				CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20161123
EP2621821 B8	20170731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20161123
EP2621821 B8	20170824	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 602011032789 COUNTRY OF REF DOCUMENT : DE
EP2621821 B8	20170831	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 : 20161123
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EP2621821 B8	20170919	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 7
EP2621821 B8	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170919 YEAR OF FEE PAYMENT : 7
EP2621821 B8	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20170919 YEAR OF FEE PAYMENT : 7
EP2621821 B8	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20170925 YEAR OF FEE PAYMENT : 7
EP2621821 B8	20171101	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20170824
EP2621821 B8	20171130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20161123
EP2621821 B8	20180131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170920 YEAR OF FEE PAYMENT : 7
EP2621821 B8	20180531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT

OFFICE TO EPO]					LAPSED DATE : 20161123
EP2621821 B8	20180531	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP2621821 B8	20180725	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP2621821 B8	20180731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LI NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20171031
EP2621821 B8	20180731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20171001
EP2621821 B8	20180731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20171031
EP2621821 B8	20180925	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 8
EP2621821 B8	20180928	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MT NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20171001
EP2621821 B8	20181031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20171001
EP2621821 B8	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20180924 YEAR OF FEE PAYMENT : 8
EP2621821 B8	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20180925 YEAR OF FEE PAYMENT : 8
EP2621821 B8	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20180924 YEAR OF FEE PAYMENT : 8
EP2621821 B8	20190131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180924 YEAR OF FEE PAYMENT : 8
EP2621821 B8	20190628	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU NOTIFICATIONNOFLAPSE : 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 : 20111001
IN03790DN2013 A	20160513	LSPB	+	published / reissued	
JP2013538763 T2	20141002	LSSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20141001

JP2013538763 T2	20150818	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20150817
JP2013538763 T2	20151112	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20151112
JP2013538763 T2	20160517	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20160517
JP2013538763 T2	20180329	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20180329
JP2013538763 T2	20180621	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20180615
JP2013538763 T2	20180622	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 6356965 COUNTRY OF REF DOCUMENT : JP
JP2016210514 A2	20161005	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20161005
JP2016210514 A2	20171211	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20171211
JP2016210514 A2	20180501	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20180501
JP2016210514 A2	20180525	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A132 EFFECTIVE DATE : 20180525
JP2016210514 A2	20180528	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20180528
JP2016210514 A2	20181029	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2016210514 A2	20181101	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20181101
JP2016210514 A2	20181206	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20181130
JP2016210514 A2	20181207	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 6446008 COUNTRY OF REF DOCUMENT : JP
JP2019031339 A2	20181130	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20181130
JP2019031339 A2	20190201	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20190201
JP6356965 B2	20180711	LSGT	+	granted / extensions (spc, cpc, pte)	
JP6356965 B2	20180614	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP6356965 B2	20180619	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP6356965 B2	20180622	LSGT	+R150	特許証 (Patent certificate)	

JP6356965 B2	20311001	PEXP		Calculated Patent Term Expiry	
JP6446008 B2	20181226	LSGT	+	granted / extensions (spc, cpc, pte)	
JP6446008 B2	20181108	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP6446008 B2	20181204	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP6446008 B2	20181207	LSGT	+R150	特許証 (Patent certificate)	
JP6446008 B2	20360915	PEXP		Calculated Patent Term Expiry	
MX2013003682 A1	20131025	LSPB	+	published / reissued	
MX2013003682 A1	20160629	LSGT	+FG	GRANT OR REGISTRATION	
MX340159 B	20160629	LSGT	+	granted / extensions (spc, cpc, pte)	
MX340159 B	20311001	PEXP		Calculated Patent Term Expiry	
US2012118848 AA	20120517	LSPB	+	published / reissued	
US2012118848 AA	20160413	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : FRIENDSHIP PRODUCTS LLC, VIRGINIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:HENDRICKSON, B. EVERETT; CARLSON, TIMOTHY J.; HENDRICKSON, A. IRENE; AND OTHERS; SIGNING DATES FROM 20120123 TO 20160307; REEL/FRAME:038273/0964
US2012118848 AA	20160504	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2016229107 AA	20160811	LSPB	+	published / reissued	
US2016229107 AA	20180319	LSSES	NFA1	Non Final Action Mailed	
US2016229107 AA	20190123	LSWD	-STCB	INFORMATION ON STATUS: APPLICATION DISCONTINUATION	TEXT : FINAL REJECTION MAILED
US2016229107 AA	20190502	LSSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US9346585 BB	20160524	LSGT	+	granted / extensions (spc, cpc, pte)	
US9346585 BB	20160414	LSFE	+PPV1	Publications -- Issue Fee Payment Verified	
US9346585 BB	20160504	LSGT	PAT1	Patented Case	
US9346585 BB	20311204	PEXP		Calculated Patent Term Expiry (PTA 64 days)	
WO12045061 A2	20120405	LSPB	+	published / reissued	
WO12045061 A2	20101031	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 201180055883.0 COUNTRY OF REF DOCUMENT : CN
WO12045061 A3	20130401	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2013531947 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO12045061 A3	20130401	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO	REF DOCUMENT NUMBER : MX/A/2013/003682 COUNTRY OF REF DOCUMENT : MX

				NATIONAL PHASE	
WO12045061 A3	20130402	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO12045061 A3	20130405	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2011830051 COUNTRY OF REF DOCUMENT : EP
WO12045061 A3	20140331	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2850736 COUNTRY OF REF DOCUMENT : CA
WO12045061 A3	20160607	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 112013007848 COUNTRY OF REF DOCUMENT : BR KIND CODE OF REF DOCUMENT : A2 DESIGNATED STATE(S) : EFFECTIVE DATE : 20130401

Title: PLASTIC CONTAINER

Abstract: This invention relates to a container consisting of a thermoplastic material, with side walls, flat top and bottom panels of which the top panel is provided with at least one fill/drain opening, and with a continuous circumferential carrying and transport rim. For better utilization of pallet space, the container body has an approximately square cross-section with slightly convex lateral surfaces and slightly radiused corners. In order to counteract the inherent tendency of the flat container walls to bulge and buckle, the container body is provided with vertical and/or horizontal reinforcement elements.

Classifications:

International (IPC 8-9): B29C49/48 B65D1/12 B65D1/18 B65D1/42

B65D8/12 (Advanced/Invention);

B29C49/48 B29L22/00 B65D1/14 (Advanced/Non-invention);

B29C49/48 B65D1/00 B65D1/40 B65D8/04 (Core/Invention)

International (IPC 1-7): B29C49/48 B29L22/00 B65D B65D1/12

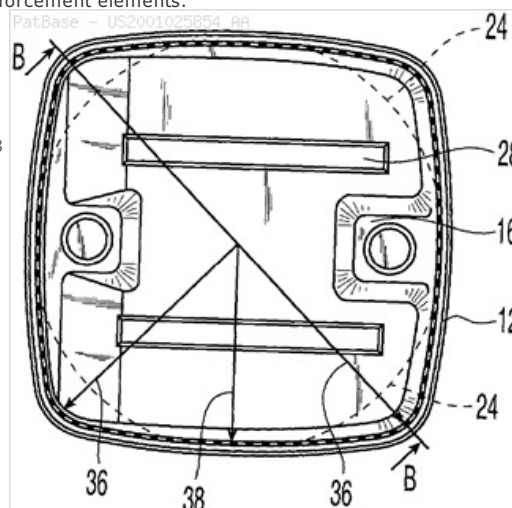
B65D1/14 B65D1/18 B65D1/42 B65D6/08 B65D6/10 B65D6/28 B65D6/38

B65D8/04

CPC: B65D1/18 B65D1/42

European: B65D1/18 B65D1/42

US: 215/382 220/669 220/672

**Family:**

Publication number	Publication date	Application number	Application date
AT246124 E	20030815	AT20000927020T	20000420
AU200045547 A1	20001110	AU20000045547	20000420
AU200045547 A5	20001110	AU20000045547D	20000420
AU766998 B2	20031030	AU20000045547	20000420
BRPI0009880 A	20020108	BR2000PI09880	20000420
CA2371202 AA	20011022	CA20002371202	20000420
CZ20013745 A3	20020814	CZ20010003745	20000420
CZ294748 B6	20050316	CZ20010003745	20000420
DE10081067 D2	20030220	DE20001081067	20000420
DE50003111 D1	20030904	DE20005003111	20000420
DK1171351 T3	20031117	DK20000927020T	20000420
EP1171351 A1	20020116	EP20000927020	20000420
EP1171351 B1	20030730	EP20000927020	20000420
ES2204585 T3	20040501	ES20000927020T	20000420
HU0105361 AB	20020429	HU20010005361	20000420
HU0105361 AC	20020528	HU20010005361	20000420
IL145626 A0	20020630	IL20000145626	20000420
IL145626 A1	20060801	IL20000145626	20000420
IN222298 B	20081121	IN2001CN01450	20011019
JP2002542130 T2	20021210	JP200000613720T	20000420
KR20020010133 A	20020202	KR20017013381	20000420
MXPA01010192 A1	20040910	MX2001PA10192	20000420
NO20015139 A	20011022	NO20010005139	20011022
NO20015139 A0	20011022	NO20010005139	20011022
NO20015139 L	20011022	NO20010005139	20011022
PL350248 A1	20021202	PL20000350248	20000420
TR200102511 T2	20020422	TR20000002511T	20000420
TR200102511 T2	20020422	TR20010002511T	20000420
US2001025854 AA	20011004	US20010867581	20010531
US6971540 BA	20051206	US20000525526	20000315
US7044325 BB	20060516	US20010867581	20010531
WO0064756 A1	20001102	WO2000EP03643	20000420

Priority:

DE19992007189U 19990422
DE20005003111 20000420

US20000525526 20000315
WO2000EP03643 20000420

DE20001081067 20000420
US20010867581 20010531

Probable Assignee: MAUSER WERKE GMBH

Assignee(s): (std): MAUSER WERKE GMBH ; WIVA BV ; MAUSER WERKE GMBH AND CO KG ; PRZYTULLA DIETMAR ; MEULEMAN WILHELM PETER ; WIVA VERPAKKINGEN BV ; WIVA VERPAKKINGEN B V

Assignee(s): WIVA VERPAKKINGEN B V OOSTERHOUT ; MAUSER BENELUX BV ; MAUSER BENELUX SOUVEREINSTRAT BV ; MAUSER WERKE G M B H ; MAUSER WERKE GMBH AND COKG ; WIVA VERPAKKINGEN POSTBUS BV

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Agent(s): FB RICE PTY LTD; MARKS AND CLERK; REINHOLD COHN AND PARTNERS; HENRY M; URSULA B

Designated states: AM AT AU AZ BA BE BG BR BY CA CH CN CY CZ DE DK EE ES FI FR GB GE GR HR HU ID IE IL IN IS IT JP KE KG KR KZ LI LT LU LV MC MD MK MX NL NO NZ PL PT RO RU SE SG SI SK TJ TM TR UA US UZ YU

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT246124 E	20030815	LSGT	+	granted / extensions (spc, cpc, pte)	
AT246124 E	20060115	LSLE	-REN	CEASED DUE TO NON-PAYMENT OF THE ANNUAL FEE	
AT246124 E	20200420	PEXP		Calculated Patent Term Expiry	
AU200045547 A1	20001110	LSPB	+	published / reissued	
AU200045547 A5	20020110	LSAS	TC	CHANGE OF APPLICANT'S NAME (SEC. 104)	OWNER NAME : MAUSER-WERKE GMBH AND CO. KG, WIVA VERPAKKINGEN B. DESCRIPTION : FORMER NAME: MAUSER-WERKE GMBH, WIVA VERPAKKINGEN B.V.
AU766998 B2	20031030	LSGT	+	granted / extensions (spc, cpc, pte)	
AU766998 B2	20020110	LSAS	TC	CHANGE OF APPLICANT'S NAME (SEC. 104)	PARTYTYPE : OWNER OWNER : MAUSER-WERKE GMBH AND CO. KG, WIVA VERPAKKINGEN B. OLDPARTY : FORMER NAME: MAUSER-WERKE GMBH, WIVA VERPAKKINGEN B.V.
AU766998 B2	20040226	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU766998 B2	20200420	PEXP		Calculated Patent Term Expiry	
BRPI0009880 A	20020108	LSPB	+	published / reissued	
BRPI0009880 A	20081111	LSFE	-B08F	APPLICATION FEES: DISMISSAL - ARTICLE 86 OF INDUSTRIAL PROPERTY LAW	TEXT : REFERENTE A 6A,7A E 8A ANUIDADES.
BRPI0009880 A	20091027	LSLE	-B08K	LAPSE AS NO EVIDENCE OF PAYMENT OF THE ANNUAL FEE HAS BEEN FURNISHED TO INPI (ACC. ART. 87)	TEXT : REFERENTE AO DESPACHO PUBLICADO NA RPI 1975 DE 11/11/2008.
CA2371202 AA	20011022	LSPB	+	published / reissued	
CA2371202 AA	20050407	LSSES	+EEER	EXAMINATION REQUEST	
CA2371202 AA	20080528	LSLE	-FZDE	DEAD	
CZ20013745 A3	20020814	LSPB	+	published / reissued	
CZ294748 B6	20050316	LSGT	+	granted / extensions (spc, cpc, pte)	
CZ294748 B6	20061011	LSLE	-MM4A	PATENT LAPSED DUE TO NON-PAYMENT OF FEE	EFFECTIVE DATE : 20000420
CZ294748 B6	20200420	PEXP		Calculated Patent Term Expiry	
DE10081067 D2	20060209	LSLE	-8139	DISPOSAL/NON-PAYMENT OF THE ANNUAL FEE	
DE50003111 D1	20040826	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE50003111 D1	20050512	LSLI	8320	WILLINGNESS TO GRANT LICENCES DECLARED (PARAGRAPH 23)	
DK1171351 T3	20031117	LSGT	+	granted / extensions (spc, cpc, pte)	

DK1171351 T3	20200420	PEXP		Calculated Patent Term Expiry	
EP1171351 A1	20020116	LSPB	+	published / reissued	
EP1171351 A1	20020116	LSSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20010914
EP1171351 A1	20160630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20160421 YEAR OF FEE PAYMENT : 17
EP1171351 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20160422 YEAR OF FEE PAYMENT : 17
EP1171351 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 : 17
EP1171351 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20160426 YEAR OF FEE PAYMENT : 17
EP1171351 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20160423 YEAR OF FEE PAYMENT : 17
EP1171351 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20160423 YEAR OF FEE PAYMENT : 17
EP1171351 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20160421 YEAR OF FEE PAYMENT : 17
EP1171351 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 : 17
EP1171351 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20160429 YEAR OF FEE PAYMENT : 17
EP1171351 A1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20170424 YEAR OF FEE PAYMENT : 18
EP1171351 B1	20030730	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1171351 B1	20030730	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20030730
EP1171351 B1	20030730	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D TEXT : NOT ENGLISH
EP1171351 B1	20030731	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1171351 B1	20030903	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D TEXT : GERMAN
EP1171351 B1	20031117	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : EP REF DOCUMENT NUMBER : 20030404394 COUNTRY OF REF DOCUMENT : GR

EP1171351 B1	20031230	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20031230
EP1171351 B1	20040126	LSRV	-LTIE	LT: INVALIDATION OF EUROPEAN PATENT OR PATENT EXTENSION	REF COUNTRY CODE : EP EFFECTIVE DATE : 20030730
EP1171351 B1	20040329	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20040329 YEAR OF FEE PAYMENT : 5
EP1171351 B1	20040420	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20040420
EP1171351 B1	20040426	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20040426 YEAR OF FEE PAYMENT : 5
EP1171351 B1	20040427	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20040427 YEAR OF FEE PAYMENT : 5
EP1171351 B1	20040428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20040428 YEAR OF FEE PAYMENT : 5
EP1171351 B1	20040429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20040429 YEAR OF FEE PAYMENT : 5
EP1171351 B1	20040430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20040430
EP1171351 B1	20040501	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2204585 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP1171351 B1	20040721	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20040504
EP1171351 B1	20040924	LSLI	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : CL
EP1171351 B1	20050420	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20050420
EP1171351 B1	20050420	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20050420
EP1171351 B1	20050430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20050430
EP1171351 B1	20050430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE	COUNTRY OF REF DOCUMENT : LI NOTIFICATION OF LAPSE : LAPSE

				[ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20050430
EP1171351 B1	20050502	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20050502
EP1171351 B1	20051103	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20051103
EP1171351 B1	20051128	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DK REF LEGAL EVENT CODE : EBP
EP1171351 B1	20051215	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP1171351 B1	20160423	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 17
EP1171351 B1	20170502	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 18
EP1171351 B1	20170630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20170424 YEAR OF FEE PAYMENT : 18
EP1171351 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170502 YEAR OF FEE PAYMENT : 18
EP1171351 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20170424 YEAR OF FEE PAYMENT : 18
EP1171351 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170503 YEAR OF FEE PAYMENT : 18
EP1171351 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20170522 YEAR OF FEE PAYMENT : 18
EP1171351 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20170424 YEAR OF FEE PAYMENT : 18
EP1171351 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20170428 YEAR OF FEE PAYMENT : 18
EP1171351 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 : 18
EP1171351 B1	20180426	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 19
EP1171351 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20180326 YEAR OF FEE PAYMENT : 19
EP1171351 B1	20180629	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20180427

				[ANNOUNCED FROM NATIONAL OFFICE TO EPO]	YEAR OF FEE PAYMENT : 19
EP1171351 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20180518 YEAR OF FEE PAYMENT : 19
EP1171351 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180502 YEAR OF FEE PAYMENT : 19
EP1171351 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20180426 YEAR OF FEE PAYMENT : 19
EP1171351 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 : 19
EP1171351 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20180423 YEAR OF FEE PAYMENT : 19
EP1171351 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 : 19
EP1171351 B1	20180928	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20180426 YEAR OF FEE PAYMENT : 19
EP1171351 B1	20200420	PEXP		Calculated Patent Term Expiry	
ES2204585 T3	20040501	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2204585 T3	20200420	PEXP		Calculated Patent Term Expiry	
HU0105361 AB	20020429	LSPB	+	published / reissued	
HU0105361 AC	20060130	LSLE	-FD9A	LAPSE OF PROVISIONAL PROTECTION DUE TO NON-PAYMENT OF FEES	
IL145626 A0	20061227	LSGT	+FF	PATENT GRANTED	
IL145626 A0	20070920	LSLE	-MM9K	PATENT NOT IN FORCE DUE TO NON-PAYMENT OF RENEWAL FEES	
IL145626 A1	20060801	LSPB	+	published / reissued	
IN222298 B	20081121	LSGT	+	granted / extensions (spc, cpc, pte)	
IN222298 B	20211019	PEXP		Calculated Patent Term Expiry	
KR20020010133 A	20020202	LSPB	+	published / reissued	
KR20020010133 A	20050421	LSDW	-WITN	WITHDRAWAL DUE TO NO REQUEST FOR EXAMINATION	
MXPA01010192 A1	20040910	LSPB	+	published / reissued	
NO20015139 A	20011022	LSPB	+	published / reissued	
NO20015139 A	20051128	LSRV	-FC2A	WITHDRAWAL, REJECTION OR DISMISSAL OF LAID OPEN PATENT APPLICATION	
PL350248 A1	20021202	LSPB	+	published / reissued	
PL350248 A1	20090731	LSRV	-REFS	DECISIONS ON REFUSAL TO GRANT PATENTS (TAKEN AFTER THE PUBLICATION OF THE	

					PARTICULARS OF THE APPLICATIONS)
TR200102511 T2	20020422	LSPB	+		published / reissued
TR200102511 T2	20020422	LSPB	+		published / reissued
US2001025854 AA	20011004	LSPB	+		published / reissued
US2001025854 AA	20040601	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MAUSER BENELUX B.V., NETHERLANDS OLDPARTY : CHANGE OF NAME; ASSIGNOR:WIVA VERPAKKINGEN; REEL/FRAME:015385/0662 EFFECTIVE DATE : 20031125
US2001025854 AA	20050110	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MAUSER BENELUX B.V., NETHERLANDS OLDPARTY : RE-RECORD TO CORRECT THE NAME OF THE ASSIGNOR, PREVIOUSLY RECORDED ON REEL 015385 FRAME 0662.; ASSIGNOR:VERPAKKINGEN, WIVA; REEL/FRAME:016174/0905 EFFECTIVE DATE : 20031125
US2001025854 AA	20051011	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MAUSER-WERKE GMBH & CO. KG, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:MAUSER BENELUX B.V.; REEL/FRAME:016632/0292 EFFECTIVE DATE : 20051007
US2001025854 AA	20060426	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US6971540 BA	20051206	LSGT	+		granted / extensions (spc, cpc, pte)
US6971540 BA	20001117	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WIVA VERPAKKINGEN B.V., NETHERLANDS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:PRZYTULLA, DIETMAR; MEULEMAN, WILHELM PETER; REEL/FRAME:011307/0202; SIGNING DATES FROM 20000428 TO 20000509
US6971540 BA	20040601	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MAUSER BENELUX B.V., NETHERLANDS OLDPARTY : CHANGE OF NAME; ASSIGNOR:WIVA VERPAKKINGEN; REEL/FRAME:015385/0662 EFFECTIVE DATE : 20031125
US6971540 BA	20050110	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MAUSER BENELUX B.V., NETHERLANDS OLDPARTY : RE-RECORD TO CORRECT THE NAME OF THE ASSIGNOR, PREVIOUSLY RECORDED ON REEL 015385 FRAME 0662.; ASSIGNOR:VERPAKKINGEN, WIVA; REEL/FRAME:016174/0905 EFFECTIVE DATE : 20031125
US6971540 BA	20051011	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MAUSER-WERKE GMBH & CO. KG, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:MAUSER BENELUX B.V.; REEL/FRAME:016632/0292 EFFECTIVE DATE : 20051007
US6971540 BA	20051116	LSGT	PAT1	Patented Case	
US6971540 BA	20051116	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US6971540 BA	20090528	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6971540 BA	20090814	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MAUSER-WERKE GMBH, GERMANY

					OLDPARTY : CHANGE OF NAME; ASSIGNOR:MAUSER WERKE GMBH & CO KG; REEL/FRAME:023094/0473 EFFECTIVE DATE : 20060904
US6971540 BA	20130521	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US6971540 BA	20170524	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US6971540 BA	20200315	PEXP		Calculated Patent Term Expiry	
US7044325 BB	20060516	LSGT	+	granted / extensions (spc, cpc, pte)	
US7044325 BB	20010531	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WIVA VERPAKKINGEN B.V., NETHERLANDS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:PRZYTULLA, DIETMAR; MEULEMAN, WILHELM P.; REEL/FRAME:011881/0833; SIGNING DATES FROM 20010511 TO 20010518
US7044325 BB	20060426	LSGT	PAT1	Patented Case	
US7044325 BB	20090814	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MAUSER-WERKE GMBH, GERMANY OLDPARTY : CHANGE OF NAME; ASSIGNOR:MAUSER WERKE GMBH & CO KG; REEL/FRAME:023094/0473 EFFECTIVE DATE : 20060904
US7044325 BB	20091029	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US7044325 BB	20131026	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US7044325 BB	20171023	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US7044325 BB	20210531	PEXP		Calculated Patent Term Expiry	
WO0064756 A1	20001102	LSPB	+	published / reissued	
WO0064756 A1	20010531	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 09867581 COUNTRY OF REF DOCUMENT : US
WO0064756 A1	20010828	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2001/02511 COUNTRY OF REF DOCUMENT : TR
WO0064756 A1	20010914	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2000927020 COUNTRY OF REF DOCUMENT : EP
WO0064756 A1	20011009	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : PA/A/2001/010192 COUNTRY OF REF DOCUMENT : MX
WO0064756 A1	20011017	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : PV2001- 3745 COUNTRY OF REF DOCUMENT : CZ
WO0064756 A1	20011019	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : IN/PCT/2001/1450/CHE COUNTRY OF REF DOCUMENT : IN
WO0064756 A1	20011019	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1020017013381 COUNTRY OF REF DOCUMENT : KR
WO0064756 A1	20011022	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2371202 COUNTRY OF REF DOCUMENT : CA
WO0064756 A1	20011022	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2000 613720 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO0064756 A1	20011022	LSNP	ENP	ENTRY INTO THE	REF DOCUMENT NUMBER : 2371202

				NATIONAL PHASE IN:	COUNTRY OF REF DOCUMENT : CA KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO0064756 A1	20011121	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 45547/00 COUNTRY OF REF DOCUMENT : AU
WO0064756 A1	20020116	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2000927020 COUNTRY OF REF DOCUMENT : EP
WO0064756 A1	20020202	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1020017013381 COUNTRY OF REF DOCUMENT : KR
WO0064756 A1	20020814	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : PV2001- 3745 COUNTRY OF REF DOCUMENT : CZ
WO0064756 A1	20030220	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 10081067 COUNTRY OF REF DOCUMENT : DE
WO0064756 A1	20030730	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2000927020 COUNTRY OF REF DOCUMENT : EP
WO0064756 A1	20040212	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 45547/00 COUNTRY OF REF DOCUMENT : AU
WO0064756 A1	20050316	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : PV2001- 3745 COUNTRY OF REF DOCUMENT : CZ
WO0064756 A1	20050421	LSWD	-WWW	WIPO INFORMATION: WITHDRAWN IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1020017013381 COUNTRY OF REF DOCUMENT : KR

Title: MULTIFUNCTIONAL CONTAINER FRAME FOR ANY KIND OF RECEPTACLE WITH MECHANICAL LIDS AND ANCHORING BASIS

Abstract: Multifunctional container frame for any type of containers with mechanical lids and anchoring basis; the object of the invention is to create a concept of package offering multiple applications and practical solutions in use through adapting lids for dosification or pouring of liquid or solid products to packages which lack of these facilities in order to avoid breaking them or racking the products. The device is characterized by a structure which conforms a frame, said structure having vertical rods (1) joining other horizontal rods (1i) and (1S), the rods (1) being provided with hinges at their central intersections, anchoring basis (8) which hold the package (5) by means of tongues (6) through flanges (7i), said basis being anchored through channels (9) which are crimped to the rods (1i) and (1S); the lid (10) is anchored to the base (8A) by means of a main frame (11).

Classifications:

International (IPC 8-9): B65D43/12 B65D43/16 B65D43/18 B65D6/08 B65D6/28 B65D61/00 B65D77/06 B65D77/30

B67D3/00 (Advanced/Invention);

B65D77/06 (Advanced/Non-Invention);

B65D43/14 B65D6/00 B65D61/00 B65D77/06 B65D77/22

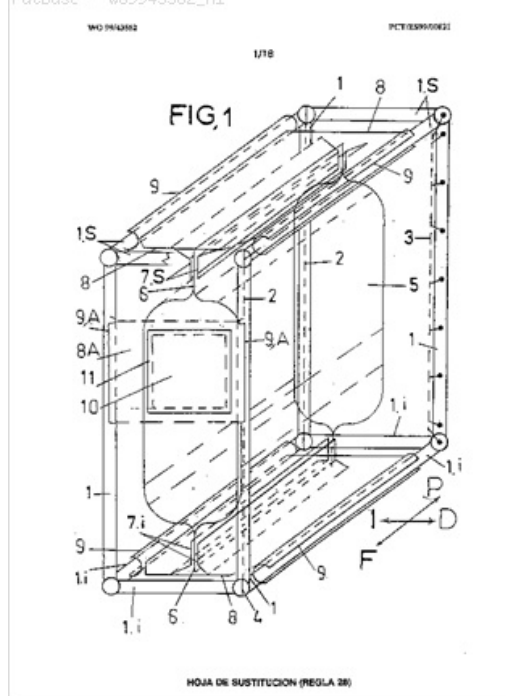
B67D3/00 (Core/Invention)

International (IPC 1-7): A45D2/14 B65D43/12 B65D43/16 B65D43/18 B65D6/08 B65D6/28 B65D77/06

CPC: B65D61/00 B65D77/30 B67D3/0019 B67D3/0029

European: B65D61/00 B65D77/30 B67D3/00E B67D3/00H

PatBase - WO9943562_A1



Family:

Publication number	Publication date	Application number	Application date
AU199919692 A1	19990915	AU19990019692	19990125
BRPI9909251 A	20001128	BR1999PI09251	19990125
CA2321872 AA	20000824	CA19992321872	19990125
CN1294560 A	20010509	CN1998004409	19990125
EP1074476 A1	20010207	EP19990900470	19990125
ES2154537 AA	20010401	ES19980000450	19980225
ES2154537 BA	20011201	ES19980000450	19980225
JP2002504463 T2	20020212	JP20000533330T	19990125
MXPA00008440 A1	20020424	MX2000PA08440	19990125
RU2000124324 A	20021110	RU20000124324	19990125
WO9943562 A1	19990902	WO1999ES00021	19990125

Priority:

ES19980000450 19980225 WO1999ES00021 19990125

Probable Assignee: BURGOS AGUDO LUIS

Assignee(s): (std): BURGOS AGUDO LUIS ; LUIS BURGOS AGUDO

Inventor(s): (std): BURGOS AGUDO LUIS ; LUIS BURGOS AGUDO ; AGUDO LUIS BURGOS

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

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 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
AU199919692 A1	19990915	LSPB	+	published / reissued	
AU199919692 A1	20030710	LSLE	-MK5	APPLICATION LAPSED SECTION 142(2)(E) - PATENT REQUEST AND COMPL. SPECIFICATION	

NOT ACCEPTED					
BRPI9909251 A	20001128	LSPB	+	published / reissued	
BRPI9909251 A	20060905	LSFE	-B08F	APPLICATION FEES: DISMISSAL - ARTICLE 86 OF INDUSTRIAL PROPERTY LAW	TEXT : REFERENTE A 5A , 6A E 7A ANUIDADES.
BRPI9909251 A	20111206	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 1861 DE 05/09/2006.
CA2321872 AA	20000824	LSPB	+	published / reissued	
CA2321872 AA	20020326	LSSES	+EEER	EXAMINATION REQUEST	
CA2321872 AA	20040126	LSLE	-FZDE	DEAD	
CN1294560 A	20010509	LSPB	+	published / reissued	
CN1294560 A	20010509	LSPB	BB1A	PUBLICATION OF APPLICATION	
CN1294560 A	20010509	LSPB	+C06	PUBLICATION	
CN1294560 A	20030820	LSDW	-C02	DEEMED WITHDRAWAL OF PATENT APPLICATION AFTER PUBLICATION (PATENT LAW 2001)	
EP1074476 A1	20010207	LSPB	+	published / reissued	
EP1074476 A1	20021127	LSSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20020922
EP1074476 A1	20030326	LSSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20030211
EP1074476 A1	20040107	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20030624
ES2154537 AA	20010401	LSPB	+	published / reissued	
ES2154537 AA	20010401	LSSES	+EC2A	SEARCH REPORT PUBLISHED	DATE OF REF DOCUMENT : 20010401 KIND CODE OF REF DOCUMENT : A1 DESIGNATED STATE(S) : EFFECTIVE DATE : 20010401
ES2154537 BA	20011201	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2154537 BA	20090615	LSLE	-FD1A	PATENT LAPSED	EFFECTIVE DATE : 20090602
ES2154537 BA	20090716	LSRE	NE2A	REQUEST FOR RESTORATION	EFFECTIVE DATE : 20090617
ES2154537 BA	20090903	LSRE	NF1A	RESTORATION GRANTED	EFFECTIVE DATE : 20090617
ES2154537 BA	20110617	LSAS	+PC2A	TRANSFER OF PATENT	PARTYTYPE : OWNER OWNER : DA OKSANA KYFYUK EFFECTIVE DATE : 20110607
ES2154537 BA	20180225	PEXP		Calculated Patent Term Expiry	
JP2002504463 T2	20040728	LSSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20040727
JP2002504463 T2	20041222	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20041221
MXPA00008440 A1	20020424	LSPB	+	published / reissued	
RU2000124324 A	20021110	LSPB	+	published / reissued	
WO9943562 A1	19990902	LSPB	+	published / reissued	
WO9943562 A1	19990125	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 99804409.1

					COUNTRY OF REF DOCUMENT : CN
WO9943562 A1	20000824	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2321872 COUNTRY OF REF DOCUMENT : CA
WO9943562 A1	20000824	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2321872 COUNTRY OF REF DOCUMENT : CA KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO9943562 A1	20000825	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : KR
WO9943562 A1	20000825	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : PA/A/2000/008440 COUNTRY OF REF DOCUMENT : MX
WO9943562 A1	20000908	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 09622876 COUNTRY OF REF DOCUMENT : US
WO9943562 A1	20000911	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 19692/99 COUNTRY OF REF DOCUMENT : AU
WO9943562 A1	20000922	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1999900470 COUNTRY OF REF DOCUMENT : EP
WO9943562 A1	20001228	LSWD	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : 8642
WO9943562 A1	20010207	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1999900470 COUNTRY OF REF DOCUMENT : EP
WO9943562 A1	20030624	LSWD	-WWW	WIPO INFORMATION: WITHDRAWN IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1999900470 COUNTRY OF REF DOCUMENT : EP

Title: CONTAINER

Abstract: A blow molded container has a neck portion defining a mouth. The neck portion leads into a shoulder portion and a bottom portion forms a container base. A sidewall portion connects the shoulder portion and the bottom portion and employs a first pair of opposing convex vacuum panels and a second pair of opposing convex vacuum panels. The first pair of opposing convex vacuum panels is larger in surface area than the second pair of opposing convex vacuum panels. A vertical column at each corner of the container joins the first pair of opposing vacuum panels to the second pair of opposing vacuum panels. A structural convex arch resides above and below each convex vacuum panel. Vacuum initiator grooves may be molded into the first and second pair of opposing vacuum panels to control vacuum panel movement.

Classifications:

International (IPC 8-9): B65D1/02 B65D1/40 B65D1/42

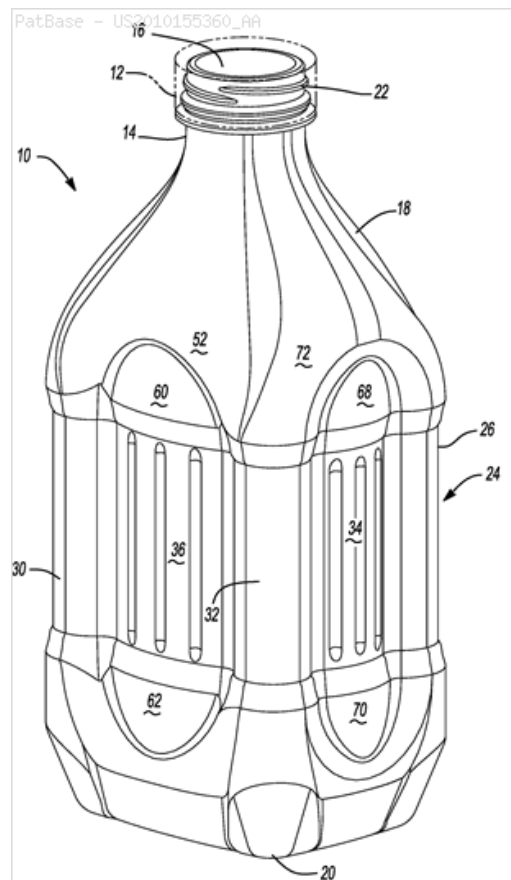
B65D23/10 (Advanced/Invention);

B65D1/02 B65D1/40 B65D23/10 (Core/Invention)

CPC: B65D1/0223 B65D1/44 B65D79/005

European: B65D1/02D B65D1/44 B65D79/00B

US: 215/381 215/382 215/382S 215/383 215/384 220/675



Family:

Publication number	Publication date	Application number	Application date
BRPI0923564 A2	20160126	BR2009PI23564	20091221
CA2747804 AA	20100701	CA20092747804	20091221
CA2747804 C	20121218	CA20092747804	20091221
CL2011001542 A1	20110930	CL20110001542	20110621
CL52046 B	20160225	CL20110001542	20110621
CL52046 B	20160219	CL20110001542	20110621
CO6331456 A2	20111020	CO20110077767	20110621
JP2012513348 T2	20120614	JP20110542534T	20091221
JP5738771 B2	20150624	JP20110542534T	20091221
MX2011006784 A1	20110803	MX20110006784	20091221
PE05972012 A1	20120523	PE20110001261	20091221
US2010155360 AA	20100624	US20080341372	20081222
US8113369 BB	20120214	US20080341372	20081222
WO10075252 A2	20100701	WO2009US68929	20091221
WO10075252 A3	20101007	WO2009US68929	20091221

Priority:

US20080341372 20081222 WO2009US68929 20091221

Probable Assignee: AMCOR GROUP GMBH

Assignee(s): (std): AMCOR LTD ; MAST LUKE A ; DOWNING DAVID ; BEUERLE FREDERICK C ; STRASSER WALTER J

Assignee(s): AMCOR RIGID PLASTICS USA LLC ; AMCOR GROUP GMBH ; AMCOR LIMITED

Inventor(s): (std): MAST LUKE A ; DOWNING DAVID ; BEUERLE FREDERICK C ; STRASSER WALTER J

Inventor(s): MAST LUKE A STRASSER WALTER J DOWNING DAVID BEUERLE FREDERICK C ; DAVID DOWNING ; FREDERICK C BEUERLE ; LUKE A MAST ; WALTER J STRASSER

Agent(s): MACRAE AND CO; CLARKE MODET; JOHANSSON AND LANGLOIS LTDA; SILVANA MARIA LOPEZ DIAZ;

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG 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
BRPI0923564 A2	20180417	LSAS	B25A	REQUESTED TRANSFER OF RIGHTS APPROVED	PARTYTYPE : OWNER OWNER : AMCOR GROUP GMBH (CH)
CA2747804 AA	20100701	LSPB	+	published / reissued	
CA2747804 AA	20120309	LSES	+EEER	EXAMINATION REQUEST	
CA2747804 C	20121218	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2747804 C	20291221	PEXP		Calculated Patent Term Expiry	
CL2011001542 A1	20110930	LSPB	+	published / reissued	
CL52046 B	20160219	LSGT	+	granted / extensions (spc, cpc, pte)	
CL52046 B	20160225	LSGT	+	granted / extensions (spc, cpc, pte)	
CL52046 B	20310621	PEXP		Calculated Patent Term Expiry	
CL52046 B	20310621	PEXP		Calculated Patent Term Expiry	
CO6331456 A2	20111020	LSPB	+	published / reissued	
CO6331456 A2	20130627	LSGT	+FG	APPLICATION GRANTED	
JP2012513348 T2	20121128	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20121127
JP2012513348 T2	20131202	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20131129
JP2012513348 T2	20140326	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20140325
JP2012513348 T2	20140827	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20140826
JP2012513348 T2	20141227	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20141226
JP2012513348 T2	20150123	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A821 EFFECTIVE DATE : 20150106
JP2012513348 T2	20150129	LSAL	A911	TRANSFER OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A911 EFFECTIVE DATE : 20150128
JP2012513348 T2	20150320	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2012513348 T2	20150327	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20150326

JP2012513348 T2	20150430	LSFE	+A61	REGISTRATION (UTILITY MODEL) FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20150422
JP2012513348 T2	20150501	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 5738771 COUNTRY OF REF DOCUMENT : JP
JP5738771 B2	20150624	LSGT	+	granted / extensions (spc, cpc, pte)	
JP5738771 B2	20150402	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP5738771 B2	20150428	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP5738771 B2	20150501	LSGT	+R150	特許証 (Patent certificate)	
JP5738771 B2	20170913	LSAS	S111	REQUEST FOR CHANGE OF OWNERSHIP OR PART OF OWNERSHIP	TEXT : JAPANESE INTERMEDIATE CODE: R313113
JP5738771 B2	20171101	LSAS	S111	REQUEST FOR CHANGE OF OWNERSHIP OR PART OF OWNERSHIP	TEXT : JAPANESE INTERMEDIATE CODE: R313113
JP5738771 B2	20171110	LSAS	R350	WRITTEN NOTIFICATION OF REGISTRATION OF TRANSFER	TEXT : JAPANESE INTERMEDIATE CODE: R350
JP5738771 B2	20180426	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5738771 B2	20180508	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5738771 B2	20181227	LSAS	S111	REQUEST FOR CHANGE OF OWNERSHIP OR PART OF OWNERSHIP	TEXT : JAPANESE INTERMEDIATE CODE: R313113
JP5738771 B2	20190110	LSAS	R350	WRITTEN NOTIFICATION OF REGISTRATION OF TRANSFER	TEXT : JAPANESE INTERMEDIATE CODE: R350
JP5738771 B2	20190425	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5738771 B2	20190514	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5738771 B2	20291221	PEXP		Calculated Patent Term Expiry	
MX2011006784 A1	20110803	LSPB	+	published / reissued	
MX2011006784 A1	20140502	LSGT	+FG	GRANT OR REGISTRATION	
PE05972012 A1	20120523	LSPB	+	published / reissued	
PE05972012 A1	20160229	LSGT	+FG	GRANT, REGISTRATION	
US2010155360 AA	20100624	LSPB	+	published / reissued	
US2010155360 AA	20120125	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US8113369 BB	20120214	LSGT	+	granted / extensions (spc, cpc, pte)	
US8113369 BB	20090206	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMCOR LIMITED,AUSTRALIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:MAST, LUKE A.; STRASSER, WALTER J.; DOWNING,

					DAVID; AND OTHERS; REEL/FRAME:022217/0331 EFFECTIVE DATE : 20090128
US8113369 BB	20090206	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMCOR LIMITED, AUSTRALIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:MAST, LUKE A.; STRASSER, WALTER J.; DOWNING, DAVID; AND OTHERS; REEL/FRAME:022217/0331 EFFECTIVE DATE : 20090128
US8113369 BB	20120125	LSGT	PAT1	Patented Case	
US8113369 BB	20120410	LSRE	CC	CERTIFICATE OF CORRECTION	
US8113369 BB	20150811	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8113369 BB	20170818	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMCOR GROUP GMBH, SWITZERLAND OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:AMCOR LIMITED; REEL/FRAME:043595/0444 EFFECTIVE DATE : 20170701
US8113369 BB	20181011	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMCOR RIGID PLASTICS USA, LLC, DELAWARE OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:AMCOR GROUP GMBH; REEL/FRAME:047215/0173 EFFECTIVE DATE : 20180621
US8113369 BB	20300508	PEXP		Calculated Patent Term Expiry (PTA 502 days)	
WO10075252 A2	20100701	LSPB	+	published / reissued	
WO10075252 A3	20110620	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2747804 COUNTRY OF REF DOCUMENT : CA
WO10075252 A3	20110621	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2011542534 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO10075252 A3	20110621	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 11077767 COUNTRY OF REF DOCUMENT : CO
WO10075252 A3	20110622	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO10075252 A3	20110622	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 001261- 2011 COUNTRY OF REF DOCUMENT : PE
WO10075252 A3	20110622	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : MX/A/2011/006784 COUNTRY OF REF DOCUMENT : MX
WO10075252 A3	20120118	LSNE	-122	EP: PCT APPLICATION NON- ENTRY IN EUROPEAN PHASE	REF DOCUMENT NUMBER : 09835687 COUNTRY OF REF DOCUMENT : EP KIND CODE OF REF DOCUMENT : A2 DESIGNATED STATE(S) :
WO10075252 A3	20160126	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : P10923564 COUNTRY OF REF DOCUMENT : BR KIND CODE OF REF DOCUMENT : A2 DESIGNATED STATE(S) : EFFECTIVE DATE : 20110622

Title: **PLASTIC CONTAINER** HAVING VACUUM PANELS

Abstract: A container structure for a hot fill liquid may employ an upper portion defining a mouth, a shoulder portion integrally formed with and extending downward from the upper portion, a bottom portion defining a base, and a body and sidewall extending between and joining the shoulder and bottom portions. The sidewall may employ a pair of opposing columns oriented diagonally relative to the base and concave inward relative to a container central vertical axis before the container is filled. The columns become concave inward to a lesser extent when the bottle is under an interior vacuum. The sidewall may also employ a pair of opposing, compound angle vacuum panels oriented diagonally relative to the base. A vacuum initiator groove is formed in each of the vacuum panels to initiate panel movement during liquid content cooling. The vacuum initiator groove is generally coincident with a vacuum panel longitudinal centerline.

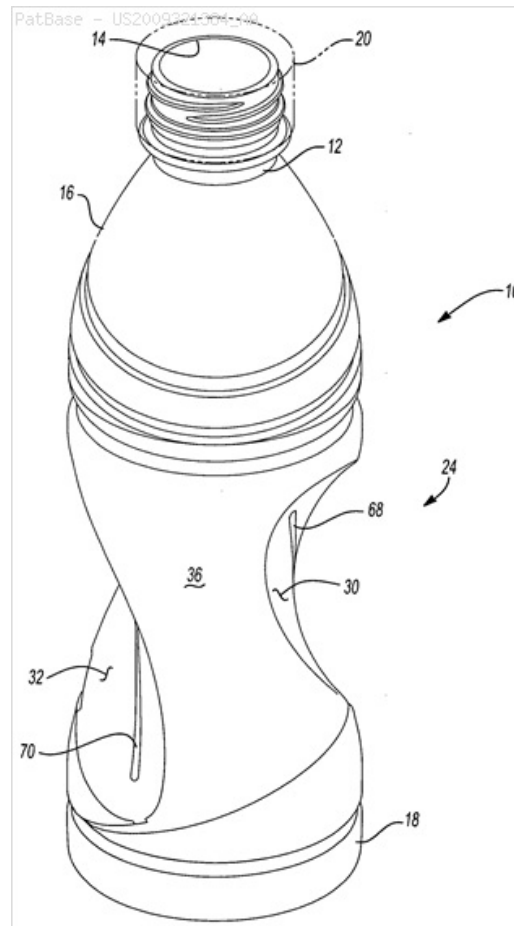
Classifications:

International (IPC 8-9): B65D1/02 B65D1/40 B65D21/08 B65D23/10
B65D6/00 B65D8/04 B65D8/12 B65D8/18 (Advanced/Invention);
B65D1/02 B65D1/40 B65D21/00 B65D23/10 B65D8/04 (Core/Invention)

CPC: B65D1/0223 B65D1/40 B65D79/005

European: B65D1/02D B65D1/40 B65D79/00B

US: 215/381 215/382 215/383 215/384 220/669 220/675



Family:

Publication number	Publication date	Application number	Application date
BRPI0913894 A2	20161101	BR2009PI13894	20090622
CA2728302 AA	20091230	CA20092728302	20090622
CO6290733 A2	20110620	CO20100158288	20101216
DOP2010000383 A	20110215	DO20100000383	20101209
ECSP11010783 A	20110228	EC2011SP10783	20110125
MX2010013805 A1	20110223	MX20100013805	20090622
PE00352011 A1	20110131	PE20100001172	20090622
US2009321384 AA	20091231	US20080215205	20080625
US8113370 BB	20120214	US20080215205	20080625
WO09158307 A2	20091230	WO2009US48127	20090622
WO09158307 A3	20100304	WO2009US48127	20090622

Priority:

US20080215205 20080625 WO2009US48127 20090622 CO20100158288 20101216

Probable Assignee: AMCOR GROUP GMBH

Assignee(s): (std): AMCOR LTD ; SANCHO JUAN ; JOSHI ROHIT V ; STEIH RICHARD J ; WILCOX ANNA ; ZHANG LIYE

Assignee(s): AMCOR RIGID PLASTICS USA LLC ; AMCOR GROUP GMBH ; AMCOR LIMITED

Inventor(s): (std): STEIH RICHARD ; JOSHI ROSHIT V ; JOSHI ROHIT ; ZAHNG LIYE ; WILCOX ANNA ; STEIH RICHARD J ; ZHANG LIYE ; JOSHI ROHIT V ; SANCHO JUAN

Inventor(s): ROHIT V JOSHI ; RICHARD J STEIH ; ANNA WILCOX ; LIYE ZHANG ; JUAN SANCHO ; LIYE ZAHNG

Agent(s): MACRAE AND CO; SILVANA MARIA LOPEZ DIAZ; HARNESS DICKEY AND PIERCE PLC; ERJAVAC STANLEY M 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 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)

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Patent	Date recorded	Event group	Code	Event	Details
BRPI0913894 A2	20180417	LSAS	B25A	REQUESTED TRANSFER OF RIGHTS APPROVED	PARTYTYPE : OWNER OWNER : AMCOR GROUP GMBH (CH)
BRPI0913894 A2	20180515	LSES	B07A	TECHNICAL EXAMINATION (OPINION): PUBLICATION OF TECHNICAL EXAMINATION (OPINION)	
CA2728302 AA	20091230	LSPB	+	published / reissued	
CA2728302 AA	20140820	LSLE	-FZDE	DEAD	EFFECTIVE DATE : 20140625
CO6290733 A2	20110620	LSPB	+	published / reissued	
CO6290733 A2	20130620	LSGT	+FG	APPLICATION GRANTED	
DOP2010000383 A	20110215	LSPB	+	published / reissued	
ECSP11010783 A	20110228	LSPB	+	published / reissued	
MX2010013805 A1	20110223	LSPB	+	published / reissued	
MX2010013805 A1	20140728	LSGT	+FG	GRANT OR REGISTRATION	
PE00352011 A1	20110131	LSPB	+	published / reissued	
PE00352011 A1	20141211	LSGT	+FG	GRANT, REGISTRATION	
US2009321384 AA	20091231	LSPB	+	published / reissued	
US2009321384 AA	20120125	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US8113370 BB	20120214	LSGT	+	granted / extensions (spc, cpc, pte)	
US8113370 BB	20080926	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMCOR LIMITED, AUSTRALIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ZHANG, LIYE; WILCOX, ANNA; JOSHI, ROHIT V.; AND OTHERS; REEL/FRAME:021593/0623; SIGNING DATES FROM 20080730 TO 20080908
US8113370 BB	20080926	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMCOR LIMITED, AUSTRALIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ZHANG, LIYE; WILCOX, ANNA; JOSHI, ROHIT V.; AND OTHERS; SIGNING DATES FROM 20080730 TO 20080908; REEL/FRAME:021593/0623
US8113370 BB	20120125	LSGT	PAT1	Patented Case	
US8113370 BB	20150811	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8113370 BB	20170818	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMCOR GROUP GMBH, SWITZERLAND OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:AMCOR LIMITED; REEL/FRAME:043595/0444 EFFECTIVE DATE : 20170701

US8113370 BB	20181011	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMCOR RIGID PLASTICS USA, LLC, DELAWARE OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:AMCOR GROUP GMBH; REEL/FRAME:047215/0173 EFFECTIVE DATE : 20180621	
US8113370 BB	20290414	PEXP		Calculated Patent Term Expiry (PTA 293 days)		
WO09158307 A2	20091230	LSPB	+	published / reissued		
WO09158307 A3	20101214	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : MX/A/2010/013805 COUNTRY OF REF DOCUMENT : MX	
WO09158307 A3	20101216	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2728302 COUNTRY OF REF DOCUMENT : CA	
WO09158307 A3	20101216	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 10158288 COUNTRY OF REF DOCUMENT : CO	
WO09158307 A3	20101220	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 001172-2010 COUNTRY OF REF DOCUMENT : PE	
WO09158307 A3	20101228	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE	
WO09158307 A3	20110720	LSNE	-122	EP: PCT APPLICATION NON-ENTRY IN EUROPEAN PHASE	REF DOCUMENT NUMBER : 09770841 COUNTRY OF REF DOCUMENT : EP KIND CODE OF REF DOCUMENT : A2 DESIGNATED STATE(S) :	
WO09158307 A3	20161101	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : PI0913894 COUNTRY OF REF DOCUMENT : BR KIND CODE OF REF DOCUMENT : A2 DESIGNATED STATE(S) : EFFECTIVE DATE : 20101227	

Title: Liquid applicator with frangible ampoule and support

Abstract: A liquid applicator is provided which is particularly useful in applying preoperative surgical scrubs or paints to skin. The liquid is contained in a frangible ampoule inside the body of the applicator. This ampoule is supported and protected by a deformable element that prevents unintentional breakage of the ampoule from impacts during storage and handling before use. The applicator is actuated by pushing at least a portion of the frangible ampoule through an aperture in the deformable element and into contact with a means for breaking the ampoule.

Classifications:

International (IPC 8-9): A61F13/40 A61M35/00

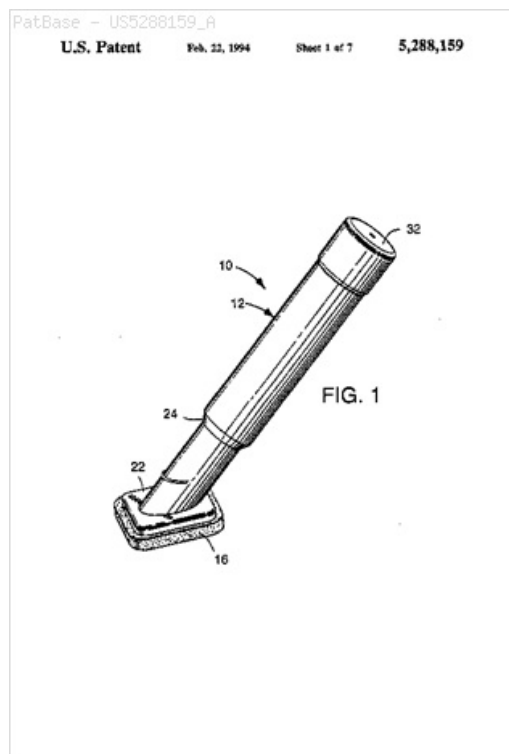
B65D83/00 (Advanced/Invention)

International (IPC 1-7): A45D34/03 A47L13/17 A61M35/00 B65D83/00

CPC: A61M35/006

European: A61M35/00B2

US: 206/532 222/541.6 401/132 401/133 401/135 401/205 604/3



Family:

Publication number	Publication date	Application number	Application date
CA2110419 AA	19940605	CA19932110419	19931201
CA2110419 C	20060711	CA19932110419	19931201
DE69308489 D1	19970410	DE19936008489	19931203
DE69308489 T2	19971009	DE19936008489T	19931203
DK0600508 T3	19970915	DK19930119531T	19931203
EP0600508 A1	19940608	EP19930119531	19931203
EP0600508 B1	19970305	EP19930119531	19931203
ES2098638 T3	19970501	ES19930119531T	19931203
JP3532600 B2	20040531	JP19930339207	19931206
JP6277297 A2	19941004	JP19930339207	19931206
US5288159 A	19940222	US19920985306	19921204
US5435660 A	19950725	US19930169321	19931217
US5658084 A	19970819	US19950445657	19950522

Priority:

US19920985306 19921204 CA19932110419 19931201 US19930169321 19931217
US19950445657 19950522

Probable Assignee: 3M CO

Assignee(s): (std): MINNESOTA MINING AND MFG ; 3M CO

Assignee(s): MINNESOTA MINING AND MANUFACTURING COMPANY ; MINNESOTA MINING AND MFG CO ; MINNESOTA MINING AND MFG CO It 3M gt ; MINNESOTA MINING AND MFG CO SAINT PAUL MINN US ; WIRT DAVID F

Inventor(s): (std): DEBITSUDO FUARADEI UIAATO ; WIRT DAVID F

Agent(s): SMART AND BIGGAR

Designated states: CH DE DK ES FR GB IT LI SE

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
CA2110419 AA	19940605	LSPB	+	published / reissued	

CA2110419 AA	20000815	LSES	+EEER	EXAMINATION REQUEST	
CA2110419 C	20060711	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2110419 C	20130115	LSLE	-MKLA	LAPSED	EFFECTIVE DATE : 20121203
CA2110419 C	20131201	PEXP		Calculated Patent Term Expiry	
DE69308489 D1	19980402	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE69308489 D1	20101021	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
DE69308489 T2	19971009	LSGT	+	granted / extensions (spc, cpc, pte)	
DE69308489 T2	20131203	PEXP		Calculated Patent Term Expiry	
DK0600508 T3	19970915	LSGT	+	granted / extensions (spc, cpc, pte)	
DK0600508 T3	20131203	PEXP		Calculated Patent Term Expiry	
EP0600508 A1	19940608	LSPB	+	published / reissued	
EP0600508 A1	19941123	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19940926
EP0600508 A1	19960221	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 19960110
EP0600508 B1	19970305	LSGT	+	granted / extensions (spc, cpc, pte)	
EP0600508 B1	19970314	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP0600508 B1	19970501	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2098638 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP0600508 B1	19970605	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE LAPSED DATE : 19970605
EP0600508 B1	19980225	LSGT	+26N	NO OPPOSITION FILED	
EP0600508 B1	19981127	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 19981127 YEAR OF FEE PAYMENT : 6
EP0600508 B1	19991231	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 19991231
EP0600508 B1	19991231	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LI NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 19991231
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EP0600508 B1	20080131	LSFE	+PGFP	ANNUAL FEE PAID TO	COUNTRY OF REF DOCUMENT

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EP0600508 B1	20100825	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON- PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20091203
EP0600508 B1	20101130	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 : 20100701
EP0600508 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 NON- PAYMENT OF DUE FEES LAPSED DATE : 20091203
EP0600508 B1	20110909	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20110831
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EP0600508 B1	20131129	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 : 20081203
EP0600508 B1	20131203	PEXP		Calculated Patent Term Expiry	
ES2098638 T3	19970501	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2098638 T3	19970501	LSGT	+FG2A	DEFINITIVE PROTECTION	REF DOCUMENT NUMBER : 600508 COUNTRY OF REF DOCUMENT : ES
ES2098638 T3	20131203	PEXP		Calculated Patent Term Expiry	
JP3532600 B2	20040531	LSGT	+	granted / extensions (spc, cpc, pte)	
JP3532600 B2	20070327	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE

						INTERMEDIATE CODE: R250
JP3532600 B2	20080325	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 5	
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JP3532600 B2	20100225	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 6	
JP3532600 B2	20100302	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 7	
JP3532600 B2	20110303	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 7	
JP3532600 B2	20120312	LSLE	-LAPS	CANCELLATION BECAUSE OF NO PAYMENT OF ANNUAL FEES		
JP3532600 B2	20131206	PEXP		Calculated Patent Term Expiry		
JP6277297 A2	20040130	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN		
JP6277297 A2	20040204	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20040203	
JP6277297 A2	20040311	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20040304	
JP6277297 A2	20040312	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150	
US5288159 A	19940222	LSGT	+	granted / extensions (spc, cpc, pte)		
US5288159 A	19921204	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MINNESOTA MINING AND MANUFACTURING COMPANY, MINNESOTA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNOR:WIRT, DAVID E.; REEL/FRAME:006347/0343 EFFECTIVE DATE : 19921204	
US5288159 A	19940209	LSGT	PAT1	Patented Case		
US5288159 A	19940209	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE	
US5288159 A	19970625	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4	
US5288159 A	20010627	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8	
US5288159 A	20050822	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12	
US5288159 A	20121204	PEXP		Calculated Patent Term Expiry		
US5435660 A	19950725	LSGT	+	granted / extensions (spc, cpc, pte)		
US5435660 A	19950721	LSGT	PAT1	Patented Case		
US5435660 A	19950721	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE	
US5435660 A	19970304	LSRE	CC	CERTIFICATE OF CORRECTION		
US5435660 A	19981223	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4	
US5435660 A	20030124	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8	
US5435660 A	20070125	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12	
US5435660 A	20131217	PEXP		Calculated Patent Term Expiry		
US5658084 A	19970819	LSGT	+	granted / extensions (spc,		

cpc, pte)					
US5658084 A	19970714	LSGT	PAT1	Patented Case	
US5658084 A	19970714	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
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US5658084 A	20050222	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5658084 A	20090219	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5658084 A	20150522	PEXP	Calculated Patent Term Expiry		

Title: REUSABLE **PLASTIC CONTAINER** FOR **SHIPPING** OF PRODUCE

Abstract: A collapsible, reusable **plastic container** that can be used for the storage and transportation of produce, having dimensions optimized for such storage and transportation and for folding down of the container. The container may also have a novel footprint for "six-down" stacking. The container may also be designed to provide increased ventilation to its contents during storage and transport. The container may also have a sample door with a clip for easy access to the produce contained in the container when it is stacked among other containers. The container may also have a latch system to secure its endwalls and sidewalls in an erected configuration during storage and transport. The container may also have lead-in in its dimensions to facilitate stacking and de-stacking of containers.

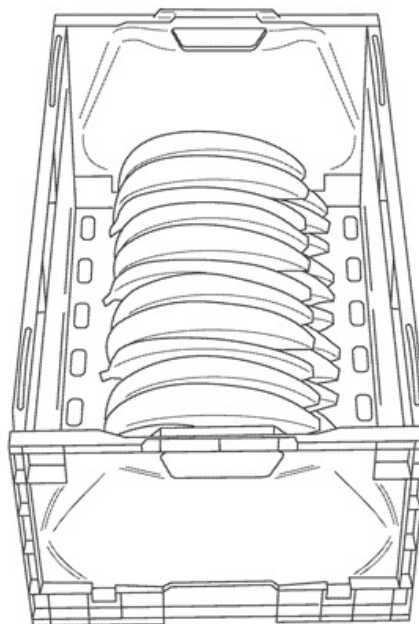
Classifications:

International (IPC 8-9): A01F A01F25/14 B65B B65B25/04 B65D B65D19/06 B65D19/18 B65D19/38 B65D25/00 B65D6/18 B65D85/34 (Advanced/Invention)

CPC: B65D11/1833 B65D2201/00 B65D2205/02 Y02W30/807 B65D25/005 B65D21/0212 B65D85/34 A01F25/14

US: 206/423 426/615

PatBase - US2016039598_AA



Family:

Publication number	Publication date	Application number	Application date
CA2910132 AA	20151022	CA20142910132	20141015
CA2910152 AA	20151022	CA20142910152	20140422
CA2910152 C	20190115	CA20142910152	20140422
CA3024777 AA	20141030	CA20143024777	20140422
CR20150580 A	20160111	CR20150000580	20151020
DOP2015000265 A	20151231	DO20150000265	20151020
EP3113599 A1	20170111	EP20140884538	20141015
EP3113599 A4	20171011	EP20140884538	20141015
GT201500315 A	20160819	GT20150000315	20151023
HK1233131 A1	20180126	HK20170106781	20170706
MX2015014536 A1	20160426	MX20150014536	20141015
PH2015502428 A	20160222	PH20150502428	20151021
US2016039598 AA	20160211	US20150920152	20151022
WO14176292 A1	20141030	WO2014US35055	20140422
WO15134067 A1	20150911	WO2014US60627	20141015

Priority:

US20130814688P 20130422 US20140948289P 20140305 CA20142910152 20140422
 WO2014US35055 20140422 WO2014US60627 20141015 US20150920152 20151022
 CA20182910152 20181126

Probable Assignee: ARENA PACKAGING LLC

Assignee(s): (std): A R ARENA PRODUCTS INC ; AR ARENA PRODUCTS INC ; ARENA PACKAGING LLC

Assignee(s): WILCOX DONALD E ; ARENA CHARLES S

Inventor(s): (std): WILCOX DONALD E ; ARENA CHARLES S

Inventor(s): CHARLES S ARENA ; DONALD E WILCOX

Agent(s): BERESKIN AND PARR LLP SENCRL SRL; VOSSIUS AND PARTNER PATENTANWALTE RECHTSANWALTE MBB; SPRUSON AND FERGUSON HONG KONG LTD; BRUEHS MARTIN A; POWERS JEFFREY B

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 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
CA2910132 AA	20151022	LSPB	+	published / reissued	
CA2910152 AA	20151022	LSPB	+	published / reissued	
CA2910152 AA	20160707	LSSES	+EEER	EXAMINATION REQUEST	EFFECTIVE DATE : 20160628
CA2910152 C	20190115	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2910152 C	20340422	PEXP		Calculated Patent Term Expiry	
CA3024777 AA	20141030	LSPB	+	published / reissued	
CA3024777 AA	20181127	LSSES	+EEER	EXAMINATION REQUEST	EFFECTIVE DATE : 20181120
CR20150580 A	20160111	LSPB	+	published / reissued	
DOP2015000265 A	20151231	LSPB	+	published / reissued	
EP3113599 A1	20170111	LSPB	+	published / reissued	
EP3113599 A1	20170111	LSSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20160930
EP3113599 A4	20171011	LSSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	EFFECTIVE DATE : 20170911
EP3113599 A4	20171011	LSRE	RIC1	INFORMATION PROVIDED ON IPC CODE ASSIGNED BEFORE GRANT	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : B65D 6/18 20060101ALI20170905BHEP
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					ARENA, CHARLES S.; REEL/FRA:036857/0462 EFFECTIVE DATE : 20151021
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Title: ANTAGONIST ANTI-CD40 ANTIBODY PHARMACEUTICAL COMPOSITIONS

Abstract: Stable liquid pharmaceutical compositions comprising an antagonist anti-CD40 antibody as a therapeutically or prophylactically active component and methods useful in their preparation are provided. These compositions comprise the antagonist anti-CD40 antibody, a buffering agent to maintain the pH of the composition between about pH 5.0 and about pH 7.0, and an amount of arginine-HCl sufficient to render the liquid composition near isotonic. The stable liquid antagonist anti-CD40 antibody-containing pharmaceutical compositions of the invention find use in methods for treating proliferative diseases and diseases having an autoimmune and/or inflammatory component.

Classifications:

International (IPC 8-9): A61K A61K35/00 A61K35/02 A61K39/395 A61K47/06 A61K47/12 A61K47/18 A61K47/20 A61K47/34 A61K9/08 A61P1/04 A61P1/16 A61P11/00 A61P11/06 A61P17/00 A61P17/04 A61P17/06 A61P19/02 A61P19/06 A61P21/04 A61P25/00 A61P25/28 A61P29/00 A61P3/10 A61P35/00 A61P35/02 A61P37/00 A61P37/02 A61P37/04 A61P37/06 A61P37/08 A61P43/00 A61P5/14 A61P7/00 A61P7/02 A61P7/06 A61P9/00 A61P9/10 C07K C07K16/18 C07K16/28 C10G3/00 C10L1/02 C10L1/08 C10L1/10 C10L1/12 C10L1/18 C10L1/182 C10L1/22 C10L1/32 C10L10/12 C12P21/08 (Advanced/Invention); C07K16/28 C10G3/00 C10L1/08 C10L1/32 C10L10/12 C12P21/08 (Advanced/Non-invention); A61K35/00 A61K35/02 A61K39/395 A61K47/12 A61K47/16 A61K47/20 A61K47/34 A61K9/08 A61P1/00 A61P11/00 A61P17/00 A61P19/00 A61P21/00 A61P25/00 A61P29/00 A61P3/00 A61P35/00 A61P37/00 A61P5/00 A61P7/00 A61P9/00 C07K16/18 C10G3/00 C10L1/00 C10L1/10 C10L1/32 C10L10/12 (Core/Invention); A61K C10L (Subclass/Invention)

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CPC: C10L1/328 C10L1/1802 C10L1/1811 C10L1/191 C10L1/1985 C10L1/231 C10L10/02 C07K16/2878 C07K2317/24 C07K2317/76 C07K2317/34 C07K2317/94 C07K2317/73 Y02P30/20 C10L10/12

European: C07K16/28R C10L1/32D C10L10/02 M07K316/960 M10L1/18F M10L1/18M M10L1/198F M10L1/19D M10L1/23B Y02E50/13

US: 424/130.1 424/133.1 424/135.1 424/139.1 424/141.1 424/143.1 424/144.1 424/144.100P 424/153.1 424/173.1 44/301 44/301P 530/387.1 530/387.3 530/388.1 530/388.2 530/388.22 530/388.7

PatBase - US2009304706_AA

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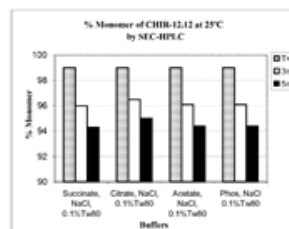


FIGURE 1

Family:

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Priority:

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Inventor(s):	LU ; AUGUSTUS ; BAO LU ; XIAOFENG ; CHEN ; OKHAMAFE ; ARAYA ; KIDISTI ; FESTUCCIA ; ANDREA ; FERDINANDO ; PETRUCCI ; LU XIAOGENG
Agent(s):	FISHER ADAMS KELLY; FISHER ADAMS KELLY PTY LTD; FISHER ADAMS KELLY CALLINANS; SPRUSON AND FERGUSON; PHILLIPS ORMONDE FITZPATRICK; BORDEN LADNER GERVAIS LLP; MOFFAT AND CO; CLARKE; PORZIO; LUZ HELENA VILLAMIL JIMENEZ; MAIWALD PATENTANWALTS GMBH; MARSHALL CAMERON JOHN ET AL; BIRD AND BIRD; ALSTON AND BIRD LLP; LERNER DAVID LITTENBERG KRUMHOLZ AND MENTLIK; HERNRY LESLIE T ET AL
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Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details

AR060487 AA	20080618	LSPB	+	published / reissued	
AR060487 AA	20141203	LSWD	-FA	ABANDONMENT OR WITHDRAWAL	
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JP5290152 B2	20130918	LSGT	+	granted / extensions (spc, cpc, pte)	
JP5290152 B2	20130530	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP5290152 B2	20130611	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP5290152 B2	20130614	LSGT	+R150	特許証 (Patent certificate)	
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KR101317235 B1	20120406	LSSES	A201	REQUEST FOR EXAMINATION	
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KR20090003360 A	20090109	LSPB	+	published / reissued	
KR20090003360 A	20120601	LSDW	-WITN	WITHDRAWAL DUE TO NO REQUEST FOR EXAMINATION	
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MA30470 B1	20281110	PEXP		Calculated Patent Term Expiry	
MA30947 B1	20091201	LSGT	+	granted / extensions (spc, cpc, pte)	
MA30947 B1	20281027	PEXP		Calculated Patent Term Expiry	
ME39508 A	20110210	LSPB	+	published / reissued	
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MX2008013508 A1	20121228	LSGT	+FG	GRANT OR REGISTRATION	
MX2008013727 A1	20090205	LSPB	+	published / reissued	
NO20084796 A	20081121	LSPB	+	published / reissued	
NO20084796 A	20131202	LSRV	-FC2A	WITHDRAWAL, REJECTION OR DISMISSAL OF LAID OPEN PATENT APPLICATION	
NZ571757 A	20120112	LSPB	+	published / reissued	
NZ571757 A	20120525	LSGT	+PSEA	PATENT SEALED	
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NZ571757 A	20171027	LSLE	-LAPS	PATENT LAPSED	
PE00472008 A1	20080214	LSPB	+	published / reissued	
PE00472008 A1	20110929	LSRV	-FC	REFUSAL	

RU2008146727 A	20100610	LSPB	+	published / reissued	
RU2008146727 A	20111027	LSWD	-FA92	ACKNOWLEDGEMENT OF APPLICATION WITHDRAWN (LACK OF SUPPLEMENTARY MATERIALS SUBMITTED)	EFFECTIVE DATE : 20110922
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SM200800064 A	20081126	LSPB	+	published / reissued	
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SM200800064 B	20270417	PEXP		Calculated Patent Term Expiry	
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TH92681 A	20081219	LSPB	+	published / reissued	
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TNSN08421 A1	20100414	LSPB	+	published / reissued	
TW200808349 A	20080216	LSPB	+	published / reissued	
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UA94264 C2	20270417	PEXP		Calculated Patent Term Expiry	
US2009304706 AA	20091210	LSPB	+	published / reissued	
US2010037513 AA	20100218	LSPB	+	published / reissued	
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US2015110783 AA	20150423	LSPB	+	published / reissued	
US2015110783 AA	20160823	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
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US8945564 BB	20091030	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : XOMA TECHNOLOGY LTD., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:NOVARTIS AG; REEL/FRAME:023446/0596 EFFECTIVE DATE : 20070509
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US8945564 BB	20300113	PEXP		Calculated Patent Term Expiry (PTA 1002 days)	
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WO07127059 A2	20070410	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 200780024110.X COUNTRY OF REF DOCUMENT : CN
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ZA200808696 A	20110330	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA200808696 A	20281009	PEXP		Calculated Patent Term Expiry	
ZA200808955 A	20101027	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA200808955 A	20281019	PEXP		Calculated Patent Term Expiry	

Title: TREATMENT OF MODIFIED ATMOSPHERE PACKAGING

Abstract: The invention relates to a device for preserving, sanitizing, ripening, and preventing or suppressing the growth of microbials within a package used for the transport and storage of various items, such as fresh fruits, vegetables, and other perishables and parcels. The device includes an enclosed container and at least one sack operably disposed adjacent the container, wherein the sack encloses an agent and the agent releases gases in the container upon the presence of humidity within the container.

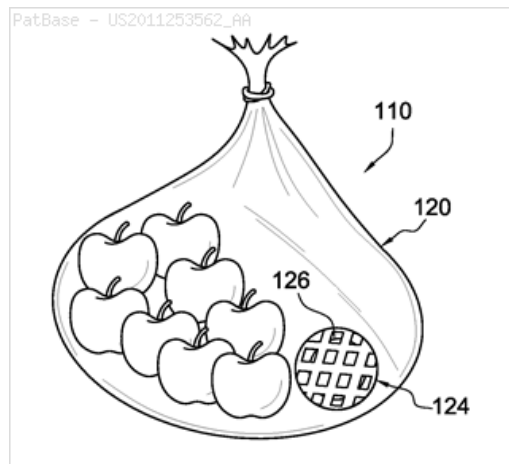
Classifications:

International (IPC 8-9): B65B B65B25/04 B65B31/00 B65B59/00 B65D51/24 B65D81/20 B65D81/24 B65D81/28 (Advanced/Invention)

CPC: B65D81/24 B65B31/00 B65D81/28 B65D5/44 B65D81/268 B65D85/34 B65D81/2076 B65B25/041

European: B65D81/28

US: 206/205 206/213.1 206/213.100P 53/474 53/474S



Family:

Publication number	Publication date	Application number	Application date
CA2801345 AA	20121130	CA20112801345	20110419
CL2012002943 A1	20130719	CL20120002943	20121019
CL2015003287 A1	20160923	CL20150003287	20151109
CL52303 B	20160321	CL20120002943	20121019
DE602011024995 D1	20160519	DE201160024995T	20110419
DK2563674 T3	20160718	DK20110772572T	20110419
EP2563674 A1	20130306	EP20110772572	20110419
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PT2563674 T	20160712	PT20110772572T	20110419
TR201608884 T4	20160721	TR20160008884T	20110419
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US2014116900 AA	20140501	US20130986851	20130612
US2017101248 AA	20170413	US20160389261	20161222
US2018339834 AA	20181129	US20180051181	20180731
US9527648 BB	20161227	US20130986851	20130612
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WO11133575 A1	20111027	WO2011US33088	20110419
ZA201208642 A	20151223	ZA20120008642	20110419

Priority:

US20100325816P 20100419	EP20110772572 20110419	US20110090096 20110419
WO2011US33088 20110419	US20130986851 20130612	US20160389261 20161222
US20180051181 20180731		

Probable Assignee: FRESHTEC INC

Assignee(s): (std): FRESHTEC INC ; IP CORP FA ; MACHADO CRAIG D

Assignee(s): FRESHTEC INC GROVER BEACH

Inventor(s): (std): MACHADO CRAIG D ; CRAIG D MACHADO ; MACHADO CRAIG

Inventor(s): MACHADO CRAIG D GROVER BEACH

Agent(s): RIDOUT AND MAYBEE LLP; COVARRUBIAS AND SILVA; COVARRUBIAS AND SILVA LIMITADA; GILL STEPHEN CHARLES; VALLEJO JUAN PEDRO; ONDA HIRONORI; ONDA MAKOTO; CANAN OEZTUERKER; JONATHAN A; TECHLAW LLP; KIDNEY JONATHAN A; CKR LAW LLP; GROSS GLEN L

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
CA2801345 AA	20121130	LSPB	+	published / reissued	
CA2801345 AA	20160418	LSSES	+EEER	EXAMINATION REQUEST	EFFECTIVE DATE : 20160406
CL2012002943 A1	20130719	LSPB	+	published / reissued	
CL2015003287 A1	20160923	LSPB	+	published / reissued	
CL52303 B	20160321	LSGT	+	granted / extensions (spc, cpc, pte)	
CL52303 B	20321019	PEXP		Calculated Patent Term Expiry	
DE602011024995 D1	20181101	LSDW	-R119	APPLICATION DEEMED WITHDRAWN, OR IP RIGHT LAPSED, DUE TO NON-PAYMENT OF RENEWAL FEE	
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EP2563674 A1	20130306	LSPB	+	published / reissued	
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				NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	PAYMENT DATE : 20160627 YEAR OF FEE PAYMENT : 6
EP2563674 A1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20160728 YEAR OF FEE PAYMENT : 6
EP2563674 A1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20160721 YEAR OF FEE PAYMENT : 6
EP2563674 A1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20160713 YEAR OF FEE PAYMENT : 6
EP2563674 A1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20160620 YEAR OF FEE PAYMENT : 6
EP2563674 A1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20160617 YEAR OF FEE PAYMENT : 6
EP2563674 A1	20161230	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20160706 YEAR OF FEE PAYMENT : 6
EP2563674 A1	20170228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20160624 YEAR OF FEE PAYMENT : 6
EP2563674 A4	20131023	LSSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	EFFECTIVE DATE : 20130924
EP2563674 A4	20131023	LSRE	RIC1	INFORMATION PROVIDED ON IPC CODE ASSIGNED BEFORE GRANT	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : B65B 25/04 20060101ALI20130918BHEP
EP2563674 A4	20131023	LSRE	RIC1	INFORMATION PROVIDED ON IPC CODE ASSIGNED BEFORE GRANT	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : B65B 31/00 20060101ALI20130918BHEP
EP2563674 A4	20131023	LSRE	RIC1	INFORMATION PROVIDED ON IPC CODE ASSIGNED BEFORE GRANT	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : B65D 81/28 20060101AFI20130918BHEP
EP2563674 A4	20150128	LSSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20150105
EP2563674 A4	20151014	LSRE	RIC1	INFORMATION PROVIDED ON IPC CODE ASSIGNED BEFORE GRANT	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : B65B 31/00 20060101ALI20150908BHEP
EP2563674 A4	20151014	LSRE	RIC1	INFORMATION PROVIDED ON IPC CODE ASSIGNED BEFORE GRANT	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : B65D 81/28 20060101ALI20150908BHEP
EP2563674 A4	20151014	LSRE	RIC1	INFORMATION PROVIDED ON IPC CODE ASSIGNED BEFORE GRANT	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : B65D 81/24 20060101AFI20150908BHEP
EP2563674 A4	20151014	LSRE	RIC1	INFORMATION PROVIDED ON IPC CODE ASSIGNED BEFORE GRANT	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : B65B 25/04 20060101ALI20150908BHEP
EP2563674 A4	20151028	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20151001
EP2563674 B1	20160406	LSGT	+	granted /	

					extensions (spc, cpc, pte)
EP2563674 B1	20160406	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP2563674 B1	20160415	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 787546 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20160415
EP2563674 B1	20160415	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP2563674 B1	20160504	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP2563674 B1	20160519	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602011024995 COUNTRY OF REF DOCUMENT : DE
EP2563674 B1	20160606	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 6
EP2563674 B1	20160803	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2578996 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) : EFFECTIVE DATE : 20160803
EP2563674 B1	20160810	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : LT REF LEGAL EVENT CODE : MG4D
EP2563674 B1	20160815	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NO REF LEGAL EVENT CODE : T2 EFFECTIVE DATE : 20160406
EP2563674 B1	20160815	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MK05 REF DOCUMENT NUMBER : 787546 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20160406
EP2563674 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 : 20160406
EP2563674 B1	20161031	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 : 20160806
EP2563674 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 : 20160406
EP2563674 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-

				TO EPO]	LIMIT LAPSED DATE : 20160406
EP2563674 B1	20161130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT NOTIFICATIONOF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME- LIMIT LAPSED DATE : 20160406
EP2563674 B1	20161130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HR NOTIFICATIONOF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME- LIMIT LAPSED DATE : 20160406
EP2563674 B1	20161130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RS NOTIFICATIONOF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME- LIMIT LAPSED DATE : 20160406
EP2563674 B1	20170110	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 602011024995 COUNTRY OF REF DOCUMENT : DE
EP2563674 B1	20170131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE NOTIFICATIONOF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME- LIMIT LAPSED DATE : 20160406
EP2563674 B1	20170131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO NOTIFICATIONOF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME- LIMIT LAPSED DATE : 20160406
EP2563674 B1	20170131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK NOTIFICATIONOF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME- LIMIT LAPSED DATE : 20160406
EP2563674 B1	20170131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONOF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME- LIMIT LAPSED DATE : 20160406
EP2563674 B1	20170202	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : EP REF DOCUMENT NUMBER : 20160401421 COUNTRY OF REF DOCUMENT : GR EFFECTIVE DATE : 20160906
EP2563674 B1	20170228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SM NOTIFICATIONOF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME- LIMIT LAPSED DATE : 20160406
EP2563674 B1	20170315	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20170110

EP2563674 B1	20170425	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 7
EP2563674 B1	20170531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160406
EP2563674 B1	20170630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20170425 YEAR OF FEE PAYMENT : 7
EP2563674 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20170425 YEAR OF FEE PAYMENT : 7
EP2563674 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 : 7
EP2563674 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NO PAYMENT DATE : 20170427 YEAR OF FEE PAYMENT : 7
EP2563674 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170425 YEAR OF FEE PAYMENT : 7
EP2563674 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20170424 YEAR OF FEE PAYMENT : 7
EP2563674 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20170424 YEAR OF FEE PAYMENT : 7
EP2563674 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170426 YEAR OF FEE PAYMENT : 7
EP2563674 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 : 7
EP2563674 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20170425 YEAR OF FEE PAYMENT : 7
EP2563674 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20170428 YEAR OF FEE PAYMENT : 7
EP2563674 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20170509 YEAR OF FEE PAYMENT : 7
EP2563674 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20170509 YEAR OF FEE PAYMENT : 7
EP2563674 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 : 7
EP2563674 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20170428

EP2563674 B1	20170831	LSFE	+PGFP	[ANNOUNCED FROM NATIONAL OFFICE TO EPO] ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	YEAR OF FEE PAYMENT : 7 COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20170424 YEAR OF FEE PAYMENT : 7
EP2563674 B1	20170929	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20170421 YEAR OF FEE PAYMENT : 7
EP2563674 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 : 20110419
EP2563674 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 : 20160406
EP2563674 B1	20180629	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20160419
EP2563674 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 : 20160406
EP2563674 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 : 20160430
EP2563674 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 : 20160406
EP2563674 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 : 20160406
EP2563674 B1	20181101	LSDW	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R119 REF DOCUMENT NUMBER : 602011024995 COUNTRY OF REF DOCUMENT : DE
EP2563674 B1	20181126	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DK REF LEGAL EVENT CODE : EBP EFFECTIVE DATE : 20180430
EP2563674 B1	20181126	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NO REF LEGAL EVENT CODE : MMPE
EP2563674 B1	20181130	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL

EP2563674 B1	20181204	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SE REF LEGAL EVENT CODE : EUG
EP2563674 B1	20181226	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20180419
EP2563674 B1	20190123	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP2563674 B1	20190131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20181106
EP2563674 B1	20190131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20181101
EP2563674 B1	20190131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180420
EP2563674 B1	20190131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180501
EP2563674 B1	20190131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20181019
EP2563674 B1	20190131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NO NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180430
EP2563674 B1	20190131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180419
EP2563674 B1	20190228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180419
EP2563674 B1	20190228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180430
EP2563674 B1	20190228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LI NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180430
EP2563674 B1	20190228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180430

EP2563674 B1	20190430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180419
EP2563674 B1	20190430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180430
EP2563674 B1	20190430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180419
EP2563674 B1	20310419	PEXP		Calculated Patent Term Expiry	
ES2578996 T3	20160803	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2578996 T3	20310419	PEXP		Calculated Patent Term Expiry	
JP2013525215 A2	20161108	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	DESCRIPTION : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20161108
JP2013525215 T2	20140417	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20140416
JP2013525215 T2	20140417	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20140416
JP2013525215 T2	20150304	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20150303
JP2013525215 T2	20150902	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20150902
JP2013525215 T2	20160329	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20160329
JP2013525215 T2	20160928	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20160928
JP2013525215 T2	20161031	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2013525215 T2	20161108	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20161108
JP2013525215 T2	20161215	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20161208
JP2013525215 T2	20161216	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 6059136 COUNTRY OF REF DOCUMENT : JP
JP6059136 B2	20170111	LSGT	+	granted / extensions (spc, cpc, pte)	
JP6059136 B2	20161110	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP6059136 B2	20161213	LSFE	R100	特許料納付書 (Patent fee payment form)	

JP6059136 B2	20161216	LSGT	+R150	特許証 (Patent certificate)	
JP6059136 B2	20310419	PEXP		Calculated Patent Term Expiry	
MX2012012193 A1	20130501	LSPB	+	published / reissued	
MX337416 B	20160303	LSGT	+	granted / extensions (spc, cpc, pte)	
MX337416 B	20160303	LSGT	+FG	GRANT OR REGISTRATION	
MX337416 B	20310419	PEXP		Calculated Patent Term Expiry	
PL2563674 T3	20160930	LSGT	+	granted / extensions (spc, cpc, pte)	
PT2563674 T	20160712	LSGT	+	granted / extensions (spc, cpc, pte)	
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TR201608884 T4	20160721	LSGT	+	granted / extensions (spc, cpc, pte)	
TR201608884 T4	20310419	PEXP		Calculated Patent Term Expiry	
US10035639 BB	20180731	LSGT	+	granted / extensions (spc, cpc, pte)	
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US10035639 BB	20190627	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : FRESHTEC, INC., NEVADA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:MACHADO, CRAIG; REEL/FRAME:049608/0434 EFFECTIVE DATE : 20190626
US10035639 BB	20190627	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : FRESHTEC, INC., NEVADA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:MACHADO, CRAIG; REEL/FRAME:049608/0912 EFFECTIVE DATE : 20190627
US10035639 BB	20361222	PEXP		Calculated Patent Term Expiry	
US2011253562 AA	20111020	LSPB	+	published / reissued	
US2011253562 AA	20120925	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : FRESHTEC, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:MACHADO, CRAIG D.; REEL/FRAME:029022/0991 EFFECTIVE DATE : 20110416
US2011253562 AA	20130710	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2011253562 AA	20130710	LSWD	-STCB	INFORMATION ON STATUS: APPLICATION DISCONTINUATION	TEXT : ABANDONED -- FAILURE TO RESPOND TO AN OFFICE ACTION
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					ASSIGNOR:MACHADO, CRAIG; REEL/FRAME:049608/0912 EFFECTIVE DATE : 20190627
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US2014116900 AA	20161207	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
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US2017101248 AA	20180328	LSES	+ALW2	Allowed -- Notice of Allowance Not Yet Mailed	
US2017101248 AA	20180329	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2017101248 AA	20180630	LSFE	+PPR1	Publications -- Issue Fee Payment Received	
US2017101248 AA	20180705	LSFE	+PPV1	Publications -- Issue Fee Payment Verified	
US2017101248 AA	20180711	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
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					ASSIGNORS INTEREST; ASSIGNORS:FIRMA HOLDINGS CORP.; FIRMA IP CORP.; REEL/FRAME:049559/0096 EFFECTIVE DATE : 20180125
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WO11133575 A1	20121018	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2013506239 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
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WO11133575 A1	20121119	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2011772572 COUNTRY OF REF DOCUMENT : EP
WO11133575 A1	20121130	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2801345 COUNTRY OF REF DOCUMENT : CA
ZA201208642 A	20151223	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA201208642 A	20321115	PEXP		Calculated Patent Term Expiry	

Title: Stable non-aqueous suspension containing organophilic clay and low density filler

Abstract: A non-aqueous liquid heavy duty laundry detergent composition in the form of a suspension of builder salt in liquid nonionic surfactant is stabilized against phase separation by the addition of small amounts of low density filler, such as hollow plastic or glass microspheres. The low density particulate filler is added in an amount to equalize the densities of the continuous liquid phase and the dispersed phase. Further stabilization against phase separation under strong vibration conditions is provided by addition of a small amount of organophilic modified clay, such as a water-swellable smectite clay in which the metal cations are total or partially exchanged with mono- or di-long chain quaternary ammonium compound.

Classifications:

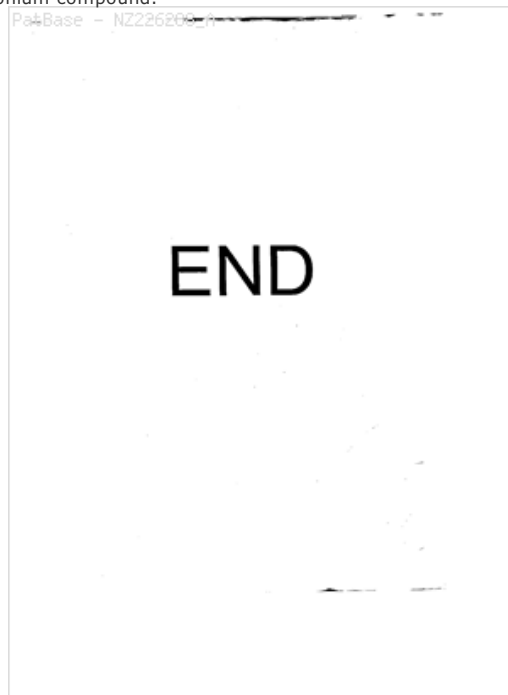
International (IPC 8-9): C11D1/66 C11D17/00 C11D17/08 C11D3/12 C11D3/14 C11D3/36 C11D3/382 D06L1/12 (Advanced/Invention); C11D17/08 (Advanced/Non-invention); C11D17/00 C11D17/08 C11D3/12 C11D3/36 C11D3/38 D06L1/00 (Core/Invention)

International (IPC 1-7): B01F3/12 C11D1/34 C11D1/62 C11D1/66 C11D1/68 C11D1/72 C11D1/722 C11D1/88 C11D1/94 C11D10/02 C11D17/00 C11D17/08 C11D3/00 C11D3/06 C11D3/066 C11D3/08 C11D3/12 C11D3/14 C11D3/20 C11D3/24 C11D3/26 C11D3/36 C11D3/37 C11D3/43 C11D3/60 D06L1/12 D06M11/00 D06M11/06 D06M11/79 D06M13/00

CPC: C11D3/1266 C11D3/362 C11D3/364 C11D3/382 C11D17/0004

European: C11D17/00A C11D3/12G2D3 C11D3/36C C11D3/36D C11D3/382

US: 252/104 252/135 252/139 252/140 252/153 252/154 252/155 252/165 252/171 252/174.16 252/174.21 252/174.25 252/526 252/528 252/545 252/547 252/8.6 252/8.8 252/8.9 252/99 510/304 510/306 510/307 510/321 510/325 510/338 510/371 510/413 510/418 510/466 510/468 510/504 510/507



Family:

Publication number	Publication date	Application number	Application date
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PT88628 B	19930430	PT19880088628	19880929
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Priority:

US19870073551 19870715 US19870102926 19870930 US19870102926 19870930
CA19880571964 19880714 US19890324996 19890317

Probable Assignee: COLGATE PALMOLIVE CO

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Assignee(s): COLGATE PALMOLIVE CO NEW YORK N Y US ; COLGATE PALMOLIVE CO SOCIETA DELLO STATO DEL ; COLGATE PALMOLIVE COMPANY ; COLGATE PALMOLIVE COMPANY SOCIETA DELLO STATO DEL DELAWARE ; COLGATE PALMOLIVE CY ; COLGATE PALMOLIVE COMPANY THE ; MICHEL JULEMONT ; MARIE CHRISTINE HOUBEN ; HOAI CHAU CAO ; COLGATE PALMOLIVE COMPANY TE NEW YORK NEW YORK VER ST V AM ; HOUBEN MARIE CHRISTINE ; JULEMONT MICHEL ; CAO HOAI CHAO

Inventor(s): (std): JULEMONT MICHEL ; HOUBEN MARIE CHRISTINE ; CAO HOAI CAU ; CAO HOAI CHAO ; CHO HOAI CHAU ; CHRISTINE HOUBEN MARIE ; CAO H C ; HOUBEN M C ; JULEMONT M ; MARIE KURISUTEIINU UUBEN ; OAI SHIYOO KAO ; MARIE CHRISTINE HOUBEN ; HOAI CHAU CAO ; HOAI CHAO CAO ; HOAI CAU CAO ; MICHEL JULEMONT ; MITSUSHIERU JIYURUMON ; MARIEEKURISUTEIINU UUBEN ; OAIISHIYOO KAO ; CAO HOAI CHAU ; CHRISTINE HOUBEN MERIE

Inventor(s): HOAI CHAU CHO ; JULEMONT MICHEL HEUSY BE ; CAO HOAI CHAU LIEGE BE ; HOUBEN MARIE CHRISTINE ALLEUR BE ; HOUBEN MERIE CHRISTINE ; M C HOUBEN ; H C CAO ; M JULEMONT

Agent(s): FB RICE; GRIFFITH HACK; FB RICE PTY LTD; SMART AND BIGGAR; SELIGSOHN GABRIELI AND CO

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AR242255 A1	19930331	LSGT	+	granted / extensions (spc, cpc, pte)	
AR242255 A1	20080715	PEXP		Calculated Patent Term Expiry	
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AU198822744 A1	19890406	LSPB	+	published / reissued	
AU615923 B2	19911017	LSGT	+	granted / extensions (spc, cpc, pte)	
AU615923 B2	20080711	PEXP		Calculated Patent Term Expiry	

AU617690 B2	19911205	LSGT	+	granted / extensions (spc, cpc, pte)	
AU617690 B2	20080923	PEXP		Calculated Patent Term Expiry	
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BE1004196 AE	19921013	LSPB	+	published / reissued	
BE1004196 AE	19980131	LSLE	-RE	PATENT LAPSED	PARTYTYPE : OWNER OWNER : COLGATE-PALMOLIVE CY EFFECTIVE DATE : 19970731
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BRPI8803540 A	19950207	LSWD	-FB19	GRANT PROCEDURE SUSPENDED (ART. 19)	
BRPI8803540 A	19960312	LSGT	+FF	DECISION: INTENTION TO GRANT	
BRPI8803540 A	19961029	LSGT	+FG	LETTER PATENT GRANTED	
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PT88628 B	19930430	LSGT	+FG3A	PATENT GRANTED, DATE OF GRANTING	EFFECTIVE DATE : 19921015
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SE8802628 A	19890116	LSPB	+	published / reissued	
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US4828723 A	19890301	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLGATE-PALMOLIVE COMPANY, NEW YORK OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNORS:CAO, HOAI-CHAU; HOUBEN, MARIE-CHRISTINE; JULEMONT, MICHEL; REEL/FRAME:005024/0606; SIGNING DATES FROM 19890110 TO 19890113
US4828723 A	19890316	LSGT	PAT1	Patented Case	
US4828723 A	19921109	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
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US4828723 A	19970722	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 19970514
US4828723 A	20180130	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
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US4931195 A	19900605	LSGT	+	granted / extensions (spc, cpc, pte)	
US4931195 A	19900410	LSGT	PAT1	Patented Case	
US4931195 A	19940605	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US4931195 A	19940816	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 19940608
US4931195 A	20180129	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US4931195 A	20180129	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US4931195 A	20090317	PEXP		Calculated Patent Term Expiry	
ZA8804897 A	19900627	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA8804897 A	20080706	PEXP		Calculated Patent Term Expiry	
ZA8807109 A	19900530	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA8807109 A	20080921	PEXP		Calculated Patent Term Expiry	

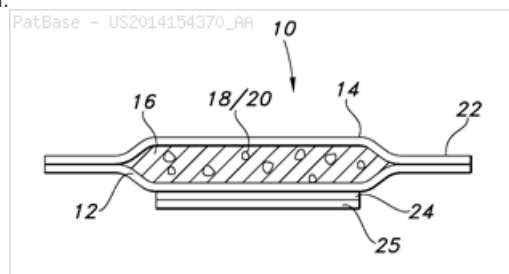
Title: CONTROLLED RELEASE COMPOSITIONS AND METHODS OF USING

Abstract: Cyclodextrin compositions, including a hydrophobic carrier and a cyclodextrin complex, are formed and disposed on a variety of substrates using conditions that avoid substantial loss of the complexed compound from the cyclodextrin complex, even where the complexed compound is a gas at common ambient temperatures (e.g. 20 degrees centigrade). Flexographic printing is particularly useful for disposing the cyclodextrin compositions on one or more substrates. Substrates treated with the cyclodextrin complexes are useful for subsequent release of the complexed compound.

Classifications:

International (IPC 8-9): A01N A01N25/00 A01N25/02 A01N25/04 A01N25/08 A01N25/10 A01N25/22 A01N25/26 A01N25/34 A01N27/00 A01N3/00 A01N3/02 A01N43/04 A01N43/16 A01P21/00 A23B7/00 A23B7/14 A23B7/15 A61K A61K31/715 B29C65/00 B32B27/00 B32B27/18 B32B37/00 B32B37/12 B32B9/00 B41M1/40 B41M3/00 B65B55/00 B65D65/40 C07C13/04 C08B37/00 C08B37/16 C09D105/16 C09D7/12 C09D7/40 (Advanced/Invention); A01N A61K (Subclass/Invention)

International (IPC 1-7): A01N25/26 A01N43/04 A61K31/715
CPC: B41M3/006 A01N27/00 A01N25/22 Y10T156/10 Y02P20/582 A01N43/16 A01N3/02 A23V2002/00 A23B7/15 A01N25/10
US: 1/1 156/60 426/106 426/118 427/256 504/292



Family:

Publication number	Publication date	Application number	Application date
AR094637 AA	20150819	AR2013P104449	20131202
AU2013302242 AA	20140619	AU20130302242	20131127
AU2013302242 BB	20140724	AU20130302242	20131127
AU2014227556 AA	20141009	AU20140227556	20140922
AU2014227556 BB	20160915	AU20140227556	20140922
BR112015012670 A2	20181218	BR20151112670	20131127
CA2867732 AA	20140912	CA20132867732	20131127
CA2867732 C	20160816	CA20132867732	20131127
CL2015001469 A1	20160429	CL20150001469	20150529
CN104936447 A	20150923	CN201380017247	20131127
CN104936447 B	20180306	CN201380017247	20131127
DE602013029597 D1	20171228	DE201360029597T	20131127
EP2938189 A1	20151104	EP20130828965	20131127
EP2938189 A4	20151111	EP20130828965	20131127
EP2938189 B1	20171115	EP20130828965	20131127
ES2659955 T3	20180320	ES20130828965T	20131127
HK1214922 A1	20160812	HK20160103008	20160315
HK1214922 B	20180914	HK20160103008	20160315
HK1215785 A1	20160915	HK20160103758	20160401
HK1215785 B	20180518	HK20160103758	20160401
IL238943 A0	20150730	IL20130238943	20131127
IL238943 A1	20180430	IL20130238943	20131127
IN03771CN2015 A	20160701	IN2015CN03771	20150626
JP2016504296 T2	20160212	JP20150545208T	20131127
JP2017071221 A2	20170413	JP20160197738	20161006
JP6023348 B2	20161109	JP20150545208T	20131127
JP6422926 B2	20181114	JP20160197738	20161006
KR101606835 B1	20160328	KR20157017463	20131127
KR20150097561 A	20150826	KR20157017463	20131127
MX2015006843 A1	20160112	MX20150006843	20131127
PL2938189 T3	20180530	PL20130828965T	20131127
RU2591453 C1	20160720	RU20150125361	20131127
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TW201427598 A	20140716	TW20130143734	20131129
TWI646897 B	20190111	TW20130143734	20131129
US2014154370 AA	20140605	US20130094416	20131202
US2016198704 AA	20160714	US20160077342	20160322
US2017303536 AA	20171026	US20170626509	20170619
US9320288 BB	20160426	US20130094416	20131202
US9713329 BB	20170725	US20160077342	20160322
US10212931 BB	20190226	US20170626509	20170619
WO14085518 A1	20140605	WO2013US72124	20131127

Priority:

US20120732103P	20121130	AU20130302242	20131127	JP20150545208T	20131127
EP20130828965	20131127	WO2013US72124	20131127	US20130094416	20131202
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US20170626509	20170619				

Probable Assignee: KIMBERLY CLARK CORP

Assignee(s): (std): CELLRESIN TECH LLC ; CELLRESIN TECHNOLOGIES LLC ; KIMBERLY CLARK WORLDWIDE INC ; KIMBERLY CLARK CO ; KIMBERLY CLARK CORP ; WOOD WILLARD E ; WOOD WILLARD ; WILLARD E WOOD ; TSELLREZIN TEKNOLODZHIS ELELSI ; KIMBERLY CLARK WORLDWIDE INC ; KIMBERLY WORLDWIDE INC

Assignee(s): YAHIAOUI ALI ; KIMBERLI KLARK VORLDDVAJD INK ; KIMBERLY CLARK WORLDWIDE INC NEENAH ; KIMBERLEY CLARK WORLDWIDE INC2300 WINCHESTER ROADNEENAHWI54956US ; KIMBERLY CLARK WORLDWIDE INC2300 WINCHESTER ROADNEENAHWI54956US ; KIMBERLEY CLARK WORLDWIDE INC ; CELLRESIN TECHNOLOGIES LLC BLOOMINGTON ; CELLRESIN TECHNOLOGIES LLC4567 AMERICAN BOULEVARD WESTBLOOMINGTONMN55437US

Inventor(s): (std): ALI YAHIAOUI ; WILLARD E WOOD ; VUD VILLARD E ; YAKHYAUI ALI ; WOOD WILLARD E W E ; YAHIAOUI ALI A ; YAHIAOUI AL ; WOOD WLLARD E ; YAHIAOUI ALI ; WOOD WILLARD E

Inventor(s): WOOD WILLARD EUS ; YAHIAOUI ALIUS ; WOOD WILLARD E ARDEN HILLS ; YAHIAOUI ALI ROSWELL

Agent(s): WRAYS; ROBIC; ESTUDIO CLARKE MODET AND CO CHILE LIMITADA; GLAS HOLGER; LEHMANN MARIA ISABEL; WENPING AND CO; MARKS AND CLERK; REINHOLD COHN AND PARTNERS; KITA AOYAMA INT PATENT BUREAU; TOLGA CAYLAK; DORSEY AND WHITNEY LLP; KAGAN BINDER PLLC; SARAGENO LORI 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
AR094637 AA	20150819	LSPB	+	published / reissued	
AU2013302242 AA	20140619	LSPB	+	published / reissued	
AU2013302242 BB	20140724	LSGT	+	granted / extensions (spc, cpc, pte)	
AU2013302242 BB	20141120	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU2013302242 BB	20150122	LSAS	PC	ASSIGNMENT REGISTERED	PARTYTYPE : OWNER OWNER : KIMBERLY-CLARK WORLDWIDE, INC. OLDPARTY : FORMER OWNER WAS: WOOD, WILLARD; KIMBERLY-CLARK WORLDWIDE, INC.
AU2013302242 BB	20331127	PEXP		Calculated Patent Term Expiry	
AU2014227556 AA	20141009	LSPB	+	published / reissued	
AU2014227556 AA	20170119	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU2014227556 AA	20170406	LSAS	PC	ASSIGNMENT REGISTERED	PARTYTYPE : OWNER OWNER : KIMBERLY-CLARK WORLDWIDE, INC. OLDPARTY : FORMER OWNER(S): WOOD, WILLARD; KIMBERLY-CLARK WORLDWIDE, INC.
AU2014227556 BB	20160915	LSGT	+	granted / extensions (spc, cpc, pte)	
AU2014227556 BB	20340922	PEXP		Calculated Patent Term Expiry	
CA2867732 AA	20140912	LSPB	+	published / reissued	
CA2867732 AA	20141105	LSSES	+EEER	EXAMINATION REQUEST	EFFECTIVE DATE : 20140912
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CA2867732 C	20160816	LSGT	+	granted / extensions (spc, cpc, pte)	
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CL2015001469 A1	20160429	LSPB	+	published / reissued	
CN104936447 A	20150923	LSPB	+	published / reissued	
CN104936447 B	20180306	LSGT	+	granted / extensions (spc, cpc, pte)	
CN104936447 B	20180306	LSGT	+GR01	PATENT GRANT	
CN104936447 B	20180622	LSAS	TR01	TRANSFER OF PATENT RIGHT	
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EP2938189 A1	20151104	LSPB	+	published / reissued	
EP2938189 A1	20151104	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20140218
EP2938189 A4	20151111	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	EFFECTIVE DATE : 20151012
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EP2938189 A4	20151111	LSRE	RIC1	INFORMATION PROVIDED ON IPC CODE ASSIGNED BEFORE GRANT	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : A01N 25/02 20060101ALI20151006BHEP
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EP2938189 A4	20161228	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : KIMBERLY-CLARK WORLDWIDE, INC.
EP2938189 A4	20170628	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20170531
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EP2938189 B1	20171227	LSAS	RAP2	RIGHTS OF A PATENT TRANSFERRED	PARTYTYPE : OWNER OWNER : KIMBERLY-CLARK WORLDWIDE, INC.
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EP2938189 B1	20180905	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
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EP2938189 B1	20181024	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20180817
EP2938189 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 : 20171127
EP2938189 B1	20181130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20171115
EP2938189 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 : 20171130
EP2938189 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 : 6
EP2938189 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20190126 YEAR OF FEE PAYMENT : 6
EP2938189 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20190201 YEAR OF FEE PAYMENT : 6
EP2938189 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20190129 YEAR OF FEE PAYMENT : 6
EP2938189 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20190123 YEAR OF FEE PAYMENT : 6
EP2938189 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20190125 YEAR OF FEE PAYMENT : 6
EP2938189 B1	20190531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20190121 YEAR OF FEE PAYMENT : 6
EP2938189 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 : 20131127
EP2938189 B1	20190628	LSLE	-PG25	LAPSED IN A	COUNTRY OF REF DOCUMENT :

				CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	MC NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME- LIMIT LAPSED DATE : 20171115
EP2938189 B1	20331127	PEXP		Calculated Patent Term Expiry	
ES2659955 T3	20180320	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2659955 T3	20331127	PEXP		Calculated Patent Term Expiry	
HK1214922 A1	20160812	LSPB	+	published / reissued	
HK1214922 A1	20360315	PEXP		Calculated Patent Term Expiry	
HK1214922 B	20180914	LSGT	+	granted / extensions (spc, cpc, pte)	
HK1214922 B	20360315	PEXP		Calculated Patent Term Expiry	
HK1215785 A1	20160915	LSPB	+	published / reissued	
HK1215785 A1	20360401	PEXP		Calculated Patent Term Expiry	
HK1215785 B	20180518	LSGT	+	granted / extensions (spc, cpc, pte)	
HK1215785 B	20360401	PEXP		Calculated Patent Term Expiry	
IL238943 A1	20180430	LSPB	+	published / reissued	
IL238943 A1	20180830	LSGT	+FF	PATENT GRANTED	
IL238943 A1	20180830	LSFE	+KB	PATENT RENEWED	
IN03771CN2015 A	20160701	LSPB	+	published / reissued	
JP2016504296 T2	20160127	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20160126
JP2016504296 T2	20160610	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20160610
JP2016504296 T2	20160831	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2016504296 T2	20160906	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20160906
JP2016504296 T2	20161013	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20161006
JP2016504296 T2	20161014	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 6023348 COUNTRY OF REF DOCUMENT : JP
JP2017071221 A2	20180227	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20180227
JP2017071221 A2	20180413	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20180413
JP2017071221 A2	20180921	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2017071221 A2	20181002	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20181002
JP2017071221 A2	20181025	LSFE	+A61	FIRST PAYMENT OF	TEXT : JAPANESE INTERMEDIATE

				ANNUAL FEES (DURING GRANT PROCEDURE)	CODE: A61 EFFECTIVE DATE : 20181017
JP2017071221 A2	20181026	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 6422926 COUNTRY OF REF DOCUMENT : JP
JP6023348 B2	20161109	LSGT	+	granted / extensions (spc, cpc, pte)	
JP6023348 B2	20160908	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP6023348 B2	20161011	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP6023348 B2	20161014	LSGT	+R150	特許証 (Patent certificate)	
JP6023348 B2	20170330	LSAS	S111	REQUEST FOR CHANGE OF OWNERSHIP OR PART OF OWNERSHIP	TEXT : JAPANESE INTERMEDIATE CODE: R313113
JP6023348 B2	20170330	LSAS	S533	WRITTEN REQUEST FOR REGISTRATION OF CHANGE OF NAME	TEXT : JAPANESE INTERMEDIATE CODE: R313533
JP6023348 B2	20170510	LSAS	R350	WRITTEN NOTIFICATION OF REGISTRATION OF TRANSFER	TEXT : JAPANESE INTERMEDIATE CODE: R350
JP6023348 B2	20331127	PEXP		Calculated Patent Term Expiry	
JP6422926 B2	20181114	LSGT	+	granted / extensions (spc, cpc, pte)	
JP6422926 B2	20181004	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP6422926 B2	20181023	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP6422926 B2	20181026	LSGT	+R150	特許証 (Patent certificate)	
JP6422926 B2	20190116	LSAS	S111	REQUEST FOR CHANGE OF OWNERSHIP OR PART OF OWNERSHIP	TEXT : JAPANESE INTERMEDIATE CODE: R313117
JP6422926 B2	20190124	LSAS	R350	WRITTEN NOTIFICATION OF REGISTRATION OF TRANSFER	TEXT : JAPANESE INTERMEDIATE CODE: R350
JP6422926 B2	20361006	PEXP		Calculated Patent Term Expiry	
KR101606835 B1	20160328	LSGT	+	granted / extensions (spc, cpc, pte)	
KR101606835 B1	20150708	LSSES	A201	REQUEST FOR EXAMINATION	
KR101606835 B1	20150708	LSSES	A302	REQUEST FOR ACCELERATED EXAMINATION	
KR101606835 B1	20150803	LSAS	N231	NOTIFICATION OF CHANGE OF APPLICANT	
KR101606835 B1	20190312	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20190313 YEAR OF FEE PAYMENT : 4
KR101606835 B1	20331127	PEXP		Calculated Patent Term Expiry	
KR20150097561 A	20150826	LSPB	+	published / reissued	
KR20150097561 A	20151028	LSSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR20150097561 A	20160114	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
KR20150097561 A	20160322	LSGT	+GRNT	WRITTEN DECISION TO GRANT	

MX2015006843 A1 PL2938189 T3	20160112 20180530	LSPB LSGT	+	published / reissued granted / extensions (spc, cpc, pte)	
RU2591453 C1	20160720	LSGT	+	granted / extensions (spc, cpc, pte)	
RU2591453 C1	20170511	LSLI	PC41	OFFICIAL REGISTRATION OF THE TRANSFER OF EXCLUSIVE RIGHT	EFFECTIVE DATE : 20170511
RU2591453 C1	20331127	PEXP		Calculated Patent Term Expiry	
TR201801750 T4	20180221	LSGT	+	granted / extensions (spc, cpc, pte)	
TR201801750 T4	20331127	PEXP		Calculated Patent Term Expiry	
TW201427598 A	20140716	LSPB	+	published / reissued	
TWI646897 B	20190111	LSGT	+	granted / extensions (spc, cpc, pte)	
TWI646897 B	20331129	PEXP		Calculated Patent Term Expiry	
US10212931 BB	20190226	LSGT	+	granted / extensions (spc, cpc, pte)	
US10212931 BB	20190206	LSGT	PAT1	Patented Case	
US10212931 BB	20190422	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KIMBERLY-CLARK WORLDWIDE, INC., WISCONSIN OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:CELLRESIN TECHNOLOGIES LLC; REEL/FRAME:048954/0855 EFFECTIVE DATE : 20190305
US10212931 BB	20370921	PEXP		Calculated Patent Term Expiry (PTA 94 days)	
US2014154370 AA	20140605	LSPB	+	published / reissued	
US2014154370 AA	20150203	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KIMBERLY-CLARK WORLDWIDE, INC., WISCONSIN OLDPARTY : NAME CHANGE; ASSIGNOR:KIMBERLY-CLARK WORLDWIDE, INC.; REEL/FRAME:034880/0634 EFFECTIVE DATE : 20150101
US2014154370 AA	20160406	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2016198704 AA	20160714	LSPB	+	published / reissued	
US2016198704 AA	20170317	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2016198704 AA	20170620	LSFE	+PPR1	Publications -- Issue Fee Payment Received	
US2016198704 AA	20170624	LSFE	+PPV1	Publications -- Issue Fee Payment Verified	
US2016198704 AA	20170703	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2017303536 AA	20171026	LSPB	+	published / reissued	
US2017303536 AA	20181211	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KIMBERLY-CLARK WORLDWIDE, INC., WISCONSIN OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:YAHIAOUI, ALI; REEL/FRAME:047740/0845 EFFECTIVE DATE : 20140206
US2017303536 AA	20181211	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CELLRESIN TECHNOLOGIES, LLC, MINNESOTA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST;

					ASSIGNOR:WOOD, WILLARD E.; REEL/FRAME:047740/0796 EFFECTIVE DATE : 20140206
US2017303536 AA	20181214	LSFE	+PPV1	Publications -- Issue Fee Payment Verified	
US2017303536 AA	20190206	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US9320288 BB	20160426	LSGT	+	granted / extensions (spc, cpc, pte)	
US9320288 BB	20140218	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CELLRESIN TECHNOLOGIES, LLC, MINNESOTA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:WOOD, WILLARD E.; REEL/FRAME:032233/0774 EFFECTIVE DATE : 20140206
US9320288 BB	20140218	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KIMBERLY-CLARK WORLDWIDE, INC., WISCONSIN OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:YAHIAOUI, ALI; REEL/FRAME:032233/0800 EFFECTIVE DATE : 20140206
US9320288 BB	20151221	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US9320288 BB	20160406	LSGT	PAT1	Patented Case	
US9320288 BB	20160719	LSRE	CC	CERTIFICATE OF CORRECTION	
US9320288 BB	20160727	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KIMBERLY-CLARK WORLDWIDE, INC., WISCONSIN OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:CELLRESIN TECHNOLOGIES, LLC.; REEL/FRAME:039273/0561 EFFECTIVE DATE : 20160603
US9320288 BB	20331202	PEXP		Calculated Patent Term Expiry	
US9713329 BB	20170725	LSGT	+	granted / extensions (spc, cpc, pte)	
US9713329 BB	20160322	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CELLRESIN TECHNOLOGIES, LLC, MINNESOTA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:WOOD, WILLARD E.; REEL/FRAME:038068/0268 EFFECTIVE DATE : 20140206
US9713329 BB	20160322	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KIMBERLY-CLARK WORLDWIDE, INC., WISCONSIN OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:YAHIAOUI, ALI; REEL/FRAME:038068/0200 EFFECTIVE DATE : 20140206
US9713329 BB	20170703	LSGT	PAT1	Patented Case	
US9713329 BB	20170810	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KIMBERLY-CLARK WORLDWIDE, INC., WISCONSIN OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:CELLRESIN TECHNOLOGIES, LLC; REEL/FRAME:043256/0803 EFFECTIVE DATE : 20170731
US9713329 BB	20360322	PEXP		Calculated Patent Term Expiry	
WO14085518 A1	20140605	LSPB	+	published / reissued	

WO14085518 A1	20140210	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2013302242 COUNTRY OF REF DOCUMENT : AU
WO14085518 A1	20140218	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2013828965 COUNTRY OF REF DOCUMENT : EP
WO14085518 A1	20140912	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2867732 COUNTRY OF REF DOCUMENT : CA
WO14085518 A1	20150521	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 238943 COUNTRY OF REF DOCUMENT : IL
WO14085518 A1	20150527	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2015545208 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO14085518 A1	20150529	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : MX/A/2015/006843 COUNTRY OF REF DOCUMENT : MX
WO14085518 A1	20150601	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO14085518 A1	20150624	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 15145223 COUNTRY OF REF DOCUMENT : CO
WO14085518 A1	20150630	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 20157017463 COUNTRY OF REF DOCUMENT : KR KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO14085518 A1	20150630	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2015125361 COUNTRY OF REF DOCUMENT : RU KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO14085518 A1	20180206	LSNP	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : BR REF LEGAL EVENT CODE : B01E REF DOCUMENT NUMBER : 112015012670 COUNTRY OF REF DOCUMENT : BR
WO14085518 A1	20180619	LSNP	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : BR REF LEGAL EVENT CODE : B01E REF DOCUMENT NUMBER : 112015012670 COUNTRY OF REF DOCUMENT : BR
WO14085518 A1	20180925	LSNP	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : BR TEXT : EM ADITAMENTO A EXIGENCIA FORMULADA NA RPI 2476 DE 19/06/2018 SOLICITA- SE A APRESENTACAO DE PROCURACAO DE WILLARD E. WOOD PARA ESTE ESCRITORIO. REF LEGAL EVENT CODE : B01E REF DOCUMENT NUMBER : 112015012670 COUNTRY OF REF DOCUMENT : BR
WO14085518 A1	20181218	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 112015012670 COUNTRY OF REF DOCUMENT : BR KIND CODE OF REF DOCUMENT : A2 DESIGNATED STATE(S) : EFFECTIVE DATE : 20150529



Title: DISPOSABLE VORTEX BREAKER

Abstract: The present invention consists of a closed presterilized bag having a disposable mixing element within it, a drive mechanism outside of the bag for rotating the mixing element without voiding sterility and a vortex breaker in the form of one or more plastic sheet materials that are attached to various inner surfaces of the bag and disrupt the formation of vortices within the bag. Preferably the sheet(s) are formed of the same material as the bag and are sealed to the bag surfaces. More preferably, the sheet(s) extend across a diameter of the bag. Most preferably, the sheet(s) are perforated with one or more slits or openings to allow for good flow and mixing without a vortex being formed.

Classifications:

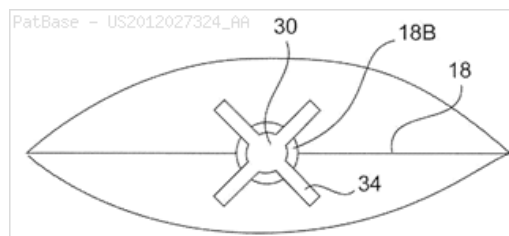
International (IPC 8-9): B01F13/00 B01F13/08 B01F15/00 B01F7/16

B01F7/18 B65D33/00 C12M1/00 C12M1/02 (Advanced/Invention)

CPC: B01F7/162 B01F15/00831 B01F15/0085 B01F15/00915 C12M23/14 C12M23/28 C12M23/34 C12M27/02 B01F13/08

European: B01F13/08 B01F15/00P2 B01F15/00P2C B01F15/00Q B01F7/16D

US: 366/241 366/241S 366/273 366/273P 366/306 366/307 383/105 383/105P



Family:

Publication number	Publication date	Application number	Application date
■ CN103037959 A	20130410	CN201180037432	20110707
■ CN103037959 B	20141105	CN201180037432	20110707
■ DE602011022469 D1	20160225	DE201160022469T	20110707
■ EP2598234 A1	20130605	EP20110738885	20110707
■ EP2598234 B1	20160106	EP20110738885	20110707
■ ES2560812 T3	20160222	ES20110738885T	20110707
■ IN00938DN2013 A	20141031	IN2013DN00938	20130130
■ JP2013535325 T2	20130912	JP20130521794T	20110707
■ JP5627782 B2	20141119	JP20130521794T	20110707
■ KR101457448 B1	20141104	KR20137000348	20110707
■ KR20130039751 A	20130422	KR20137000348	20110707
■ SG10201504574R A1	20150730	SG20151004574	20110707
■ SG185591 A1	20121228	SG20120084174	20110707
■ US2012027324 AA	20120202	US20110178097	20110707
■ US2012155216 AA	20120621	US20120399354	20120217
■ US8500322 BB	20130806	US20110178097	20110707
■ US8556497 BB	20131015	US20120399354	20120217
■ WO12015571 A1	20120202	WO2011US43181	20110707

Priority:

US20100369249P 20100730 EP20110738885 20110707 US20110178097 20110707
WO2011US43181 20110707 US20120399354 20120217

Probable Assignee: EMD MILLIPORE CORP

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Assignee(s): EMD MILLIPORE BILLERICA CORP

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Inventor(s): MARTIN MORRISSEY BILLERICA ; DAVID DECOSTE BILLERICA

Agent(s): GRAHAM WATT AND CO LLP SEVENOAKS; KIRKHAM NICHOLAS ANDREW; DE ELZABURU ALBERTO; KAWAGUTI AND PARTNERS; W P LAI AND CO C O Y F CHONG; EMD MILLIPORE CORP

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
CN103037959 A	20130410	LSPB	+	published / reissued	
CN103037959 A	20130410	LSPB	+C06	PUBLICATION	
CN103037959 B	20141105	LSGT	+	granted / extensions (spc, cpc, pte)	
CN103037959 B	20141105	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN103037959 B	20130707	PEXP		Calculated Patent Term Expiry	

EP2598234 A1	20130605	LSPB	+	published / reissued	
EP2598234 A1	20130605	LSSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20121127
EP2598234 A1	20131211	LSSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20131107
EP2598234 A1	20150325	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20150226
EP2598234 A1	20150930	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20150903
EP2598234 A1	20160729	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20160613 YEAR OF FEE PAYMENT : 6
EP2598234 A1	20160831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20160613 YEAR OF FEE PAYMENT : 6
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EP2598234 A1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20160706 YEAR OF FEE PAYMENT : 6
EP2598234 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 : 6
EP2598234 A1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20160720 YEAR OF FEE PAYMENT : 6
EP2598234 B1	20160106	LSGT	+	granted / extensions (spc, cpc, pte)	
EP2598234 B1	20160106	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP2598234 B1	20160115	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP2598234 B1	20160210	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP2598234 B1	20160215	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 768389 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20160215
EP2598234 B1	20160222	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2560812 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) : EFFECTIVE DATE : 20160222
EP2598234 B1	20160225	LSPB	REG	REFERENCE TO A	REF COUNTRY CODE : DE

				NATIONAL CODE	REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602011022469 COUNTRY OF REF DOCUMENT : DE
EP2598234 B1	20160510	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : LT REF LEGAL EVENT CODE : MG4D
EP2598234 B1	20160515	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MK05 REF DOCUMENT NUMBER : 768389 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20160106
EP2598234 B1	20160613	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 6
EP2598234 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 : 20160406
EP2598234 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 : 20160407
EP2598234 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 : 20160106
EP2598234 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 : 20160106
EP2598234 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 : 20160106
EP2598234 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 : 20160506
EP2598234 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 : 20160106
EP2598234 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 : 20160106
EP2598234 B1	20160831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LT NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME- LIMIT LAPSED DATE : 20160106
EP2598234 B1	20160831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME- LIMIT LAPSED DATE : 20160106
EP2598234 B1	20160831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME- LIMIT LAPSED DATE : 20160506
EP2598234 B1	20160831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LV NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME- LIMIT LAPSED DATE : 20160106
EP2598234 B1	20161007	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 602011022469 COUNTRY OF REF DOCUMENT : DE
EP2598234 B1	20161031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME- LIMIT LAPSED DATE : 20160106
EP2598234 B1	20161031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME- LIMIT LAPSED DATE : 20160106
EP2598234 B1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20160711 YEAR OF FEE PAYMENT : 6
EP2598234 B1	20161130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME- LIMIT LAPSED DATE : 20160106
EP2598234 B1	20161130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME- LIMIT LAPSED DATE : 20160106
EP2598234 B1	20161130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT	COUNTRY OF REF DOCUMENT : CZ NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE

				INFORMATION FROM NATIONAL OFFICE TO EPO]	DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160106
EP2598234 B1	20161130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SM NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160106
EP2598234 B1	20161214	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20161007
EP2598234 B1	20170228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160106
EP2598234 B1	20170228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160406
EP2598234 B1	20170331	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160106
EP2598234 B1	20170613	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 7
EP2598234 B1	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170613 YEAR OF FEE PAYMENT : 7
EP2598234 B1	20170831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20160707
EP2598234 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 : 7
EP2598234 B1	20170831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20170613 YEAR OF FEE PAYMENT : 7
EP2598234 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170705 YEAR OF FEE PAYMENT : 7
EP2598234 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20170804 YEAR OF FEE PAYMENT : 7
EP2598234 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20170720 YEAR OF FEE PAYMENT : 7
EP2598234 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20170705

				[ANNOUNCED FROM NATIONAL OFFICE TO EPO]	YEAR OF FEE PAYMENT : 7
EP2598234 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20170712 YEAR OF FEE PAYMENT : 7
EP2598234 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20170710 YEAR OF FEE PAYMENT : 7
EP2598234 B1	20180531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160106
EP2598234 B1	20180531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU NOTIFICATION OF LAPSE : 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 : 20110707
EP2598234 B1	20180612	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 8
EP2598234 B1	20180629	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MT NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20160731
EP2598234 B1	20180629	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MK NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160106
EP2598234 B1	20180629	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160106
EP2598234 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20180613 YEAR OF FEE PAYMENT : 8
EP2598234 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 : 8
EP2598234 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 : 8
EP2598234 B1	20181031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AL NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160106
EP2598234 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180626 YEAR OF FEE PAYMENT : 8

EP2598234 B1	20181031	LSFE	+PGFP	TO EPO] ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20180802 YEAR OF FEE PAYMENT : 8
EP2598234 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20180713 YEAR OF FEE PAYMENT : 8
EP2598234 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20180710 YEAR OF FEE PAYMENT : 8
EP2598234 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20180704 YEAR OF FEE PAYMENT : 8
EP2598234 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20180713 YEAR OF FEE PAYMENT : 8
EP2598234 B1	20310707	PEXP		Calculated Patent Term Expiry	
ES2560812 T3	20160222	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2560812 T3	20310707	PEXP		Calculated Patent Term Expiry	
IN00938DN2013 A	20141031	LSPB	+	published / reissued	
JP2013535325 T2	20140122	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20140121
JP2013535325 T2	20140422	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20140421
JP2013535325 T2	20140902	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2013535325 T2	20140917	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20140916
JP2013535325 T2	20141009	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20140930
JP2013535325 T2	20141010	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 5627782 COUNTRY OF REF DOCUMENT : JP
JP5627782 B2	20141119	LSGT	+	granted / extensions (spc, cpc, pte)	
JP5627782 B2	20140918	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP5627782 B2	20141007	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP5627782 B2	20141010	LSGT	+R150	特許証 (Patent certificate)	
JP5627782 B2	20170928	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5627782 B2	20171003	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5627782 B2	20180125	LSAS	R350	WRITTEN NOTIFICATION OF REGISTRATION OF TRANSFER	TEXT : JAPANESE INTERMEDIATE CODE: R350

JP5627782 B2	20180927	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5627782 B2	20181002	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5627782 B2	20310707	PEXP		Calculated Patent Term Expiry	
KR101457448 B1	20141104	LSGT	+	granted / extensions (spc, cpc, pte)	
KR101457448 B1	20310707	PEXP		Calculated Patent Term Expiry	
KR20130039751 A	20130422	LSPB	+	published / reissued	
KR20130039751 A	20130107	LSES	A201	REQUEST FOR EXAMINATION	
KR20130039751 A	20140414	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR20130039751 A	20141020	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
KR20130039751 A	20141028	LSGT	+GRNT	WRITTEN DECISION TO GRANT	
SG10201504574R A1	20150730	LSPB	+	published / reissued	
SG185591 A1	20121228	LSPB	+	published / reissued	
US2012027324 AA	20120202	LSPB	+	published / reissued	
US2012027324 AA	20130717	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2012155216 AA	20120621	LSPB	+	published / reissued	
US2012155216 AA	20130925	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US8500322 BB	20130806	LSGT	+	granted / extensions (spc, cpc, pte)	
US8500322 BB	20111020	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MILLIPORE CORPORATION, MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:MORRISSEY, MARTIN; REEL/FRAME:027092/0904 EFFECTIVE DATE : 20110817
US8500322 BB	20120131	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : EMD MILLIPORE CORPORATION, MASSACHUSETTS OLDPARTY : CHANGE OF NAME; ASSIGNOR:MILLIPORE CORPORATION; REEL/FRAME:027620/0891 EFFECTIVE DATE : 20120101
US8500322 BB	20130717	LSGT	PAT1	Patented Case	
US8500322 BB	20170126	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8500322 BB	20180201	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : EMD MILLIPORE CORPORATION, MASSACHUSETTS OLDPARTY : CHANGE OF ADDRESS; ASSIGNOR:EMD MILLIPORE CORPORATION; REEL/FRAME:045225/0156 EFFECTIVE DATE : 20171010
US8500322 BB	20311207	PEXP		Calculated Patent Term Expiry (PTA 153 days)	
US8556497 BB	20131015	LSGT	+	granted / extensions (spc, cpc, pte)	
US8556497 BB	20130925	LSGT	PAT1	Patented Case	

US8556497 BB	20140916	LSRE	CC	CERTIFICATE OF CORRECTION	
US8556497 BB	20170330	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8556497 BB	20180201	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : EMD MILLIPORE CORPORATION, MASSACHUSETTS OLDPARTY : CHANGE OF ADDRESS; ASSIGNOR:EMD MILLIPORE CORPORATION; REEL/FRAME:045225/0156 EFFECTIVE DATE : 20171010
US8556497 BB	20320217	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
WO12015571 A1	20120202	LSPB	+	published / reissued	
WO12015571 A1	20110707	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 201180037432.4 COUNTRY OF REF DOCUMENT : CN
WO12015571 A1	20121127	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2011738885 COUNTRY OF REF DOCUMENT : EP
WO12015571 A1	20130107	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 20137000348 COUNTRY OF REF DOCUMENT : KR KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO12015571 A1	20130111	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2013521794 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO12015571 A1	20130130	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE

Title: MIXTURES OF AMINES WITH GUANIDINE DERIVATIVES

Abstract: The present invention provides a mixture comprising at least three hardener components a1), a2), and b), the ratio of hardener component a1) to a2) being in the range from 0.1 to 10:1, and hardener component b) being present at 5 percent to 55 percent by weight, based on the mixture, a process for preparing this mixture, the use of the mixture of the invention for curing epoxy resins, the use of the mixture of the invention with epoxy resins as adhesives, and an epoxy resin cured with the mixture of the invention.

Classifications:

International (IPC 8-9): B29C35/02 B29C39/00 B29C39/02 B29C39/10 B29C39/24 B29C70/04 B32B27/04 B32B27/26 B32B27/38 C07C211/36 C07C279/00 C07C279/04 C07C279/16 C08G59/02 C08G59/14 C08G59/40 C08G59/50 C08G59/56 C08J3/20 C08J5/00 C08J5/04 C08K5/17 C08K5/21 C08K5/29 C08K5/31 C08L63/00 C08L71/00 C09J11/04 C09J11/06 C09J11/08 C09J163/00 C09K3/00 C7C279/00 (Advanced/Invention); B29C33/38 B29C35/02 C07C279/04 C08G59/58 (Advanced/Non-invention); C07C279/00 C07C279/04 C07C279/16 (Core/Invention); C07C279/00 C07C279/04 C08G59/56 C08J5/04 C08L63/00 C09J163/00 (Core/Non-invention)

International (IPC 1-7): C07C279/00

CPC: C08G59/02 Y10T428/24994 Y10T428/31511 C07C211/36 C08G59/4021 C07C279/04 C07C279/16 C08G59/50 C09J163/00 C08G59/56 C08L63/00

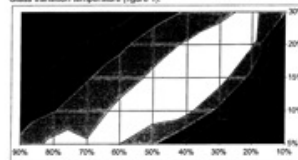
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US: 1/1 252/182.23 252/182.230S 264/331.12 264/331.120P 264/347 264/347S 428/297.4 428/413 523/400 523/428 525/523 525/523P 525/523S 528/408

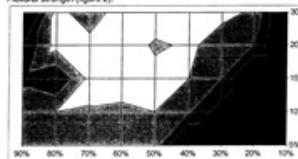
PatBase - US2011130524_AA

Patent Application Publication Jun. 2, 2011 Sheet 1 of 2 US 2011/0130524 A1

Glass transition temperature (Figure 1):



Flexural strength (Figure 2):



Family:

Publication number	Publication date	Application number	Application date
AT538088 E	20120115	AT20090780758T	20090717
AT538089 E	20120115	AT20090800037T	20090717
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Priority:

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WO2009EP58700	20090708	WO2009EP58699	20090708	WO2009EP58701	20090708
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WO2009EP59210	20090717	US20110055174	20110415	US20130141058	20131226

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Inventor(s): GEISLER, JOERG-PETER

Agent(s): ROBIC; OBLON SPIVAK MCCLELLAND MAIER AND NEUSTADT LLP; OBLON MCCLELLAND MAIER AND NEUSTADT LLP; BASF SE

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)

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Patent	Date recorded	Event group	Code	Event	Details
AT538088 E	20120115	LSGT	+	granted / extensions	

(spc, cpc, pte)					
AT538088 E	20290717	PEXP		Calculated Patent Term Expiry	
AT538089 E	20120115	LSGT	+	granted / extensions (spc, cpc, pte)	
AT538089 E	20290717	PEXP		Calculated Patent Term Expiry	
AT540022 E	20120115	LSGT	+	granted / extensions (spc, cpc, pte)	
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EP2307358 B1	20130925	LSOP	-R26	OPPOSITION FILED (CORRECTED)	PARTYTYPE : OPPONENT OPPONENT : EVONIK DEGUSSA GMBH EFFECTIVE DATE : 20120920
EP2307358 B1	20140212	LSOP	-R26	OPPOSITION FILED (CORRECTED)	PARTYTYPE : OPPONENT OPPONENT : EVONIK DEGUSSA GMBH EFFECTIVE DATE : 20120920
EP2307358 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 : 20120717
EP2307358 B1	20140530	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 : 20111221
EP2307358 B1	20150805	LSOP	-R26	OPPOSITION FILED (CORRECTED)	PARTYTYPE : OPPONENT OPPONENT : HEXION INC. EFFECTIVE DATE : 20120919
EP2307358 B1	20150915	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MM01 REF DOCUMENT NUMBER : 538088 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20140717
EP2307358 B1	20151030	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE PAYMENT DATE : 20150708 YEAR OF FEE PAYMENT : 7

EP2307358 B1	20151030	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LT PAYMENT DATE : 20150707 YEAR OF FEE PAYMENT : 7
EP2307358 B1	20151030	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20150721 YEAR OF FEE PAYMENT : 7
EP2307358 B1	20151030	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK PAYMENT DATE : 20150716 YEAR OF FEE PAYMENT : 7
EP2307358 B1	20151030	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HR PAYMENT DATE : 20150701 YEAR OF FEE PAYMENT : 7
EP2307358 B1	20151130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20140717
EP2307358 B1	20151130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20150729 YEAR OF FEE PAYMENT : 7
EP2307358 B1	20151130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LV PAYMENT DATE : 20150626 YEAR OF FEE PAYMENT : 7
EP2307358 B1	20151130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20150626 YEAR OF FEE PAYMENT : 7
EP2307358 B1	20160727	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
EP2307358 B1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20160726 YEAR OF FEE PAYMENT : 8
EP2307358 B1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20160704 YEAR OF FEE PAYMENT : 8

EP2307358 B1	20161130	LSFE	+PGFP	OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO] ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20160704 YEAR OF FEE PAYMENT : 8
EP2307358 B1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20160726 YEAR OF FEE PAYMENT : 8
EP2307358 B1	20161230	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20160725 YEAR OF FEE PAYMENT : 8
EP2307358 B1	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20160930 YEAR OF FEE PAYMENT : 8
EP2307358 B1	20170210	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : LT REF LEGAL EVENT CODE : MM4D EFFECTIVE DATE : 20160717
EP2307358 B1	20170215	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : EE REF LEGAL EVENT CODE : MM4A REF DOCUMENT NUMBER : E006497 COUNTRY OF REF DOCUMENT : EE EFFECTIVE DATE : 20160731
EP2307358 B1	20170403	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SK REF LEGAL EVENT CODE : MM4A REF DOCUMENT NUMBER : E 11115 COUNTRY OF REF DOCUMENT : SK EFFECTIVE DATE : 20160717
EP2307358 B1	20170428	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 : 20160718
EP2307358 B1	20170428	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 : 20160717
EP2307358 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 NON-PAYMENT OF DUE FEES LAPSED DATE : 20160731

EP2307358 B1	20170428	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20160717
EP2307358 B1	20170428	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LV NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20160717
EP2307358 B1	20170531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20160717
EP2307358 B1	20170531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20160718
EP2307358 B1	20170531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HR NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20160717
EP2307358 B1	20170531	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SI REF LEGAL EVENT CODE : KO00 EFFECTIVE DATE : 20170405
EP2307358 B1	20170727	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 9
EP2307358 B1	20170929	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20170725 YEAR OF FEE PAYMENT : 9
EP2307358 B1	20170929	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20170629 YEAR OF FEE PAYMENT : 9
EP2307358 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170727 YEAR OF FEE PAYMENT : 9
EP2307358 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20170830

				NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	YEAR OF FEE PAYMENT : 9
EP2307358 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20170725 YEAR OF FEE PAYMENT : 9
EP2307358 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20170713 YEAR OF FEE PAYMENT : 9
EP2307358 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20170728 YEAR OF FEE PAYMENT : 9
EP2307358 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NO PAYMENT DATE : 20170725 YEAR OF FEE PAYMENT : 9
EP2307358 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20170720 YEAR OF FEE PAYMENT : 9
EP2307358 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 : 9
EP2307358 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20170727 YEAR OF FEE PAYMENT : 9
EP2307358 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20170710 YEAR OF FEE PAYMENT : 9
EP2307358 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20170630 YEAR OF FEE PAYMENT : 9
EP2307358 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20170725 YEAR OF FEE PAYMENT : 9

EP2307358 B1	20171130	LSFE	+PGFP	[ANNOUNCED FROM NATIONAL OFFICE TO EPO] ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20170725 YEAR OF FEE PAYMENT : 9
EP2307358 B1	20180131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170929 YEAR OF FEE PAYMENT : 9
EP2307358 B1	20180726	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 10
EP2307358 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20180628 YEAR OF FEE PAYMENT : 10
EP2307358 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20180621 YEAR OF FEE PAYMENT : 10
EP2307358 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20180724 YEAR OF FEE PAYMENT : 10
EP2307358 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20180725 YEAR OF FEE PAYMENT : 10
EP2307358 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20180828 YEAR OF FEE PAYMENT : 10
EP2307358 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20180713 YEAR OF FEE PAYMENT : 10
EP2307358 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NO PAYMENT DATE : 20180724 YEAR OF FEE PAYMENT : 10

EP2307358 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20180726 YEAR OF FEE PAYMENT : 10
EP2307358 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20180725 YEAR OF FEE PAYMENT : 10
EP2307358 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20180731 YEAR OF FEE PAYMENT : 10
EP2307358 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20180725 YEAR OF FEE PAYMENT : 10
EP2307358 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20180726 YEAR OF FEE PAYMENT : 10
EP2307358 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20180731 YEAR OF FEE PAYMENT : 10
EP2307358 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20180712 YEAR OF FEE PAYMENT : 10
EP2307358 B1	20190131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180928 YEAR OF FEE PAYMENT : 10
EP2307358 B1	20290717	PEXP		Calculated Patent Term Expiry	
EP2307359 A1	20110413	LSPB	+	published / reissued	
EP2307359 A1	20110413	LSSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20110222
EP2307359 A1	20141128	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20140701 YEAR OF FEE PAYMENT : 6
EP2307359 A1	20151030	LSFE	+PGFP	ANNUAL FEE	COUNTRY OF REF DOCUMENT : ES

				PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	PAYMENT DATE : 20150827 YEAR OF FEE PAYMENT : 7
EP2307359 A1	20151130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20150731 YEAR OF FEE PAYMENT : 7
EP2307359 A1	20160129	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20150930 YEAR OF FEE PAYMENT : 7
EP2307359 A1	20160930	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20160725 YEAR OF FEE PAYMENT : 8
EP2307359 A1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20160729 YEAR OF FEE PAYMENT : 8
EP2307359 A1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NO PAYMENT DATE : 20160726 YEAR OF FEE PAYMENT : 8
EP2307359 A1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20160721 YEAR OF FEE PAYMENT : 8
EP2307359 A1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20160727 YEAR OF FEE PAYMENT : 8
EP2307359 A1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20160727 YEAR OF FEE PAYMENT : 8
EP2307359 A1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20160714 YEAR OF FEE PAYMENT : 8
EP2307359 A1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20160715 YEAR OF FEE PAYMENT : 8

				OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	
EP2307359 A1	20161230	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20160712 YEAR OF FEE PAYMENT : 8
EP2307359 A1	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
EP2307359 B1	20120104	LSGT	+	granted / extensions (spc, cpc, pte)	
EP2307359 B1	20120104	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D TEXT : NOT ENGLISH
EP2307359 B1	20120113	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP2307359 B1	20120115	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 540022 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20120115
EP2307359 B1	20120201	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP2307359 B1	20120308	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 502009002430 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20120308
EP2307359 B1	20120328	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : RO REF LEGAL EVENT CODE : EPE
EP2307359 B1	20120411	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : T3
EP2307359 B1	20120430	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NO REF LEGAL EVENT CODE : T2 EFFECTIVE DATE : 20120104
EP2307359 B1	20120430	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2379691 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) : EFFECTIVE DATE : 20120430
EP2307359 B1	20120731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20120404
EP2307359 B1	20120731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT	COUNTRY OF REF DOCUMENT : IS NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT

				INFORMATION FROM NATIONAL OFFICE TO EPO]	LAPSED DATE : 20120504
EP2307359 B1	20120801	LSWD	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FD4D
EP2307359 B1	20120828	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HU REF LEGAL EVENT CODE : AG4A REF DOCUMENT NUMBER : E013619 COUNTRY OF REF DOCUMENT : HU
EP2307359 B1	20120831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20120405
EP2307359 B1	20120928	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20120104
EP2307359 B1	20121031	LSOP	-26	OPPOSITION FILED	PARTYTYPE : OPPONENT OPPONENT : EVONIK DEGUSSA GMBH EFFECTIVE DATE : 20120920
EP2307359 B1	20121031	LSOP	-26	OPPOSITION FILED	PARTYTYPE : OPPONENT OPPONENT : MOMENTIVE SPECIALTY CHEMICALS INC. EFFECTIVE DATE : 20120919
EP2307359 B1	20121031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20120104
EP2307359 B1	20121227	LSOP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R026 REF DOCUMENT NUMBER : 502009002430 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20120919
EP2307359 B1	20130228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120731
EP2307359 B1	20130228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MK NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20120104
EP2307359 B1	20130731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MT NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20120104

EP2307359 B1	20130925	LSOP	-R26	FROM NATIONAL OFFICE TO EPO] OPPOSITION FILED (CORRECTED)	PARTYTYPE : OPPONENT OPPONENT : EVONIK DEGUSSA GMBH EFFECTIVE DATE : 20120920
EP2307359 B1	20140212	LSOP	-R26	OPPOSITION FILED (CORRECTED)	PARTYTYPE : OPPONENT OPPONENT : EVONIK DEGUSSA GMBH EFFECTIVE DATE : 20120920
EP2307359 B1	20140530	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 : 20120104
EP2307359 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 : 20120717
EP2307359 B1	20150805	LSOP	-R26	OPPOSITION FILED (CORRECTED)	PARTYTYPE : OPPONENT OPPONENT : HEXION INC. EFFECTIVE DATE : 20120919
EP2307359 B1	20150915	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MM01 REF DOCUMENT NUMBER : 540022 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20140717
EP2307359 B1	20151030	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20150721 YEAR OF FEE PAYMENT : 7
EP2307359 B1	20151030	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK PAYMENT DATE : 20150716 YEAR OF FEE PAYMENT : 7
EP2307359 B1	20151030	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HR PAYMENT DATE : 20150701 YEAR OF FEE PAYMENT : 7
EP2307359 B1	20151030	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE PAYMENT DATE : 20150708 YEAR OF FEE PAYMENT : 7
EP2307359 B1	20151030	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LT PAYMENT DATE : 20150707 YEAR OF FEE PAYMENT : 7

EP2307359 B1	20151130	LSLE	-PG25	EPO] LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20140717
EP2307359 B1	20151130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20150729 YEAR OF FEE PAYMENT : 7
EP2307359 B1	20151130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LV PAYMENT DATE : 20150626 YEAR OF FEE PAYMENT : 7
EP2307359 B1	20151130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20150626 YEAR OF FEE PAYMENT : 7
EP2307359 B1	20160727	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
EP2307359 B1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20160726 YEAR OF FEE PAYMENT : 8
EP2307359 B1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20160704 YEAR OF FEE PAYMENT : 8
EP2307359 B1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20160726 YEAR OF FEE PAYMENT : 8
EP2307359 B1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20160704 YEAR OF FEE PAYMENT : 8
EP2307359 B1	20161230	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20160725 YEAR OF FEE PAYMENT : 8
EP2307359 B1	20170131	LSFE	+PGFP	ANNUAL FEE	COUNTRY OF REF DOCUMENT : DE

				PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	PAYMENT DATE : 20160930 YEAR OF FEE PAYMENT : 8
EP2307359 B1	20170210	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : LT REF LEGAL EVENT CODE : MM4D EFFECTIVE DATE : 20160717
EP2307359 B1	20170215	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : EE REF LEGAL EVENT CODE : MM4A REF DOCUMENT NUMBER : E006495 COUNTRY OF REF DOCUMENT : EE EFFECTIVE DATE : 20160731
EP2307359 B1	20170403	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SK REF LEGAL EVENT CODE : MM4A REF DOCUMENT NUMBER : E 10881 COUNTRY OF REF DOCUMENT : SK EFFECTIVE DATE : 20160717
EP2307359 B1	20170428	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20160718
EP2307359 B1	20170428	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20160717
EP2307359 B1	20170428	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LT NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20160717
EP2307359 B1	20170428	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20160731
EP2307359 B1	20170428	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LV NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20160717
EP2307359 B1	20170531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20160718
EP2307359 B1	20170531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE	COUNTRY OF REF DOCUMENT : HR NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE

				[ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	FEES LAPSED DATE : 20160717
EP2307359 B1	20170531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20160717
EP2307359 B1	20170531	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SI REF LEGAL EVENT CODE : K000 EFFECTIVE DATE : 20170405
EP2307359 B1	20170727	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 9
EP2307359 B1	20170929	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20170725 YEAR OF FEE PAYMENT : 9
EP2307359 B1	20170929	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20170629 YEAR OF FEE PAYMENT : 9
EP2307359 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 : 9
EP2307359 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20170725 YEAR OF FEE PAYMENT : 9
EP2307359 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20170720 YEAR OF FEE PAYMENT : 9
EP2307359 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NO PAYMENT DATE : 20170725 YEAR OF FEE PAYMENT : 9
EP2307359 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170727 YEAR OF FEE PAYMENT : 9
EP2307359 B1	20171031	LSFE	+PGFP	ANNUAL FEE	COUNTRY OF REF DOCUMENT : RO

				PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	PAYMENT DATE : 20170713 YEAR OF FEE PAYMENT : 9
EP2307359 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20170830 YEAR OF FEE PAYMENT : 9
EP2307359 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20170728 YEAR OF FEE PAYMENT : 9
EP2307359 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20170725 YEAR OF FEE PAYMENT : 9
EP2307359 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20170703 YEAR OF FEE PAYMENT : 9
EP2307359 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20170710 YEAR OF FEE PAYMENT : 9
EP2307359 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20170725 YEAR OF FEE PAYMENT : 9
EP2307359 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20170727 YEAR OF FEE PAYMENT : 9
EP2307359 B1	20180131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170929 YEAR OF FEE PAYMENT : 9
EP2307359 B1	20180726	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 10
EP2307359 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20180628 YEAR OF FEE PAYMENT : 10

EP2307359 B1	20180831	LSFE	+PGFP	OFFICE TO EPO] ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20180621 YEAR OF FEE PAYMENT : 10
EP2307359 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NO PAYMENT DATE : 20180724 YEAR OF FEE PAYMENT : 10
EP2307359 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20180724 YEAR OF FEE PAYMENT : 10
EP2307359 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20180725 YEAR OF FEE PAYMENT : 10
EP2307359 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20180726 YEAR OF FEE PAYMENT : 10
EP2307359 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20180828 YEAR OF FEE PAYMENT : 10
EP2307359 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20180713 YEAR OF FEE PAYMENT : 10
EP2307359 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20180731 YEAR OF FEE PAYMENT : 10
EP2307359 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20180726 YEAR OF FEE PAYMENT : 10
EP2307359 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20180725 YEAR OF FEE PAYMENT : 10

EP2307359 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20180712 YEAR OF FEE PAYMENT : 10
EP2307359 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20180725 YEAR OF FEE PAYMENT : 10
EP2307359 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20180731 YEAR OF FEE PAYMENT : 10
EP2307359 B1	20190131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180928 YEAR OF FEE PAYMENT : 10
EP2307359 B1	20290717	PEXP		Calculated Patent Term Expiry	
EP2307360 A1	20110413	LSPB	+	published / reissued	
EP2307360 A1	20110413	LSSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20110222
EP2307360 A1	20141128	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20140701 YEAR OF FEE PAYMENT : 6
EP2307360 A1	20151030	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20150827 YEAR OF FEE PAYMENT : 7
EP2307360 A1	20151130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20150731 YEAR OF FEE PAYMENT : 7
EP2307360 A1	20160129	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20150930 YEAR OF FEE PAYMENT : 7
EP2307360 A1	20160930	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20160725 YEAR OF FEE PAYMENT : 8

EP2307360 A1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NO PAYMENT DATE : 20160726 YEAR OF FEE PAYMENT : 8
EP2307360 A1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20160729 YEAR OF FEE PAYMENT : 8
EP2307360 A1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20160727 YEAR OF FEE PAYMENT : 8
EP2307360 A1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20160721 YEAR OF FEE PAYMENT : 8
EP2307360 A1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20160715 YEAR OF FEE PAYMENT : 8
EP2307360 A1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20160714 YEAR OF FEE PAYMENT : 8
EP2307360 A1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20160727 YEAR OF FEE PAYMENT : 8
EP2307360 A1	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
EP2307360 A1	20161230	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20160712 YEAR OF FEE PAYMENT : 8
EP2307360 B1	20111221	LSGT	+	granted / extensions (spc, cpc, pte)	
EP2307360 B1	20111221	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D TEXT : NOT ENGLISH
EP2307360 B1	20111230	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP

EP2307360 B1	20120115	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 538089 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20120115
EP2307360 B1	20120118	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP2307360 B1	20120320	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : RO REF LEGAL EVENT CODE : EPE
EP2307360 B1	20120321	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2376975 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) : EFFECTIVE DATE : 20120321
EP2307360 B1	20120322	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 502009002266 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20120322
EP2307360 B1	20120328	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : T3
EP2307360 B1	20120430	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NO REF LEGAL EVENT CODE : T2 EFFECTIVE DATE : 20111221
EP2307360 B1	20120531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20120322
EP2307360 B1	20120629	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20111221
EP2307360 B1	20120718	LSWD	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FD4D
EP2307360 B1	20120731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IS NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20120421
EP2307360 B1	20120731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20111221
EP2307360 B1	20120731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA	COUNTRY OF REF DOCUMENT : BG NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE

				POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	PREScribed TIME-LIMIT LAPSED DATE : 20120321
EP2307360 B1	20120928	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HU REF LEGAL EVENT CODE : AG4A REF DOCUMENT NUMBER : E013800 COUNTRY OF REF DOCUMENT : HU
EP2307360 B1	20121031	LSOP	-26	OPPOSITION FILED	PARTYTYPE : OPPONENT OPPONENT : EVONIK DEGUSSA GMBH EFFECTIVE DATE : 20120920
EP2307360 B1	20121031	LSOP	-26	OPPOSITION FILED	PARTYTYPE : OPPONENT OPPONENT : MOMENTIVE SPECIALTY CHEMICALS INC. EFFECTIVE DATE : 20120919
EP2307360 B1	20121227	LSOP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R026 REF DOCUMENT NUMBER : 502009002266 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20120919
EP2307360 B1	20130228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120731
EP2307360 B1	20130228	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 : 20111221
EP2307360 B1	20130731	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 : 20111221
EP2307360 B1	20130925	LSOP	-R26	OPPOSITION FILED (CORRECTED)	PARTYTYPE : OPPONENT OPPONENT : EVONIK DEGUSSA GMBH EFFECTIVE DATE : 20120920
EP2307360 B1	20140212	LSOP	-R26	OPPOSITION FILED (CORRECTED)	PARTYTYPE : OPPONENT OPPONENT : EVONIK DEGUSSA GMBH EFFECTIVE DATE : 20120920
EP2307360 B1	20140530	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 : 20111221
EP2307360 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 : 20120717

EP2307360 B1	20150805	LSOP	-R26	OPPOSITION FILED (CORRECTED)	PARTYTYPE : OPPONENT OPPONENT : HEXION INC. EFFECTIVE DATE : 20120919
EP2307360 B1	20150915	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MM01 REF DOCUMENT NUMBER : 538089 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20140717
EP2307360 B1	20151030	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LT PAYMENT DATE : 20150707 YEAR OF FEE PAYMENT : 7
EP2307360 B1	20151030	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20150721 YEAR OF FEE PAYMENT : 7
EP2307360 B1	20151030	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HR PAYMENT DATE : 20150701 YEAR OF FEE PAYMENT : 7
EP2307360 B1	20151030	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE PAYMENT DATE : 20150708 YEAR OF FEE PAYMENT : 7
EP2307360 B1	20151030	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK PAYMENT DATE : 20150716 YEAR OF FEE PAYMENT : 7
EP2307360 B1	20151130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20140717
EP2307360 B1	20151130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LV PAYMENT DATE : 20150626 YEAR OF FEE PAYMENT : 7
EP2307360 B1	20151130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20150729 YEAR OF FEE PAYMENT : 7
EP2307360 B1	20151130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED	COUNTRY OF REF DOCUMENT : SI PAYMENT DATE : 20150626 YEAR OF FEE PAYMENT : 7

				FROM NATIONAL OFFICE TO EPO]	
EP2307360 B1	20160727	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
EP2307360 B1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20160726 YEAR OF FEE PAYMENT : 8
EP2307360 B1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20160704 YEAR OF FEE PAYMENT : 8
EP2307360 B1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20160726 YEAR OF FEE PAYMENT : 8
EP2307360 B1	20161130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20160704 YEAR OF FEE PAYMENT : 8
EP2307360 B1	20161230	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20160725 YEAR OF FEE PAYMENT : 8
EP2307360 B1	20170131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20160930 YEAR OF FEE PAYMENT : 8
EP2307360 B1	20170210	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : LT REF LEGAL EVENT CODE : MM4D EFFECTIVE DATE : 20160717
EP2307360 B1	20170215	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : EE REF LEGAL EVENT CODE : MM4A REF DOCUMENT NUMBER : E006496 COUNTRY OF REF DOCUMENT : EE EFFECTIVE DATE : 20160731
EP2307360 B1	20170403	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SK REF LEGAL EVENT CODE : MM4A REF DOCUMENT NUMBER : E 10624 COUNTRY OF REF DOCUMENT : SK EFFECTIVE DATE : 20160717
EP2307360 B1	20170428	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20160718

EP2307360 B1	20170428	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20160731
EP2307360 B1	20170428	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LT NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20160717
EP2307360 B1	20170428	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20160717
EP2307360 B1	20170428	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LV NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20160717
EP2307360 B1	20170531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20160718
EP2307360 B1	20170531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HR NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20160717
EP2307360 B1	20170531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20160717
EP2307360 B1	20170531	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SI REF LEGAL EVENT CODE : KO00 EFFECTIVE DATE : 20170405
EP2307360 B1	20170727	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 9
EP2307360 B1	20170929	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20170725 YEAR OF FEE PAYMENT : 9

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EP2307360 B1	20170929	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20170629 YEAR OF FEE PAYMENT : 9
EP2307360 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NO PAYMENT DATE : 20170725 YEAR OF FEE PAYMENT : 9
EP2307360 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20170725 YEAR OF FEE PAYMENT : 9
EP2307360 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 : 9
EP2307360 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20170713 YEAR OF FEE PAYMENT : 9
EP2307360 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20170830 YEAR OF FEE PAYMENT : 9
EP2307360 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20170720 YEAR OF FEE PAYMENT : 9
EP2307360 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20170728 YEAR OF FEE PAYMENT : 9
EP2307360 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170727 YEAR OF FEE PAYMENT : 9
EP2307360 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20170725 YEAR OF FEE PAYMENT : 9

EP2307360 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20170630 YEAR OF FEE PAYMENT : 9
EP2307360 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20170727 YEAR OF FEE PAYMENT : 9
EP2307360 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20170725 YEAR OF FEE PAYMENT : 9
EP2307360 B1	20171130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20170710 YEAR OF FEE PAYMENT : 9
EP2307360 B1	20180131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170929 YEAR OF FEE PAYMENT : 9
EP2307360 B1	20180726	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 10
EP2307360 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20180628 YEAR OF FEE PAYMENT : 10
EP2307360 B1	20180831	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20180621 YEAR OF FEE PAYMENT : 10
EP2307360 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20180726 YEAR OF FEE PAYMENT : 10
EP2307360 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20180725 YEAR OF FEE PAYMENT : 10
EP2307360 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20180724 YEAR OF FEE PAYMENT : 10

EP2307360 B1	20181031	LSFE	+PGFP	NATIONAL OFFICE TO EPO] ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20180828 YEAR OF FEE PAYMENT : 10
EP2307360 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NO PAYMENT DATE : 20180724 YEAR OF FEE PAYMENT : 10
EP2307360 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20180713 YEAR OF FEE PAYMENT : 10
EP2307360 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20180725 YEAR OF FEE PAYMENT : 10
EP2307360 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20180726 YEAR OF FEE PAYMENT : 10
EP2307360 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20180725 YEAR OF FEE PAYMENT : 10
EP2307360 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20180712 YEAR OF FEE PAYMENT : 10
EP2307360 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20180731 YEAR OF FEE PAYMENT : 10
EP2307360 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20180731 YEAR OF FEE PAYMENT : 10
EP2307360 B1	20190131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180928 YEAR OF FEE PAYMENT : 10

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EP2307360 B1	20290717	PEXP		Calculated Patent Term Expiry	
ES2376975 T3	20120321	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2376975 T3	20290717	PEXP		Calculated Patent Term Expiry	
ES2377376 T3	20120327	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2377376 T3	20290717	PEXP		Calculated Patent Term Expiry	
ES2379691 T3	20120430	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2379691 T3	20290717	PEXP		Calculated Patent Term Expiry	
HR20120233 T1	20120430	LSPB	+	published / reissued	
HR20120234 T1	20120430	LSPB	+	published / reissued	
HR20120266 T1	20120430	LSPB	+	published / reissued	
IN00017CN2011 A	20111125	LSPB	+	published / reissued	
IN00094CN2011 A	20111202	LSPB	+	published / reissued	
IN00119CN2011 A	20111202	LSPB	+	published / reissued	
JP2011528741 T2	20120714	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20120713
JP2011528741 T2	20120714	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20120713
JP2011528741 T2	20130611	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20130610
JP2011528741 T2	20131026	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20131025
JP2011528741 T2	20140617	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20140616
JP2011528742 T2	20120718	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20120717
JP2011528742 T2	20130611	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20130610
JP2011528742 T2	20131026	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20131025
JP2011528742 T2	20140617	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20140616
JP2011528743 T2	20120718	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20120717
JP2011528743 T2	20130611	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20130610

JP2011528743 T2	20131026	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20131025
JP2011528743 T2	20140617	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20140616
JP2015052119 A2	20151104	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20151102
JP2015052119 A2	20160404	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20160404
JP2015063692 A2	20150818	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20150817
JP2015063692 A2	20161011	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20161011
JP2015083675 A2	20151117	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20151116
JP2015083675 A2	20160613	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20160613
KR101562421 B1	20151021	LSGT	+	granted / extensions (spc, cpc, pte)	
KR101562421 B1	20290717	PEXP		Calculated Patent Term Expiry	
KR101562422 B1	20151022	LSGT	+	granted / extensions (spc, cpc, pte)	
KR101562422 B1	20290717	PEXP		Calculated Patent Term Expiry	
KR20110044241 A	20110428	LSPB	+	published / reissued	
KR20110044241 A	20150811	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
KR20110052644 A	20110518	LSPB	+	published / reissued	
KR20110052644 A	20151019	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR20110052644 A	20160726	LSRV	-E601	DECISION TO REFUSE APPLICATION	
KR20110052645 A	20110518	LSPB	+	published / reissued	
KR20110052645 A	20150811	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
MX2011000421 A1	20110222	LSPB	+	published / reissued	
MX2011000421 A1	20120906	LSGT	+FG	GRANT OR REGISTRATION	
MX2011000688 A1	20110315	LSPB	+	published / reissued	
MX2011000688 A1	20120705	LSGT	+FG	GRANT OR REGISTRATION	
MX2011000773 A1	20110225	LSPB	+	published / reissued	
MX2011000773 A1	20120724	LSGT	+FG	GRANT OR	

PT2307358 T	20120208	LSGT	+	REGISTRATION granted / extensions (spc, cpc, pte)	
PT2307358 T	20290717	PEXP		Calculated Patent Term Expiry	
PT2307359 T	20120202	LSGT	+	granted / extensions (spc, cpc, pte)	
PT2307359 T	20290717	PEXP		Calculated Patent Term Expiry	
PT2307360 T	20120111	LSGT	+	granted / extensions (spc, cpc, pte)	
PT2307360 T	20290717	PEXP		Calculated Patent Term Expiry	
SI2307358 T1	20120430	LSGT	+	granted / extensions (spc, cpc, pte)	
SI2307358 T1	20290717	PEXP		Calculated Patent Term Expiry	
SI2307359 T1	20120531	LSGT	+	granted / extensions (spc, cpc, pte)	
SI2307359 T1	20290717	PEXP		Calculated Patent Term Expiry	
SI2307360 T1	20120430	LSGT	+	granted / extensions (spc, cpc, pte)	
SI2307360 T1	20290717	PEXP		Calculated Patent Term Expiry	
TH119671 A	20130117	LSPB	+	published / reissued	
TH128790 A	20131107	LSPB	+	published / reissued	
TH128791 A	20131107	LSPB	+	published / reissued	
TW201016743 A	20100501	LSPB	+	published / reissued	
TW201016744 A	20100501	LSPB	+	published / reissued	
TW201026736 A	20100716	LSPB	+	published / reissued	
TWI450912 B	20140901	LSGT	+	granted / extensions (spc, cpc, pte)	
TWI450912 B	20290721	PEXP		Calculated Patent Term Expiry	
TWI454500 B	20141001	LSGT	+	granted / extensions (spc, cpc, pte)	
TWI454500 B	20290721	PEXP		Calculated Patent Term Expiry	
TWI460201 B	20141111	LSGT	+	granted / extensions (spc, cpc, pte)	
TWI460201 B	20290721	PEXP		Calculated Patent Term Expiry	
US2011130524 AA	20110602	LSPB	+	published / reissued	
US2011130524 AA	20120207	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BASF SE, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:WITTENBECHER, LARS; HENNINGSEN, MICHAEL; DAUN,

					GREGOR; AND OTHERS; SIGNING DATES FROM 20090731 TO 20091023; REEL/FRAME:027664/0128
US2011130524 AA	20160413	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2011180970 AA	20110728	LSPB	+	published / reissued	
US2011180970 AA	20140917	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2011190419 AA	20110804	LSPB	+	published / reissued	
US2011190419 AA	20140514	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2014107255 AA	20140417	LSPB	+	published / reissued	
US2014107255 AA	20150401	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US8741426 BB	20140603	LSGT	+	granted / extensions (spc, cpc, pte)	
US8741426 BB	20110422	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BASF SE, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:WITTENBECHER, LARS; HENNINGSEN, MICHAEL; DAUN, GREGOR; AND OTHERS; SIGNING DATES FROM 20101228 TO 20110123; REEL/FRAME:026169/0954
US8741426 BB	20140514	LSGT	PAT1	Patented Case	
US8741426 BB	20171129	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8741426 BB	20300819	PEXP		Calculated Patent Term Expiry (PTA 398 days and a terminal disclaimer has been filed)	
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US8852489 BB	20110422	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BASF SE, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:WITTENBECHER, LARS; HENNINGSEN, MICHAEL; DAUN, GREGOR; AND OTHERS; SIGNING DATES FROM 20101229 TO 20110315; REEL/FRAME:026169/0688
US8852489 BB	20140917	LSGT	PAT1	Patented Case	
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US8852489 BB	20300505	PEXP		Calculated Patent Term Expiry (PTA 292 days)	
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US9012020 BB	20150401	LSGT	PAT1	Patented Case	
US9012020 BB	20181016	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US9012020 BB	20331226	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	

US9328058 BB	20160503	LSGT	+	granted / extensions (spc, cpc, pte)	
US9328058 BB	20151228	LSSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US9328058 BB	20160413	LSGT	PAT1	Patented Case	
US9328058 BB	20300906	PEXP		Calculated Patent Term Expiry (PTA 416 days and a terminal disclaimer has been filed)	
WO10010045 A1	20100128	LSPB	+	published / reissued	
WO10010045 A1	20090717	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 200980128523.1 COUNTRY OF REF DOCUMENT : CN
WO10010045 A1	20101220	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2009780758 COUNTRY OF REF DOCUMENT : EP
WO10010045 A1	20110104	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 17/CHENP/2011 COUNTRY OF REF DOCUMENT : IN
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WO10010045 A1	20110111	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : MX/A/2011/000421 COUNTRY OF REF DOCUMENT : MX
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WO10010047 A1	20090717	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 200980129034.8 COUNTRY OF REF DOCUMENT : CN
WO10010047 A1	20110106	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2009800037 COUNTRY OF REF DOCUMENT : EP
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WO10010048 A1	20110415	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 13055174 COUNTRY OF REF DOCUMENT : US
WO10010048 A1	20180313	LSNP	ENP	ENTRY INTO THE NATIONAL	REF DOCUMENT NUMBER : PI0916234 COUNTRY OF REF DOCUMENT : BR

PHASE IN:

KIND CODE OF REF DOCUMENT : A2

DESIGNATED STATE(S) :

EFFECTIVE DATE : 20110119

Title: FLUID TREATMENT PROCESS USING DYNAMIC MICROFILTRATION AND ULTRAFILTRATION

Abstract: A method of treating wastewater by passing wastewater into a dynamic microfiltration assembly to form a first concentrate stream and a filtrate stream and then passing the filtrate stream into an ultrafiltration assembly to form a second concentrate stream and a purified water stream.

Classifications:

International (IPC 8-9): B01D15/00 B01D17/00 B01D17/02 B01D21/00 B01D35/28 B01D36/00 B01D61/02 B01D61/04 B01D61/08 B01D61/14 B01D61/16 B01D61/36 B01D63/16 B01D65/08 B63J4/00 C02F1/28 C02F1/32 C02F1/44 C02F1/52 C02F1/78 C02F9/00 (Advanced/Invention); B63J4/00 C02F1/28 C02F1/32 C02F1/78 (Advanced/Non-invention); B01D17/00 B01D17/02 B01D21/00 B01D36/00 B01D61/02 B01D61/14 B01D61/16 B01D61/36 B01D63/16 B01D65/00 B63J4/00 C02F1/28 C02F1/32 C02F1/44 C02F1/52 C02F1/78 C02F9/00 (Core/Invention); C02F1/32 C02F1/78 (Core/Non-invention); B08B (Subclass/Invention)

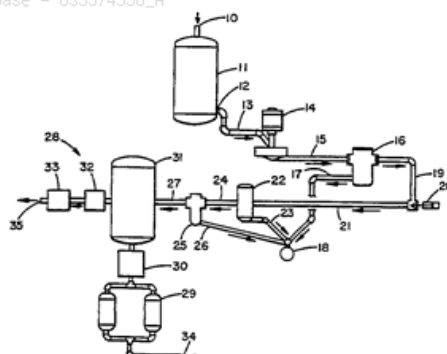
International (IPC 1-7): B01D15/00 B01D33/00 B01D35/28 B01D36/00 B01D36/02 B01D39/08 B01D61/02 B01D61/08 B01D61/14 B01D61/20 B01D61/36 B01D61/58 B01J20/02 B08B B63J4/00 C02C C02F1/00 C02F1/28 C02F1/32 C02F1/40 C02F1/44 C02F1/50 C02F1/52 C02F1/78 C02F9/00

CPC: B01D61/145 B01D61/147 B01D61/025 B01D61/027 C02F2103/002 C02F2103/008 B01D21/01 B01D21/02 B01D2321/02 B01D2321/16 B01D65/08 B01D17/0202 B01D21/0012 B01D61/04 B01D61/142 B01D61/16 B01D63/16 B01D2221/02 B01D2311/04 B01D2321/168 B01D2321/2058 C02F1/32 C02F1/44 C02F1/441 C02F1/444 C02F1/78 B01D21/0006 B01D21/30 B01D17/12 B01D21/00 B01D17/00 B01D17/0211 B01D17/10 B01D21/0039 B01D17/08 B01D17/085

European: B01D17/00 B01D17/02B B01D21/00 B01D21/00F B01D21/00N B01D21/01 B01D21/02 B01D61/04 B01D61/14B B01D61/16 B01D63/16 B01D65/08 C02F1/44 C02F1/44B C02F1/44D L01D221/02 L01D311/04 L01D321/02 L01D321/16 L01D321/16H L01D321/20D14 M02F1/32 M02F1/44B M02F1/78 M02F103/00C M02F103/00S

US: 210/259 210/641 210/651

PatBase - US5374356_A

**Family:**

Publication number	Publication date	Application number	Application date
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AU680061 B2	19970717	AU19940080484	19941215
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CA2138055 AA	19960226	CA19942138055	19941214
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DE4325335 A1	19940203	DE19934325335	19930728
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IT1265012 B1	19961017	IT1993TO00525	19930714
IT1267368 B1	19970128	IT1994TO01100	19941230
ITTO930525 A0	19930714	IT1993TO00525	19930714
ITTO930525 A1	19940129	IT1993TO00525	19930714
ITTO941100 A0	19941230	IT1994TO01100	19941230
ITTO941100 A1	19960226	IT1994TO01100	19941230
JP6154752 A2	19940603	JP19930186332	19930728
JP8066697 A2	19960312	JP19950024308	19950213
US5374356 A	19941220	US19920920973	19920728
US5578213 A	19961126	US19950405762	19950316

Priority:

US19920920973 19920728 CA19922080939 19921020 US19940295611 19940825
CA19942138055 19941214 US19950405762 19950316

Probable Assignee: PALL CORP

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Agent(s): SHELSTON IP; SHELSTON IP PTY LTD; MARKS AND CLERK

Legal status (INPADOC)
[View legal status timeline](#)

Patent	Date recorded	Event group	Code	Event	Details
AU199480484 A1	19960307	LSPB	+	published / reissued	
AU680061 B2	19970717	LSGT	+	granted / extensions (spc, cpc, pte)	
AU680061 B2	20020718	LSLE	-MK14	PATENT CEASED SECTION 143(A) (ANNUAL FEES NOT PAID) OR EXPIRED	
AU680061 B2	20141215	PEXP		Calculated Patent Term Expiry	
CA2080939 AA	19940129	LSPB	+	published / reissued	
CA2080939 AA	20001020	LSLE	-FZDE	DEAD	
CA2138055 AA	19960226	LSPB	+	published / reissued	
CA2138055 AA	20021216	LSLE	-FZDE	DEAD	
DE19527410 A1	19960229	LSPB	+	published / reissued	
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DE4325335 A1	19940203	LSPB	+	published / reissued	
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FR2694282 B1	19950310	LSGT	+	granted / extensions (spc, cpc, pte)	
FR2694282 B1	20020524	LSLE	-ST	NOTIFICATION OF LAPSE	
FR2694282 B1	20130726	PEXP		Calculated Patent Term Expiry	
FR2723934 A1	19960301	LSPB	+	published / reissued	
FR2723934 B1	19981023	LSGT	+	granted / extensions (spc, cpc, pte)	
FR2723934 B1	20020927	LSLE	-ST	NOTIFICATION OF LAPSE	
FR2723934 B1	20141230	PEXP		Calculated Patent Term Expiry	
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GB2269166 B2	19951115	LSGT	+	granted / extensions (spc, cpc, pte)	
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GB2269166 B2	20130609	PEXP		Calculated Patent Term Expiry	
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RENEWAL FEE					
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IT1265012 B1	20130714	PEXP		Calculated Patent Term Expiry	
IT1267368 B1	19970128	LSGT	+	granted / extensions (spc, cpc, pte)	
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US5374356 A	19941220	LSGT	+	granted / extensions (spc, cpc, pte)	
US5374356 A	19920817	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PALL CORPORATION, NEW YORK OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNORS:MILLER, JOHN D.; BARKLEY, P. GLENN; WHITE, DONALD H., JR.; AND OTHERS; REEL/FRAME:006223/0679; SIGNING DATES FROM 19920708 TO 19920710
US5374356 A	19980608	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5374356 A	20021220	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5374356 A	20030122	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US5374356 A	20030122	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US5374356 A	20030218	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20021220
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US5578213 A	19961126	LSGT	+	granted / extensions (spc, cpc, pte)	
US5578213 A	20000515	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5578213 A	20041126	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
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US5578213 A	20041229	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US5578213 A	20050125	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20041126

US5578213 A	20150316	PEXP	Calculated Patent Term Expiry
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Abstract: A container may have a base, a sidewall connected to the base, a bell connected to the sidewall, and a finish connected to the bell. The base may have strap ribs to resist deformation of the base. The sidewall may have recessed columns to resist bending, leaning, crumbling, and/or stretching. The strap ribs and recessed columns may vertically line up along a central axis of the container to communicate forces on the container vertically along the container to continuously resist deformation in the base and the sidewall.

International (IPC 8-9): B65D1/02 B65D1/40 B65D1/42 B65D1/44 B65D1/46 B65D23/00 B65D23/10 B65D8/08 B65D8/12 B65D90/02 (Advanced/Invention); B29C49/06 B29L31/00 (Advanced/Non-invention); B65D1/02 B65D1/42 B65D8/08 (Core/Invention)
CPC: B65D1/44 B65D1/0223 B29B2911/14013 B29B2911/14333 B29B2911/14486 B29C49/06 B29L2031/7158 B65D1/0284 B65D1/42 B65D2501/0027 B65D2501/0081 B65D23/102 B65D2501/0036
US: 1/1 215/375 215/377 215/382 220/669



Publication number	Publication date	Application number	Application date
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Priority:

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US20130141224	20131226	WO2013US77810	20131226	US20140157400	20140114
US20140157400	20140116	WO2014US11923	20140116	US20150610940	20150130
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JP20180071678	20180403	US20180012029	20180619	US20180236847	20181231

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Inventor(s): HANAN JAY CLARKE ONTARIO

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; OSLER HOSKIN AND HARCOURT LLP; WILSON LUE LLP; ANDES CONSULTING SPA; JAIME EDUARDO DELGADO VILLEGAS; DEHNS; HUGHES ANDREA MICHELLE; ISERN JORGE; ANNISA AM BADAR SH LLM; NABILA AM BADAR SH LLM; KAWAGUTI AND PARTNERS; HANI Z; RUTAN AND TUCKER LLP; SAYED HANI Z

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
AU2013370421 AA	20140703	LSPB	+	published / reissued	
AU2013370421 BB	20170928	LSGT	+	granted / extensions (spc, cpc, pte)	
AU2013370421 BB	20180125	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU2013370421 BB	20331226	PEXP		Calculated Patent Term Expiry	
AU2014370440 AA	20151015	LSPB	+	published / reissued	
AU2016200518 AA	20160818	LSPB	+	published / reissued	
CA2895524 AA	20150617	LSPB	+	published / reissued	
CA2895524 AA	20181224	LSES	+EEER	EXAMINATION REQUEST	EFFECTIVE DATE : 20181207
CA2907004 AA	20150915	LSPB	+	published / reissued	
CA2907004 AA	20190118	LSES	+EEER	EXAMINATION REQUEST	EFFECTIVE DATE : 20190111

CA2918903 AA	20160730	LSPB	+	published / reissued	
CL2015001866 A1	20151023	LSPB	+	published / reissued	
CL2015002911 A1	20160328	LSPB	+	published / reissued	
CL56845 B	20181221	LSGT	+	granted / extensions (spc, cpc, pte)	
CL56845 B	20350626	PEXP		Calculated Patent Term Expiry	
CO16020052 A1	20160510	LSPB	+	published / reissued	
CO7600137 A1	20160510	LSPB	+	published / reissued	
EP2938548 A1	20151104	LSPB	+	published / reissued	
EP2938548 A1	20151104	LSSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20150622
EP2938548 A1	20161012	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20160916
EP2938548 B1	20170222	LSGT	+	granted / extensions (spc, cpc, pte)	
EP2938548 B1	20170222	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20170117
EP2938548 B1	20170222	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP2938548 B1	20170228	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP2938548 B1	20170315	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 869071 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20170315
EP2938548 B1	20170322	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP2938548 B1	20170406	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602013017793 COUNTRY OF REF DOCUMENT : DE
EP2938548 B1	20170626	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : LT REF LEGAL EVENT CODE : MG4D
EP2938548 B1	20170703	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2621282 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) : EFFECTIVE DATE : 20170703
EP2938548 B1	20170715	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MK05 REF DOCUMENT NUMBER : 869071 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20170222
EP2938548 B1	20170731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HR NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170222
EP2938548 B1	20170731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170523
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EP2938548 B1	20170831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170522
EP2938548 B1	20170831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LV NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170222
EP2938548 B1	20170831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RS NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170222
EP2938548 B1	20170831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170222
EP2938548 B1	20170831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20170222
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				NATIONAL OFFICE TO EPO]	WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170222
EP2938548 B1	20171031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170222
EP2938548 B1	20171031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170222
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EP2938548 B1	20171123	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 602013017793 COUNTRY OF REF DOCUMENT : DE
EP2938548 B1	20171130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170222
EP2938548 B1	20171130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SM NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170222
EP2938548 B1	20171130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170222
EP2938548 B1	20171219	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 5
EP2938548 B1	20180131	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20171123
EP2938548 B1	20180131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20171219 YEAR OF FEE PAYMENT : 5
EP2938548 B1	20180228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170222
EP2938548 B1	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20171218 YEAR OF FEE PAYMENT : 5

EP2938548 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 : 5
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EP2938548 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20171227 YEAR OF FEE PAYMENT : 5
EP2938548 B1	20180731	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP2938548 B1	20180919	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP2938548 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 : 20171226
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EP2938548 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 : 20171226
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EP2938548 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
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EP2938548 B1	20190228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20181218 YEAR OF FEE PAYMENT : 6
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EP2938548 B1	20331226	PEXP		Calculated Patent Term Expiry	
EP3087009 A1	20161102	LSPB	+	published / reissued	
EP3087009 A1	20161102	LSSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20150918
EP3087009 A4	20170621	LSSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	EFFECTIVE DATE : 20170522
EP3087009 A4	20170621	LSRE	RIC1	INFORMATION PROVIDED ON IPC CODE ASSIGNED BEFORE GRANT	CLASSIFICATION SCHEME : IPC CLASSIFICATION SYMBOL : B65D 8/08 20060101AFI20170516BHEP
EP3087009 A4	20170621	LSRE	RIC1	INFORMATION PROVIDED ON IPC CODE ASSIGNED BEFORE GRANT	CLASSIFICATION SCHEME : IPC CLASSIFICATION SYMBOL : B65D 23/10 20060101ALI20170516BHEP
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ES2621282 T3	20170703	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2621282 T3	20331226	PEXP		Calculated Patent Term Expiry	
ID201701955 A	20170310	LSPB	+	published / reissued	
ID201703968 A	20170421	LSPB	+	published / reissued	
JP2016155603 A2	20181211	LSSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20181211
JP2016501798 T2	20160708	LSSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20160708
JP2016501798 T2	20170711	LSSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20170711
JP2016501798 T2	20180104	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20180104
JP2016501798 T2	20180226	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2016501798 T2	20180306	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20180306
JP2016501798 T2	20180412	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20180404
JP2016501798 T2	20180413	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 6321034 COUNTRY OF REF DOCUMENT : JP
JP2017501093 T2	20161013	LSSES	+A621	WRITTEN REQUEST	TEXT : JAPANESE INTERMEDIATE

				FOR APPLICATION EXAMINATION	CODE: A621 EFFECTIVE DATE : 20160826
JP2017501093 T2	20170704	LSSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20170704
JP2017501093 T2	20170920	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20170920
JP2017501093 T2	20180306	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20180306
JP2017501093 T2	20180704	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20180704
JP2017501093 T2	20180903	LSAL	A911	TRANSFER OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A911 EFFECTIVE DATE : 20180831
JP2017501093 T2	20181105	LSAL	-A912	REMOVAL OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A912 EFFECTIVE DATE : 20181102
JP6321034 B2	20180509	LSGT	+	granted / extensions (spc, cpc, pte)	
JP6321034 B2	20180308	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP6321034 B2	20180410	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP6321034 B2	20180413	LSGT	+R150	特許証 (Patent certificate)	
JP6321034 B2	20331226	PEXP		Calculated Patent Term Expiry	
MX2015008422 A1	20160216	LSPB	+	published / reissued	
MX2015008422 A1	20190130	LSGT	+FG	GRANT OR REGISTRATION	
MX2015014355 A1	20151207	LSPB	+	published / reissued	
MX2016001344 A1	20160729	LSPB	+	published / reissued	
MX362665 B	20190130	LSGT	+	granted / extensions (spc, cpc, pte)	
MX362665 B	20331226	PEXP		Calculated Patent Term Expiry	
PE16782015 A1	20151217	LSPB	+	published / reissued	
PE16922015 A1	20151204	LSPB	+	published / reissued	
TH159442 A	20170118	LSPB	+	published / reissued	
TH161362 A	20170330	LSPB	+	published / reissued	
TH166251 A	20170817	LSPB	+	published / reissued	
US10023346 BB	20180717	LSGT	+	granted / extensions (spc, cpc, pte)	
US10023346 BB	20150227	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : NIAGARA BOTTLING, LLC, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:HANAN, JAY CLARKE; REEL/FRAME:035056/0742 EFFECTIVE DATE : 20150220
US10023346 BB	20180627	LSGT	PAT1	Patented Case	
US10023346 BB	20350130	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
US10202217 BB	20190212	LSGT	+	granted / extensions (spc, cpc, pte)	
US10202217 BB	20190123	LSGT	PAT1	Patented Case	
US10202217 BB	20350722	PEXP		Calculated Patent Term Expiry (a terminal disclaimer	

				has been filed)	
US2014183156 AA	20140703	LSPB	+	published / reissued	
US2014183156 AA	20150812	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2014183202 AA	20140703	LSPB	+	published / reissued	
US2014183202 AA	20150826	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2015144587 AA	20150528	LSPB	+	published / reissued	
US2015144587 AA	20150918	LSES	NFA1	Non Final Action Mailed	
US2015144587 AA	20170530	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : NIAGARA BOTTLING, LLC, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:FORSTHOVEL, JOCHEN; SCHAU, ALEXANDER; REEL/FRAME:042533/0576 EFFECTIVE DATE : 20170524
US2015144587 AA	20170920	LSES	ADV1	Advisory Action Mailed	
US2015144587 AA	20171107	LSES	-NFA2	Non Final Action Counted, Not Yet Mailed	
US2015144587 AA	20171115	LSES	NFA1	Non Final Action Mailed	
US2015144587 AA	20180326	LSES	+ALW2	Allowed -- Notice of Allowance Not Yet Mailed	
US2015144587 AA	20180327	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2015144587 AA	20180618	LSFE	+PPR1	Publications -- Issue Fee Payment Received	
US2015144587 AA	20180627	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2015329234 AA	20151119	LSPB	+	published / reissued	
US2015329234 AA	20170222	LSES	NFA1	Non Final Action Mailed	
US2015329234 AA	20170301	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO BANK, NATIONAL ASSOCIATION, AS ADMINIS OLDPARTY : NOTICE AND CONFIRMATION OF GRANT OF SECURITY INTEREST IN PATENTS; ASSIGNOR:NIAGARA BOTTLING, LLC; REEL/FRAME:041843/0947 EFFECTIVE DATE : 20170222
US2015329234 AA	20170530	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : NIAGARA BOTTLING, LLC, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:FORSTHOVEL, JOCHEN; SCHAU, ALEXANDER; REEL/FRAME:042533/0576 EFFECTIVE DATE : 20170524
US2015329234 AA	20170921	LSES	ADV1	Advisory Action Mailed	
US2015329234 AA	20171212	LSES	NFA1	Non Final Action Mailed	
US2015329234 AA	20190105	LSFE	+PPV1	Publications -- Issue Fee Payment Verified	
US2015329234 AA	20190123	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2015336703 AA	20151126	LSPB	+	published / reissued	
US2015336703 AA	20170106	LSES	NFA1	Non Final Action	

US2015336703 AA	20170301	LSAS	AS	Mailed ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO BANK, NATIONAL ASSOCIATION, AS ADMINIS OLDPARTY : NOTICE AND CONFIRMATION OF GRANT OF SECURITY INTEREST IN PATENTS; ASSIGNOR:NIAGARA BOTTLING, LLC; REEL/FRAME:041843/0947 EFFECTIVE DATE : 20170222
US2015336703 AA	20170530	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : NIAGARA BOTTLING, LLC, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:FORSTHOVEL, JOCHEN; SCHAU, ALEXANDER; REEL/FRAME:042533/0576 EFFECTIVE DATE : 20170524
US2015336703 AA	20171030	LSES	ADV2	Advisory Action Counted, Not Yet Mailed	
US2015336703 AA	20171031	LSES	ADV1	Advisory Action Mailed	
US2015336703 AA	20171220	LSES	-NFA2	Non Final Action Counted, Not Yet Mailed	
US2015336703 AA	20171222	LSES	NFA1	Non Final Action Mailed	
US2015336703 AA	20181107	LSES	NFA1	Non Final Action Mailed	
US2015336703 AA	20190306	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2015336703 AA	20190610	LSFE	+PPV1	Publications -- Issue Fee Payment Verified	
US2018297741 AA	20181018	LSPB	+	published / reissued	
US2018297741 AA	20181108	LSES	NFA1	Non Final Action Mailed	
US2018297741 AA	20190510	LSWD	-STCB	INFORMATION ON STATUS: APPLICATION DISCONTINUATION	TEXT : FINAL REJECTION MAILED
US2019135477 AA	20190509	LSPB	+	published / reissued	
US2019135477 AA	20190507	LSES	NFA1	Non Final Action Mailed	
US9120589 BB	20150901	LSGT	+	granted / extensions (spc, cpc, pte)	
US9120589 BB	20140415	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : NIAGARA BOTTLING, LLC, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:HANAN, JAY CLARKE; REEL/FRAME:032678/0718 EFFECTIVE DATE : 20140220
US9120589 BB	20150812	LSGT	PAT1	Patented Case	
US9120589 BB	20170301	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO BANK, NATIONAL ASSOCIATION, AS ADMINIS OLDPARTY : NOTICE AND CONFIRMATION OF GRANT OF SECURITY INTEREST IN PATENTS; ASSIGNOR:NIAGARA BOTTLING, LLC; REEL/FRAME:041843/0947 EFFECTIVE DATE : 20170222
US9120589 BB	20170530	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : NIAGARA BOTTLING, LLC, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:FORSTHOVEL, JOCHEN; SCHAU, ALEXANDER; REEL/FRAME:042533/0576 EFFECTIVE DATE : 20170524

US9120589 BB	20190207	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US9120589 BB	20340116	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
US9132933 BB	20150915	LSGT	+	granted / extensions (spc, cpc, pte)	
US9132933 BB	20140109	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : NIAGARA BOTTLING, LLC, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:HANAN, JAY CLARKE; REEL/FRAME:031933/0120 EFFECTIVE DATE : 20140109
US9132933 BB	20140113	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : NIAGARA BOTTLING, LLC, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:HANAN, JAY CLARKE; REEL/FRAME:031955/0441 EFFECTIVE DATE : 20140109
US9132933 BB	20150826	LSGT	PAT1	Patented Case	
US9132933 BB	20170301	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WELLS FARGO BANK, NATIONAL ASSOCIATION, AS ADMINIS OLDPARTY : NOTICE AND CONFIRMATION OF GRANT OF SECURITY INTEREST IN PATENTS; ASSIGNOR:NIAGARA BOTTLING, LLC; REEL/FRAME:041843/0947 EFFECTIVE DATE : 20170222
US9132933 BB	20170530	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : NIAGARA BOTTLING, LLC, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:FORSTHOVEL, JOCHEN; SCHAU, ALEXANDER; REEL/FRAME:042533/0576 EFFECTIVE DATE : 20170524
US9132933 BB	20181113	LSRE	CC	CERTIFICATE OF CORRECTION	
US9132933 BB	20190214	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US9132933 BB	20331226	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
WO14105956 A1	20140703	LSPB	+	published / reissued	
WO14105956 A1	20150617	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2895524 COUNTRY OF REF DOCUMENT : CA
WO14105956 A1	20150622	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2013821389 COUNTRY OF REF DOCUMENT : EP
WO14105956 A1	20150625	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 15146876 COUNTRY OF REF DOCUMENT : CO
WO14105956 A1	20150625	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 001200-2015 COUNTRY OF REF DOCUMENT : PE
WO14105956 A1	20150626	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2015550768 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO14105956 A1	20150626	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : MX/A/2015/008422 COUNTRY OF REF DOCUMENT : MX

WO14105956 A1	20150629	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO14105956 A1	20150709	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2013370421 COUNTRY OF REF DOCUMENT : AU DATE OF REF DOCUMENT : 20131226 KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO14105956 A1	20150713	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : IDP00201504351 COUNTRY OF REF DOCUMENT : ID
WO14105956 A1	20170711	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 112015015458 COUNTRY OF REF DOCUMENT : BR KIND CODE OF REF DOCUMENT : A2 DESIGNATED STATE(S) : EFFECTIVE DATE : 20150625
WO15099813 A1	20150702	LSPB	+	published / reissued	
WO15099813 A1	20150915	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2907004 COUNTRY OF REF DOCUMENT : CA
WO15099813 A1	20150918	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2014875517 COUNTRY OF REF DOCUMENT : EP
WO15099813 A1	20150924	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2016561583 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO15099813 A1	20150929	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 15231128 COUNTRY OF REF DOCUMENT : CO
WO15099813 A1	20150929	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 002092-2015 COUNTRY OF REF DOCUMENT : PE
WO15099813 A1	20151012	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : MX/A/2015/014355 COUNTRY OF REF DOCUMENT : MX
WO15099813 A1	20151015	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2014370440 COUNTRY OF REF DOCUMENT : AU DATE OF REF DOCUMENT : 20140116 KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO15099813 A1	20151104	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : IDP00201507146 COUNTRY OF REF DOCUMENT : ID
WO15099813 A1	20160627	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO15099813 A1	20170718	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 112015025191 COUNTRY OF REF DOCUMENT : BR KIND CODE OF REF DOCUMENT : A2 DESIGNATED STATE(S) : EFFECTIVE DATE : 20151001

Title: Bottled water **shipping** rack

Abstract: A stackable crate and modular rack system for horizontally retaining large bottles. The individual crates may be adapted to retain multiple bottles held in various configurations. The crates are designed to provide stability when stacked on top of one another to form a modular rack. The individual crates include an alignment feature, and a locking feature which also provides for sliding one stacked crate over another.

Classifications:

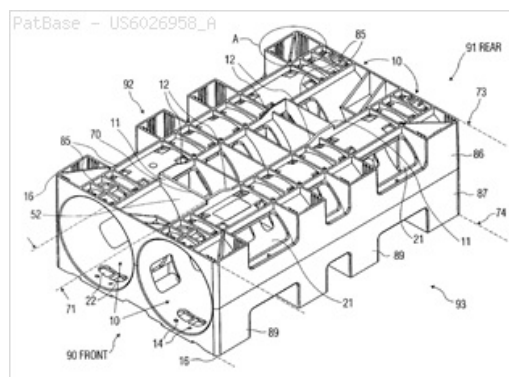
International (IPC 8-9): B65D1/24 B65D19/44 B65D21/00
B65D21/02 (Advanced/Invention);
B65D21/00 (Core/Invention)

International (IPC 1-7): B65D21/00

CPC: B65D1/243 B65D19/44 B65D21/02 B65D2501/24019
B65D2501/2405 B65D2501/2407 B65D2501/24152 B65D2501/24197
B65D2501/24541 B65D2501/24592 B65D2501/24929 B65D21/0209

European: B65D1/24B B65D19/44 B65D21/02 B65D21/02E
L65D501/24B10E3 L65D501/24B18H L65D501/24B2B L65D501/24B4
L65D501/24B4B1 L65D501/24B4F1 L65D501/24B6 L65D501/24B8E

US: 206/3 206/372 206/503



Family:

Publication number	Publication date	Application number	Application date
CA2321913 AA	20000822	CA19992321913	19990302
CA2321913 C	20050705	CA19992321913	19990302
DE69942025 D1	20100401	DE19996042025	19990302
EP1089916 A1	20010411	EP19990911033	19990302
EP1089916 A4	20080416	EP19990911033	19990302
EP1089916 B1	20100217	EP19990911033	19990302
ES2341306 T3	20100617	ES19990911033T	19990302
US6026958 A	20000222	US19980215692	19981218
US6142300 A	20001107	US19990459014	19991210
WO9944900 A1	19990910	WO1999US04507	19990302

Priority:

US19980076774P 19980304 US19980215692 19981218 WO1999US04507 19990302
US19990459014 19991210

Probable Assignee: KELLY DANIEL

Assignee(s): (std): DONNELL EMERSON B ; DONNELL EMERSON B JR ; DONNELL JUN ; KELLY DANIEL E ; KELLY DANIEL

Assignee(s): DONNELL JUN EMERSON B

Inventor(s): (std): DONNELL JR EMERSON B ; KELLY DANIEL ; DONNELL EMERSON B JR ; DONNELL EMERSON B ; KELLY DANIEL E

Agent(s): FETHERSTONHAUGH AND CO; COYLE PHILIP AIDAN

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

Legal status (INPADOC)

[View legal status timeline](#)

Patent	Date recorded	Event group	Code	Event	Details
CA2321913 AA	20000822	LSPB	+	published / reissued	
CA2321913 AA	20020515	LSES	+EEER	EXAMINATION REQUEST	
CA2321913 C	20050705	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2321913 C	20190506	LSLE	-MKEX	EXPIRY	EFFECTIVE DATE : 20190304
CA2321913 C	20190302	PEXP		Calculated Patent Term Expiry	
DE69942025 D1	20110310	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE69942025 D1	20190302	LSLE	-R071	EXPIRY OF RIGHT	
EP1089916 A1	20010411	LSPB	+	published / reissued	
EP1089916 A1	20010411	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20001004
EP1089916 A1	20160429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20160310 YEAR OF FEE PAYMENT : 18

EP1089916 A1	20160429	LSFE	+PGFP	NATIONAL OFFICE TO EPO] ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20160223 YEAR OF FEE PAYMENT : 18
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EP1089916 A1	20160531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20151223 YEAR OF FEE PAYMENT : 18
EP1089916 A1	20160531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20160208 YEAR OF FEE PAYMENT : 18
EP1089916 A4	20080416	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	EFFECTIVE DATE : 20080319
EP1089916 A4	20081112	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20081008
EP1089916 B1	20100217	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1089916 B1	20100217	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP1089916 B1	20100316	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP1089916 B1	20100519	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : T3
EP1089916 B1	20100617	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2341306 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP1089916 B1	20100730	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20100617
EP1089916 B1	20110126	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20101118
EP1089916 B1	20110126	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20100517
EP1089916 B1	20110131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20100217
EP1089916 B1	20110131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20100302
EP1089916 B1	20110331	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20100217

EP1089916 B1	20110729	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20100517
EP1089916 B1	20160208	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 18
EP1089916 B1	20170213	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 19
EP1089916 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170221 YEAR OF FEE PAYMENT : 19
EP1089916 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20170320 YEAR OF FEE PAYMENT : 19
EP1089916 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170213 YEAR OF FEE PAYMENT : 19
EP1089916 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20170124 YEAR OF FEE PAYMENT : 19
EP1089916 B1	20170630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20170214 YEAR OF FEE PAYMENT : 19
EP1089916 B1	20180111	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 20
EP1089916 B1	20180228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20171227 YEAR OF FEE PAYMENT : 20
EP1089916 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 : 20
EP1089916 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180220 YEAR OF FEE PAYMENT : 20
EP1089916 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 : 20
EP1089916 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20180402 YEAR OF FEE PAYMENT : 20
EP1089916 B1	20190302	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R071 REF DOCUMENT NUMBER : 69942025 COUNTRY OF REF DOCUMENT : DE
EP1089916 B1	20190302	PEXP		Calculated Patent Term Expiry	
ES2341306 T3	20100617	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2341306 T3	20190302	PEXP		Calculated Patent Term Expiry	

US6026958 A	20000222	LSGT	+	granted / extensions (spc, cpc, pte)	
US6026958 A	19981218	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KELLY, DANIEL, NEW JERSEY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:KELLY, DANIEL; DONNELL, EMERSON B. JR.; REEL/FRAME:009665/0374 EFFECTIVE DATE : 19981030
US6026958 A	20000210	LSGT	PAT1	Patented Case	
US6026958 A	20000210	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US6026958 A	20030728	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6026958 A	20070621	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US6026958 A	20110721	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US6026958 A	20181218	PEXP		Calculated Patent Term Expiry	
US6142300 A	20001107	LSGT	+	granted / extensions (spc, cpc, pte)	
US6142300 A	19991210	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KELLY, DANIEL, NEW JERSEY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:KELLY, DANIEL; DONNELL, JR., EMERSON B.; REEL/FRAME:010453/0803 EFFECTIVE DATE : 19991208
US6142300 A	20001020	LSGT	PAT1	Patented Case	
US6142300 A	20001020	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US6142300 A	20010529	LSRE	CC	CERTIFICATE OF CORRECTION	
US6142300 A	20040427	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6142300 A	20080417	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US6142300 A	20120411	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US6142300 A	20191210	PEXP		Calculated Patent Term Expiry	
WO9944900 A1	19990910	LSPB	+	published / reissued	
WO9944900 A1	20000822	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2321913 COUNTRY OF REF DOCUMENT : CA
WO9944900 A1	20000822	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2321913 COUNTRY OF REF DOCUMENT : CA KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO9944900 A1	20000901	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : PA/A/2000/008621 COUNTRY OF REF DOCUMENT : MX
WO9944900 A1	20000918	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1999911033 COUNTRY OF REF DOCUMENT : EP
WO9944900 A1	20010411	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1999911033 COUNTRY OF REF DOCUMENT : EP

Title: TWO-COMPONENT POLYURETHANE ADHESIVE FOR ADHESIVELY BONDING MOLDED FIBER PARTS

Abstract: The invention relates to a two-component adhesive on the basis of polyurethanes, having a high adhesive strength, a high glass temperature, a low curing time and a sufficiently long processing time, which can adhesively bond also substrates having uneven surfaces. The invention further relates to the use of the two-component adhesive for the adhesive bonding of molded fiber parts, such as, for example, wing half-shells of rotor blades for wind power plants.

Classifications:

International (IPC 8-9): C08G18/24 C08G18/32 C08G18/36 C08G18/48 C08G18/66 C08G18/72 C08G18/76 C08G18/79 C08K7/14 C09J11/00 C09J175/04 C09J5/00 F16B11/00 (Advanced/Invention)

CPC: C08G18/244 C08G18/36 C08G18/4829 C08G18/6696 C08G18/724 C08G18/246 C08K7/14 C09J175/04 C08G18/3215 C08G18/7671 C08G18/792

Family:

Publication number	Publication date	Application number	Application date
■ CN107108848 A	20170829	CN201580068479	20151117
■ DE102014226277 A1	20160623	DE201410226277	20141217
■ DE502015006706 D1	20181129	DE201550006706T	20151117
■ DK3233950 T3	20190225	DK20150794939T	20151117
■ EP3233950 A1	20171025	EP20150794939	20151117
■ EP3233950 B1	20181031	EP20150794939	20151117
■ ES2706528 T3	20190329	ES20150794939T	20151117
■ PL3233950 T3	20190430	PL20150794939T	20151117
■ US2018051196 AA	20180222	US20170613535	20170605
■ WO16096277 A1	20160623	WO2015EP76753	20151117

Priority:

DE201410226277 20141217 EP20150794939 20151117 WO2015EP76753 20151117

Probable Assignee: HENKEL AND CO KGAA AG

Assignee(s): (std): HENKEL AND AG ; HENKEL AND CO KGAA AG

Inventor(s): (std): THIELE LOTHAR ; JURKSCHAT KLAUS ; POELITZ SILVANA ; ZOELLER THOMAS ; POLITZ SILVANA ; ZOLLER THOMAS

Agent(s): ISERN JORGE

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
CN107108848 A	20170829	LSPB	+	published / reissued	
CN107108848 A	20170829	LSPB	PB01	PUBLICATION	
DE102014226277 A1	20160623	LSPB	+	published / reissued	
DK3233950 T3	20190225	LSGT	+	granted / extensions (spc, cpc, pte)	
DK3233950 T3	20351117	PEXP		Calculated Patent Term Expiry	
EP3233950 A1	20171025	LSPB	+	published / reissued	
EP3233950 A1	20171025	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20170515
EP3233950 A1	20180718	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20180621
EP3233950 B1	20181031	LSGT	+	granted / extensions (spc, cpc, pte)	
EP3233950 B1	20181031	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D TEXT : NOT ENGLISH
EP3233950 B1	20181115	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 1059286 COUNTRY OF REF DOCUMENT : AT

					KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20181115
EP3233950 B1	20181128	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D TEXT : LANGUAGE OF EP DOCUMENT: GERMAN
EP3233950 B1	20181129	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 502015006706 COUNTRY OF REF DOCUMENT : DE
EP3233950 B1	20181231	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20181120 YEAR OF FEE PAYMENT : 4
EP3233950 B1	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 : 4
EP3233950 B1	20190131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20181121 YEAR OF FEE PAYMENT : 4
EP3233950 B1	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 : 4
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EP3233950 B1	20190228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20181219 YEAR OF FEE PAYMENT : 4
EP3233950 B1	20190228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20181120 YEAR OF FEE PAYMENT : 4
EP3233950 B1	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 : 4
EP3233950 B1	20190312	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : LT REF LEGAL EVENT CODE : MG4D
EP3233950 B1	20190329	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2706528 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) : EFFECTIVE DATE : 20190329
EP3233950 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 : 20181031
EP3233950 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 : 20190228					
EP3233950 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 : 20181031
EP3233950 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 : 20190131
EP3233950 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 : 20181031
EP3233950 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20181123 YEAR OF FEE PAYMENT : 4
EP3233950 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20181130 YEAR OF FEE PAYMENT : 4
EP3233950 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NO PAYMENT DATE : 20181126 YEAR OF FEE PAYMENT : 4
EP3233950 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 : 20181031
EP3233950 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 : 20190201
EP3233950 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 : 20190301
EP3233950 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 : 20181031
EP3233950 B1	20190531	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

EP3233950 B1	20351117	PEXP		Calculated Patent Term Expiry	
ES2706528 T3	20190329	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2706528 T3	20351117	PEXP		Calculated Patent Term Expiry	
PL3233950 T3	20190430	LSGT	+	granted / extensions (spc, cpc, pte)	
US2018051196 AA	20180222	LSPB	+	published / reissued	
US2018051196 AA	20171026	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : HENKEL AG & CO. KGAA, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:THIELE, LOTHAR; POELITZ, SILVANA; ZOELLER, THOMAS; AND OTHERS; SIGNING DATES FROM 20171002 TO 20171016; REEL/FRAME:043953/0626
US2018051196 AA	20180623	LSES	-NFA2	Non Final Action Counted, Not Yet Mailed	
US2018051196 AA	20180626	LSES	NFA1	Non Final Action Mailed	
US2018051196 AA	20190221	LSWD	-STCB	INFORMATION ON STATUS: APPLICATION DISCONTINUATION	TEXT : FINAL REJECTION MAILED
WO16096277 A1	20160623	LSPB	+	published / reissued	
WO16096277 A1	20170619	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE

Title: PRODUCE **SHIPPING** CONTAINER

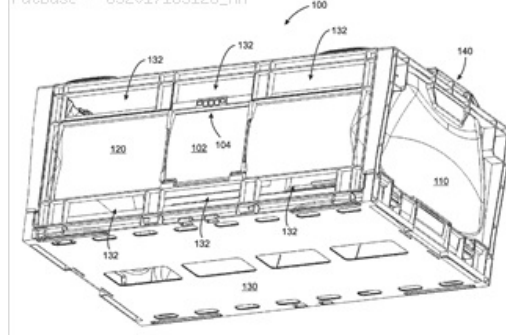
Abstract: A container having walls, one having a projection including a hook and an exterior surface opposite the hook having an external contact location, the hook extending away from the contact surface, the contact location disposed interiorly of the hook. The container includes a door, and a latch coupled to the door by a spring. The latch comprises a catch and a binding arm, and has a contact surface positioned to fit the projection between the catch and contact surface. The latch has a locked position in which the catch and hook maintain the door in the closed position, and an unlocked position in which the door is movable. The spring biases the latch into the locked position. Sufficient pressure on the latch overcomes the biasing to achieve the unlocked position, to allow the open position to be attained. When in the locked position, the contact surface faces the contact location.

Classifications:

International (IPC 8-9): A01F25/14 B65D21/02 B65D21/08 B65D25/00 B65D25/04 B65D45/16 B65D6/18 B65D85/34 E05C19/02 E05C19/10 (Advanced/Invention)

CPC: B65D25/005 B65D11/1833 B65D21/086 B65D21/0201 B65D85/34

PatBase - US2017183126_AA



Family:

Publication number	Publication date	Application number	Application date
CA3006797 AA	20180529	CA20163006797	20161222
CO20180006335 A2	20180710	CO20180006335	20180619
DOP2018000152 A	20180715	DO20180000152	20180620
EP3393231 A1	20181031	EP20160880074	20161222
MX2018007283 A1	20180928	MX20180007283	20161222
PH2018501312 A	20190227	PH20180501312	20180620
US2017183126 AA	20170629	US20160387844	20161222
US10273052 BB	20190430	US20160387844	20161222
WO17112840 A1	20170629	WO2016US68192	20161222

Priority:

US20150387285P 20151223 US20160387844 20161222 WO2016US68192 20161222

Probable Assignee: ARENA PACKAGING LLC

Assignee(s): (std): ARENA PACKAGING LLC

Assignee(s): WILCOX DONALD E

Inventor(s): (std): WILCOX DONALD E ; DONALD E WILCOX ; WILCOX E DONALD

Inventor(s): WILCOX E

Agent(s): BERESKIN AND PARR LLP SENCRL SRL; CARLOS REINALDO OLARTE GARCIA; VOSSIUS AND PARTNER PATENTANWAELTE RECHTSANWAELTE MBB; BOND SCHOENECK AND KING PLLC; POWERS JEFFREY; POWERS JEFFREY B

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 KH 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 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
CA3006797 AA	20180529	LSPB	+	published / reissued	
CO20180006335 A2	20180710	LSPB	+	published / reissued	
DOP2018000152 A	20180715	LSPB	+	published / reissued	
EP3393231 A1	20181031	LSPB	+	published / reissued	
EP3393231 A1	20181031	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20180720
MX2018007283 A1	20180928	LSPB	+	published / reissued	
PH2018501312 A	20190227	LSPB	+	published / reissued	
US10273052 BB	20190430	LSGT	+	granted / extensions (spc, cpc, pte)	
US10273052 BB	20170119	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ARENA PACKAGING, LLC,

					NEW YORK OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:WILCOX, DONALD E.; REEL/FRAME:041013/0297 EFFECTIVE DATE : 20170109	
US10273052 BB	20190410	LSGT	PAT1	Patented Case		
US10273052 BB	20371208	PEXP		Calculated Patent Term Expiry (PTA 351 days)		
US2017183126 AA	20170629	LSPB	+	published / reissued		
US2017183126 AA	20190206	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications		
US2017183126 AA	20190313	LSFE	+PPR1	Publications -- Issue Fee Payment Received		
US2017183126 AA	20190315	LSFE	+PPV1	Publications -- Issue Fee Payment Verified		
US2017183126 AA	20190410	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE	
WO17112840 A1	20170629	LSPB	+	published / reissued		
WO17112840 A1	20180529	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 3006797 COUNTRY OF REF DOCUMENT : CA	
WO17112840 A1	20180605	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : CR2018-000313 COUNTRY OF REF DOCUMENT : CR	
WO17112840 A1	20180614	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : MX/A/2018/007283 COUNTRY OF REF DOCUMENT : MX	
WO17112840 A1	20180620	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 12018501312 COUNTRY OF REF DOCUMENT : PH	
WO17112840 A1	20180626	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE	
WO17112840 A1	20180723	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2016880074 COUNTRY OF REF DOCUMENT : EP	

Title: METHOD AND APPARATUS FOR THE PROCESSING OF MEDICAL WASTE MATERIALS

Abstract: An apparatus and novel method for processing medical waste materials comprising an elongate pressure vessel of generally cylindrical configuration having an inlet end, and a closely fitting closure member for the inlet. An elongate drum of generally cylindrical configuration is mounted in the vessel for rotation about its longitudinal axis, which drum can be selectively driven in either rotative direction. The longitudinal axis of the drum is disposed at a slight angle of incline to the horizontal, placing the inlet end at a slightly higher elevation than the opposite end. A helically configured member is disposed along the interior perimeter of said drum, such that during rotation of the drum in a first rotative direction, the helically configured member moves the waste material in a direction away from the inlet end of the drum, whereas during rotation of the drum in the second rotative direction, the helically configured member moves the waste material toward the inlet. The helically configured member is utilized in conjunction with a plurality of non-obstructive lifting paddles that serve to effect a highly advantageous, very thorough mixing of the waste materials. Moisture and heat are typically utilized to aid the processing of the waste, such as by the addition of steam. Discharge of the fully processed waste material is effected when the drum is being rotated in the second rotative direction, after the closure member has been opened.

Classifications:

International (ipc 8-9): A61G12/00 A61L11/00 A61L2/04 B02C17/16

B02C19/18 B09B3/00 (Advanced/Invention);

A61G12/00 A61L11/00 B02C17/16 B02C19/00 B09B3/00

B09B5/00 (Advanced/Non-invention);

A61G12/00 A61L11/00 A61L2/04 B02C17/16 B02C19/00

B09B3/00 (Core/Invention);

B02C (Subclass/Invention)

International (ipc 1-7): A61G12/00 A61L11/00 A61L2/04 B02C17/16

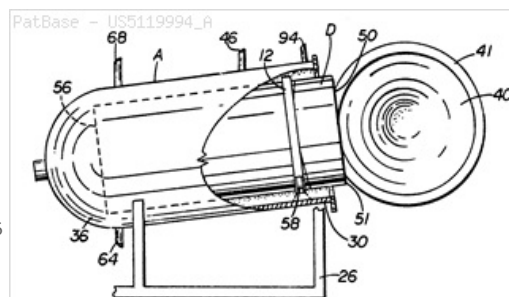
B02C19/12 B02C19/18 B09B3/00

CPC: A61L2/04 A61L11/00 B09B3/00 Y10S241/606 B09B3/0075 A61L2/06

European: A61L11/00 B09B3/00M

US: 241/17 241/18 241/21 241/23 241/26 241/284 241/299 241/606

241/65 422/26 422/295 422/309 422/33



Family:

Publication number	Publication date	Application number	Application date
AT176607 E	19990215	AT19920915658T	19920520
AU199223362 A1	19931213	AU19920023362	19920520
AU665960 B2	19960125	AU19920023362	19920520
CA2118019 AA	19941012	CA19922118019	19920520
CA2118019 C	19980428	CA19922118019	19920520
DE69228431 D1	19990325	DE19926028431	19920520
DE69228431 T2	19990701	DE19926028431T	19920520
EP0684874 A1	19951206	EP19920915658	19920520
EP0684874 A4	19960124	EP19920915658	19920520
EP0684874 B1	19990210	EP19920915658	19920520
ES2127219 T3	19990416	ES19920915658T	19920520
HK1010700 A1	20000407	HK19980111673	19981030
JP3421339 B2	20030630	JP19930520158T	19920520
JP8500259 T2	19960116	JP19930520158T	19920520
KR0164912 B1	19990115	KR19940074179	19941119
KR100164912 B1	19990115	KR19940704179	19941119
KR19950701553 A	19950428	KR19940704179	19941119
KR19957001553 A	19950428	KR19947004179	19920520
US5119994 A	19920609	US19900604761	19901029
WO9323167 A1	19931125	WO1992US04270	19920520

Priority:

US19900604761 19901029 CA19922118019 19920520 WO1992US04270 19920520

Probable Assignee: PLACZEK TERRANCE M TICKFAW LA US

Assignee(s): (std): PLACZEK TERRANCE M ; TERRANCE M PLACZEK

Assignee(s): PLACZEK TERRANCE M TICKFAW LA US ; PLACZEK FAMILY TRUST

Inventor(s): (std): PLACZEK TERRANCE M ; TERRANCE M PLACZEK

Inventor(s): TERRANCEM.PLACZEK

Agent(s): PHILLIPS ORMONDE FITZPATRICK; MACRAE AND CO

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

Legal status (INPADOC)

View legal status timeline

Patent	Date recorded	Event group	Code	Event	Details
AT176607 E	19990215	LSGT	+	granted / extensions (spc, cpc, pte)	
AT176607 E	19991115	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	
AT176607 E	20090215	LSLE	-REN	CEASED DUE TO NON-	

				PAYMENT OF THE ANNUAL FEE	
AT176607 E	20120520	PEXP		Calculated Patent Term Expiry	
AU199223362 A1	19931213	LSPB	+	published / reissued	
AU665960 B2	19960125	LSGT	+	granted / extensions (spc, cpc, pte)	
AU665960 B2	20120520	PEXP		Calculated Patent Term Expiry	
CA2118019 AA	19941012	LSPB	+	published / reissued	
CA2118019 AA	19941012	LSES	+EEER	EXAMINATION REQUEST	
CA2118019 C	19980428	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2118019 C	20120520	LSLE	-MKEX	EXPIRY	
CA2118019 C	20120520	PEXP		Calculated Patent Term Expiry	
DE69228431 D1	20000302	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE69228431 D1	20090326	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
DE69228431 T2	19990701	LSGT	+	granted / extensions (spc, cpc, pte)	
DE69228431 T2	20120520	PEXP		Calculated Patent Term Expiry	
EP0684874 A1	19951206	LSPB	+	published / reissued	
EP0684874 A1	19951206	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19940510
EP0684874 A4	19960124	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	
EP0684874 A4	19970521	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 19970403
EP0684874 B1	19990210	LSGT	+	granted / extensions (spc, cpc, pte)	
EP0684874 B1	19990210	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 19990210
EP0684874 B1	19990215	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP0684874 B1	19990416	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2127219 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP0684874 B1	19990510	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 19990510
EP0684874 B1	19991130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 19991130
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EP0684874 B1	20040520	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT	COUNTRY OF REF DOCUMENT : LU NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES

				INFORMATION FROM NATIONAL OFFICE TO EPO]	LAPSED DATE : 20040520
EP0684874 B1	20070502	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20070502 YEAR OF FEE PAYMENT : 16
EP0684874 B1	20070529	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20070529 YEAR OF FEE PAYMENT : 16
EP0684874 B1	20070530	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20070530 YEAR OF FEE PAYMENT : 16
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EP0684874 B1	20081231	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP0684874 B1	20090130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LI NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20080531
EP0684874 B1	20090130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20080531
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EP0684874 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 NON-PAYMENT OF DUE FEES LAPSED DATE : 20111201
EP0684874 B1	20120330	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20110531
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EP0684874 B1	20120831	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 : 20120519
EP0684874 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 : 20080520
EP0684874 B1	20130718	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20130718
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EP0684874 B1	20120519	PEXP		Calculated Patent Term Expiry	
EP0684874 B1	20120520	PEXP		Calculated Patent Term Expiry	
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HK1010700 A1	20000407	LSPB	+	published / reissued	
HK1010700 A1	20041215	LSFE	+PF	PATENT IN FORCE	
HK1010700 A1	20120622	LSLE	-PE	PATENT EXPIRED	EFFECTIVE DATE : 20120519
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JP3421339 B2	20061010	LSFE	+R250	(spc, cpc, pte) RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
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JP3421339 B2	20100408	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 7
JP3421339 B2	20100413	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 8
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JP3421339 B2	20120520	PEXP		Calculated Patent Term Expiry	
KR0164912 B1	19990115	LSGT	+	granted / extensions (spc, cpc, pte)	
KR0164912 B1	20141119	PEXP		Calculated Patent Term Expiry	
KR100164912 B1	19990115	LSGT	+	granted / extensions (spc, cpc, pte)	
KR100164912 B1	20141119	PEXP		Calculated Patent Term Expiry	
KR19950701553 A	19950428	LSPB	+	published / reissued	
KR19957001553 A	19950428	LSPB	+	published / reissued	
US5119994 A	19920609	LSGT	+	granted / extensions (spc, cpc, pte)	
US5119994 A	19920427	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PLACZEK FAMILY TRUST, THE, LOUISIANA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNOR:PLACZEK, TERRANCE M.; REEL/FRAME:006094/0218 EFFECTIVE DATE : 19920408
US5119994 A	19920527	LSGT	PAT1	Patented Case	
US5119994 A	19920527	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5119994 A	19960117	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5119994 A	19991207	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5119994 A	20040202	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5119994 A	20101029	PEXP		Calculated Patent Term Expiry	
WO9323167 A1	19931125	LSPB	+	published / reissued	
WO9323167 A1	19931124	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1992915658 COUNTRY OF REF DOCUMENT : EP
WO9323167 A1	19941012	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2118019 COUNTRY OF REF DOCUMENT : CA
WO9323167 A1	19951206	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1992915658 COUNTRY OF REF DOCUMENT : EP

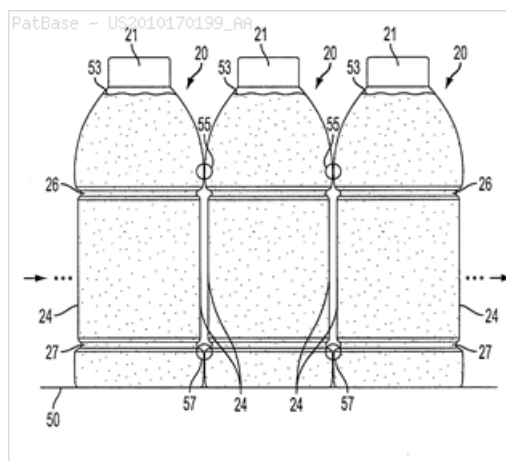
WO9323167 A1	19990210	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1992915658 COUNTRY OF REF DOCUMENT : EP
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Title: METHOD AND SYSTEM FOR HANDLING CONTAINERS

Abstract: Method and system for handling a plurality of hot-filled and capped containers having temporary deformations or distortions caused by vacuums induced in the containers. For each container, temporary deformations are confined or directed to a particular portion of the container. Annular hoop rings can be provided to confine the temporary deformations to a smooth sidewall portion of the container between the annular hoop rings. Alternatively, one or more supplemental vacuum panels can be provided to confine or direct the temporary deformation thereto. The annular hoop rings and the one or more supplemental vacuum panels can provide for substantially stable touch points for the container. The containers are conveyed with temporary deformations such that substantially stable contact points of each container are in contact with corresponding substantially stable contact points of other containers. After the conveying, a moveable element in a bottom end of each container is activated substantially permanently to remove the vacuum in the container.

Classifications:

International (IPC 8-9): B65B3/00 B65B3/04 B65B35/10 B65B55/14 B65B61/24 B65B61/28 B65B63/08 B65B65/00 B65B7/28 B65D1/02 B65D1/42 B65D1/44 B65D25/00 B65D6/00 B65D6/28 B65D79/00 B65D8/04 B65D8/06 B65D8/18 B65D90/02 B65D90/12 B67B1/00 B67C3/02 B67C3/04 B67C3/14 B67C3/22 B67C3/24 B67C7/00 F28F7/00 (Advanced/Invention); B65B61/28 B67C3/22 (Advanced/Non-invention); B65B3/00 B65B61/00 B65B63/00 B65B65/00 B65B7/28 B65D90/12 (Core/Invention)
CPC: B67C3/045 B65B61/24 B65B61/28 B65D1/0261 B65D2501/0036 B67C2003/226
European: B65B61/24 B67C3/04A L65B61/28 L67C3/22L
US: 141/168 141/168S 141/82 165/138 215/373 215/381 220/609 220/672 220/721 220/721S 53/127 53/127P 53/127S 53/143 53/143S 53/266.1 53/266.100S 53/281 53/390 53/390S 53/440 53/440P 53/471 53/471S 53/485 53/485S 53/486

**Family:**

Publication number	Publication date	Application number	Application date
AU2010203790 AA	20100715	AU20100203790	20100104
BRPI1007385 A2	20160216	BR2010PI07385	20100104
CA2748184 AA	20110622	CA20102748184	20100104
CA2748184 C	20180213	CA20102748184	20100104
CA2960638 AA	20110622	CA20102960638	20100104
CA2960638 C	20180612	CA20102960638	20100104
DE602010023045 D1	20150423	DE201060023045T	20100104
EP2389329 A1	20111130	EP20100729403	20100104
EP2389329 A4	20130619	EP20100729403	20100104
EP2389329 B1	20150311	EP20100729403	20100104
ES2539328 T3	20150629	ES20100729403T	20100104
JP2012514566 T2	20120628	JP20110544643T	20100104
JP5619771 B2	20141105	JP20110544643T	20100104
MX2011007233 A1	20110804	MX20110007233	20100104
NZ593486 A	20131025	NZ20100593486	20100104
US2010170199 AA	20100708	US20090349268	20090106
US2010170200 AA	20100708	US20100651461	20100102
US2011185677 AA	20110804	US20110087472	20110415
US2011266293 AA	20111103	US20110184368	20110715
US2012240515 AA	20120927	US20120450872	20120419
US7926243 BB	20110419	US20090349268	20090106
US8096098 BB	20120117	US20100651461	20100102
US8171701 BB	20120508	US20110087472	20110415
US8429880 BB	20130430	US20120450872	20120419
US10035690 BB	20180731	US20110184368	20110715
WO10080731 A1	20100715	WO2010US20045	20100104

Priority:

US20090349268 20090106 US20100651461 20100102 CA20102748184 20100104
 EP20100729403 20100104 WO2010US20045 20100104 US20110087472 20110415
 US20110184368 20110715 US20120450872 20120419 CA20172748184 20170321

Probable Assignee: GRAHAM PACKAGING CO LP

Assignee(s): (std): BYSICK SCOTT B ; BYSICK SCOTT E ; GRAHAM PACKAGING CO ; KELLEY PAUL V ; GRAHAM PACKAGING CO LP

Assignee(s): REYNOLDS GROUP HOLDINGS INC ; GRAHAM PACKAGING CO LP YORK ; GRAHAM PACKAGING COMPANY L P ; GRAHAM PACKAGING COMPANY LP ; BANK OF NEW YORK MELLON

Inventor(s): (std): BYSICK SCOTT B ; BYSICK SCOTT E ; KELLEY PAUL V

Inventor(s): SCOTT E BYSICK ; PAUL V KELLEY

Agent(s): PIZZEYS; PIZZEYS PATENT AND TRADE MARK ATTORNEYS PTY LTD; MCCARTHY TETRAULT LLP; GOWLING WLG CANADA LLP; ZEITLER VOLPERT KANDBINDER PATENT U RECHTSANWAELTE PARTNERSCHAFT MBB; ILGART JEAN CHRISTOPHE; LINAGE RAFAEL; MILES AND STOCKBRIDGE PC; JAMES T; STEPHEN W; BAKER BOTTS LLP; CARMICHAEL JAMES T 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
AU2010203790 AA	20100715	LSPB	+	published / reissued	
AU2010203790 AA	20140731	LSLE	-MK4	APPLICATION LAPSED SECTION 142(2) (D) - NO CONTINUATION FEE PAID FOR THE APPLICATION	
BRPI1007385 A2	20160913	LSFE	-B08F	APPLICATION FEES: DISMISSAL - ARTICLE 86 OF INDUSTRIAL PROPERTY LAW	TEXT : REFERENTE AS 5A E 6A ANUIDADES.
BRPI1007385 A2	20170110	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 2384 DE 13-09-2016 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.
CA2748184 AA	20110622	LSPB	+	published / reissued	
CA2748184 AA	20141120	LSSES	+EEER	EXAMINATION REQUEST	EFFECTIVE DATE : 20141104
CA2748184 C	20180213	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2748184 C	20300104	PEXP		Calculated Patent Term Expiry	
CA2960638 AA	20110622	LSPB	+	published / reissued	
CA2960638 AA	20170324	LSSES	+EEER	EXAMINATION REQUEST	EFFECTIVE DATE : 20170310
CA2960638 C	20180612	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2960638 C	20300104	PEXP		Calculated Patent Term Expiry	
EP2389329 A1	20111130	LSPB	+	published / reissued	
EP2389329 A1	20111130	LSSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20110712
EP2389329 A1	20160229	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20151221 YEAR OF FEE PAYMENT : 7
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EP2389329 A4	20141022	LSGT	+INTG	INTENTION TO	EFFECTIVE DATE : 20140923	

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EP2389329 B1	20150408	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP2389329 B1	20150415	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 715174 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20150415
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EP2389329 B1	20150629	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2539328 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) : EFFECTIVE DATE : 20150629
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EP2389329 B1	20150815	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MK05 REF DOCUMENT NUMBER : 715174 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20150311
EP2389329 B1	20150825	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : LT REF LEGAL EVENT CODE : MG4D

EP2389329 B1	20150831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LV NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20150311
EP2389329 B1	20150831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20150612
EP2389329 B1	20151030	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20150311
EP2389329 B1	20151030	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20150311
EP2389329 B1	20151030	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20150311
EP2389329 B1	20151030	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20150713
EP2389329 B1	20151030	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : EE NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20150311
EP2389329 B1	20151130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20150311
EP2389329 B1	20151130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IS NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20150711
EP2389329 B1	20151214	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 602010023045 COUNTRY OF REF DOCUMENT : DE
EP2389329 B1	20160126	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP

YEAR OF FEE PAYMENT : 7					
EP2389329 B1	20160129	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20150311
EP2389329 B1	20160217	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20151214
EP2389329 B1	20160229	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20150311
EP2389329 B1	20160831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160104
EP2389329 B1	20160831	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP2389329 B1	20160930	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20150311
EP2389329 B1	20161031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20160131
EP2389329 B1	20161031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LI NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20160131
EP2389329 B1	20161102	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP2389329 B1	20170125	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 8
EP2389329 B1	20170131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20160104
EP2389329 B1	20170228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20161221 YEAR OF FEE PAYMENT : 8
EP2389329 B1	20170331	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20170126 YEAR OF FEE PAYMENT : 8

				OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	
EP2389329 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170125 YEAR OF FEE PAYMENT : 8
EP2389329 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20170127 YEAR OF FEE PAYMENT : 8
EP2389329 B1	20170428	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170125 YEAR OF FEE PAYMENT : 8
EP2389329 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20170127 YEAR OF FEE PAYMENT : 8
EP2389329 B1	20170531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20170127 YEAR OF FEE PAYMENT : 8
EP2389329 B1	20170630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20170126 YEAR OF FEE PAYMENT : 8
EP2389329 B1	20170630	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20170124 YEAR OF FEE PAYMENT : 8
EP2389329 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 : 20150311
EP2389329 B1	20180125	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 9
EP2389329 B1	20180330	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20180125 YEAR OF FEE PAYMENT : 9
EP2389329 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20180219 YEAR OF FEE PAYMENT : 9

EP2389329 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
EP2389329 B1	20180430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20180123 YEAR OF FEE PAYMENT : 9
EP2389329 B1	20180531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SM NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20150311
EP2389329 B1	20180531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU NOTIFICATIONNOFLAPSE : 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 : 20100104
EP2389329 B1	20180531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20150311
EP2389329 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20180125 YEAR OF FEE PAYMENT : 9
EP2389329 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20180123 YEAR OF FEE PAYMENT : 9
EP2389329 B1	20180531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20180125 YEAR OF FEE PAYMENT : 9
EP2389329 B1	20180629	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MT NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20160131
EP2389329 B1	20180629	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20150311
EP2389329 B1	20180629	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MK NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20150311

EP2389329 B1	20180731	LSLE	-PG25	OFFICE TO EPO] LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BG NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20150311
EP2389329 B1	20180731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180329 YEAR OF FEE PAYMENT : 9
EP2389329 B1	20190131	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20180102 YEAR OF FEE PAYMENT : 9
EP2389329 B1	20300104	PEXP		Calculated Patent Term Expiry	
ES2539328 T3	20150629	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2539328 T3	20300104	PEXP		Calculated Patent Term Expiry	
JP2012514566 T2	20121116	LSSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20121115
JP2012514566 T2	20131204	LSSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20131203
JP2012514566 T2	20140604	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20140603
JP2012514566 T2	20140811	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2012514566 T2	20140820	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20140819
JP2012514566 T2	20140925	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20140917
JP2012514566 T2	20140926	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 5619771 COUNTRY OF REF DOCUMENT : JP
JP5619771 B2	20141105	LSGT	+	granted / extensions (spc, cpc, pte)	
JP5619771 B2	20140821	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP5619771 B2	20140922	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP5619771 B2	20140926	LSGT	+R150	特許証 (Patent certificate)	
JP5619771 B2	20170907	LSFE	R20	特許料納付書 (Patent fee payment form)	

JP5619771 B2	20170912	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5619771 B2	20180927	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5619771 B2	20181002	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5619771 B2	20300104	PEXP		Calculated Patent Term Expiry	
MX2011007233 A1	20110804	LSPB	+	published / reissued	
MX2011007233 A1	20150123	LSGT	+FG	GRANT OR REGISTRATION	
NZ593486 A	20131025	LSPB	+	published / reissued	
NZ593486 A	20140131	LSGT	+PSEA	PATENT SEALED	
NZ593486 A	20140328	LSFE	+RENEW	RENEWAL (RENEWAL FEES ACCEPTED)	TEXT : PATENT RENEWED FOR 3 YEARS UNTIL 04 JAN 2017 BY COMPUTER PACKAGES INC EFFECTIVE DATE : 20140228
NZ593486 A	20161223	LSFE	+RENEW	RENEWAL (RENEWAL FEES ACCEPTED)	TEXT : PATENT RENEWED FOR 1 YEAR UNTIL 04 JAN 2018 BY COMPUTER PACKAGES INC EFFECTIVE DATE : 20161220
NZ593486 A	20180126	LSFE	+RENEW	RENEWAL (RENEWAL FEES ACCEPTED)	TEXT : PATENT RENEWED FOR 1 YEAR UNTIL 04 JAN 2019 BY IPAN GMBH EFFECTIVE DATE : 20180102
NZ593486 A	20190125	LSFE	+RENEW	RENEWAL (RENEWAL FEES ACCEPTED)	TEXT : PATENT RENEWED FOR 1 YEAR UNTIL 04 JAN 2020 BY JAMES + WELLS EFFECTIVE DATE : 20190103
US10035690 BB	20180731	LSGT	+	granted / extensions (spc, cpc, pte)	
US10035690 BB	20110901	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRAHAM PACKAGING COMPANY, L.P., PENNSYLVANIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:KELLEY, PAUL V.; BYSICK, SCOTT E.; SIGNING DATES FROM 20090106 TO 20090112; REEL/FRAME:026841/0848
US10035690 BB	20110926	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : REYNOLDS GROUP HOLDINGS INC., NEW ZEALAND OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:GRAHAM PACKAGING COMPANY, L.P.; REEL/FRAME:026970/0699 EFFECTIVE DATE : 20110908
US10035690 BB	20310715	PEXP		Calculated Patent Term Expiry	
US2010170199 AA	20100708	LSPB	+	published / reissued	
US2010170199 AA	20110330	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2010170200 AA	20100708	LSPB	+	published / reissued	
US2010170200 AA	20110926	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : REYNOLDS GROUP HOLDINGS INC., NEW ZEALAND OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:GRAHAM PACKAGING COMPANY, L.P.; REEL/FRAME:026970/0699 EFFECTIVE DATE : 20110908
US2010170200 AA	20111228	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2011185677 AA	20110804	LSPB	+	published /	

reissued					
US2011185677 AA	20110926	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : REYNOLDS GROUP HOLDINGS INC., NEW ZEALAND OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:GRAHAM PACKAGING COMPANY, L.P.; REEL/FRAME:026970/0699 EFFECTIVE DATE : 20110908
US2011185677 AA	20120320	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRAHAM PACKAGING COMPANY, L.P., PENNSYLVANIA OLDPARTY : TERMINATION AND RELEASE OF SECURITY INTEREST IN PATENTS; ASSIGNOR:REYNOLDS GROUP HOLDINGS INC.; REEL/FRAME:027895/0738 EFFECTIVE DATE : 20120320
US2011185677 AA	20120322	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : THE BANK OF NEW YORK MELLON, NEW YORK OLDPARTY : PATENT SECURITY AGREEMENT; ASSIGNOR:GRAHAM PACKAGING COMPANY, L.P.; REEL/FRAME:027910/0609 EFFECTIVE DATE : 20120320
US2011185677 AA	20120418	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2011266293 AA	20111103	LSPB	+	published / reissued	
US2011266293 AA	20120320	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRAHAM PACKAGING COMPANY, L.P., PENNSYLVANIA OLDPARTY : TERMINATION AND RELEASE OF SECURITY INTEREST IN PATENTS; ASSIGNOR:REYNOLDS GROUP HOLDINGS INC.; REEL/FRAME:027895/0738 EFFECTIVE DATE : 20120320
US2011266293 AA	20120322	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : THE BANK OF NEW YORK MELLON, NEW YORK OLDPARTY : PATENT SECURITY AGREEMENT; ASSIGNOR:GRAHAM PACKAGING COMPANY, L.P.; REEL/FRAME:027910/0609 EFFECTIVE DATE : 20120320
US2011266293 AA	20161117	LSES	NFA1	Non Final Action Mailed	
US2011266293 AA	20171017	LSES	+ALW2	Allowed -- Notice of Allowance Not Yet Mailed	
US2011266293 AA	20171018	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2011266293 AA	20171102	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2011266293 AA	20180119	LSFE	+PPR1	Publications -- Issue Fee Payment Received	
US2011266293 AA	20180122	LSFE	+PPV1	Publications -- Issue Fee Payment Verified	
US2011266293 AA	20180711	LSGT	PAT1	Patented Case	
US2011266293 AA	20180711	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2012240515 AA	20120927	LSPB	+	published / reissued	
US2012240515 AA	20130410	LSGT	STCF	INFORMATION	TEXT : PATENTED CASE

					ON STATUS: PATENT GRANT
US7926243 BB	20110419	LSGT	+	granted / extensions (spc, cpc, pte)	
US7926243 BB	20090130	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRAHAM PACKAGING COMPANY, L.P., PENNSYLVANIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:KELLEY, PAUL V., MR.; BYSICK, SCOTT E., MR.; SIGNING DATES FROM 20090106 TO 20090112; REEL/FRAME:022181/0495
US7926243 BB	20110330	LSGT	PAT1	Patented Case	
US7926243 BB	20110926	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : REYNOLDS GROUP HOLDINGS INC., NEW ZEALAND OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:GRAHAM PACKAGING COMPANY, L.P.; REEL/FRAME:026970/0699 EFFECTIVE DATE : 20110908
US7926243 BB	20111114	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRAHAM PACKAGING COMPANY, L.P., PENNSYLVANIA OLDPARTY : NUNC PRO TUNC ASSIGNMENT; ASSIGNORS:KELLEY, PAUL V.; BYSICK, SCOTT E.; REEL/FRAME:027221/0436 EFFECTIVE DATE : 20090106
US7926243 BB	20120320	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRAHAM PACKAGING COMPANY, L.P., PENNSYLVANIA OLDPARTY : TERMINATION AND RELEASE OF SECURITY INTEREST IN PATENTS; ASSIGNOR:REYNOLDS GROUP HOLDINGS INC.; REEL/FRAME:027895/0738 EFFECTIVE DATE : 20120320
US7926243 BB	20120322	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : THE BANK OF NEW YORK MELLON, NEW YORK OLDPARTY : PATENT SECURITY AGREEMENT; ASSIGNOR:GRAHAM PACKAGING COMPANY, L.P.; REEL/FRAME:027910/0609 EFFECTIVE DATE : 20120320
US7926243 BB	20141020	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US7926243 BB	20290607	PEXP		Calculated Patent Term Expiry (PTA 152 days)	
US8096098 BB	20120117	LSGT	+	granted / extensions (spc, cpc, pte)	
US8096098 BB	20100104	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRAHAM PACKAGING COMPANY, L.P., PENNSYLVANIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:KELLEY, PAUL V; BYSICK, SCOTT E; SIGNING DATES FROM 20090106 TO 20090112; REEL/FRAME:023729/0706
US8096098 BB	20111228	LSGT	PAT1	Patented Case	
US8096098 BB	20120320	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GRAHAM PACKAGING COMPANY, L.P., PENNSYLVANIA OLDPARTY : TERMINATION AND RELEASE OF SECURITY INTEREST IN PATENTS; ASSIGNOR:REYNOLDS GROUP HOLDINGS INC.; REEL/FRAME:027895/0738 EFFECTIVE DATE : 20120320
US8096098 BB	20120322	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : THE BANK OF NEW YORK MELLON, NEW YORK OLDPARTY : PATENT SECURITY AGREEMENT; ASSIGNOR:GRAHAM PACKAGING COMPANY, L.P.; REEL/FRAME:027910/0609 EFFECTIVE DATE : 20120320

US8096098 BB	20150717	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8096098 BB	20300305	PEXP		Calculated Patent Term Expiry (PTA 62 days and a terminal disclaimer has been filed)	
US8171701 BB	20120508	LSGT	+	granted / extensions (spc, cpc, pte)	
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US8429880 BB	20320419	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
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Title: MECHANIZED SEPARATION AND RECOVERY SYSTEM FOR SOLID WASTE

Abstract: Methods and systems for separating a mixed waste into a wet organic fraction, a dry organic fraction, and an inorganic fraction are achieved by (i) comminuting the mixed solid waste, (ii) fractionating the comminuted stream by size to produce two or more particle-sized waste streams, and (iii) processing one or more of the particle-sized waste streams using density separation to produce an intermediate waste stream, and (iv) recovering a homogenous product (e.g., a recyclable material or an organic fuel) from the intermediate waste stream.

Classifications:

International (IPC 8-9): B02C18/00 B02C19/00 B02C23/00 B02C23/08 B02C23/14 B02C23/18 B03B9/06 B03C1/00 B03C1/02 B03C1/18 B03C1/23 B03C1/24 B03C1/247 B03C1/30 B07B1/00 B07B11/04 B07B11/06 B07B13/04 B07B13/08 B07B15/00 B07B4/02 B07B4/04 B07B9/00 B07B9/02 B09B B09B3/00 B09B5/00 B29B17/02 C02F C02F11/04 C02F11/12 C08J C08J11/00 C08J11/04 C10G1/10 C10L C10L1/00 C10L3/00 C10L3/08 C10L3/10 C10L5/00 C10L5/46 C12P3/00 C12S3/00 C12S9/00 C22B1/00 C22B7/00

F02B63/04 (Advanced/Invention);

B29B17/02 (Advanced/Non-invention);

B09B C02F C08J C10L (Subclass/Invention)

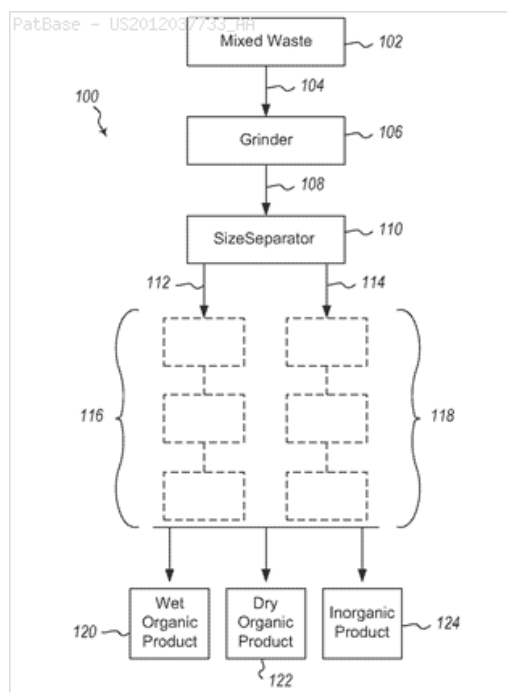
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**Family:**

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BR112013012860 A2	20170919	BR20131112860	20111006
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Priority:

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Probable Assignee: ORGANIC ENERGY CORP

Assignee(s): (std): GARDNER KURT ; ORGANIC ENERGY CORP ; GITSCHER GEORGE ; BUCKLE LARRY L ; BUCKLE LARRY T ; HARRIS GREGORY ; GITSCHER GEORGE

Assignee(s): COLLINS COOPER ; ROLLIN HOLDINGS LLC ; BELANGER BRANDON

Inventor(s): (std): GITSCHER GEORGE ; HARRIS GREGORY ; GARDNER KURT ; BUCKLE LARRY L ; GITSCHER GEORGE ; BUCKLE LARRY T ; GITSCHER GEORGE G ; GEORGE GITSCHER ; GEORGE GITSCHER ; GITSCHER GEORGE K

Agent(s): OSLER HOSKIN AND HARCOURT LLP; SCHWARZ AND PARTNER; PATPOL KANCELARIA PATENTOWA SP Z OO; ORIENTAL INTELLECTUAL PROPERTY SERVICES CO; WORKMAN NYDEGGER; HANSEN ANDREW 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 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
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JP2014500140 T2	20160405	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20160405
JP2014500140 T2	20160711	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20160711
JP2014500140 T2	20160721	LSAL	A911	TRANSFER OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A911 EFFECTIVE DATE : 20160720
JP2014500140 T2	20160809	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2014500140 T2	20160816	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20160816
JP2014500140 T2	20160908	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20160901
JP2014500140 T2	20160909	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 6001550 COUNTRY OF REF DOCUMENT : JP
JP2014501608 T2	20141007	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20141006
JP2014501608 T2	20141007	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20141006
JP2014501608 T2	20150422	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20150421
JP2014501608 T2	20151020	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20151020
JP2014501608 T2	20151118	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20151117
JP2014501608 T2	20160517	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20160517
JP2014501608 T2	20160907	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2014501608 T2	20160913	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20160913
JP2014501608 T2	20161013	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20161006
JP2014501608 T2	20161014	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 6023070 COUNTRY OF REF DOCUMENT : JP
JP6001550 B2	20161005	LSGT	+	granted / extensions (spc, cpc, pte)	
JP6001550 B2	20160818	LSGT	+A01	特許査定書 (Decision	

JP6001550 B2	20160906	LSFE	R100	of patent grant) 特許料納付書 (Patent fee payment form)	
JP6001550 B2	20160909	LSGT	+R150	特許証 (Patent certificate)	
JP6001550 B2	20311006	PEXP		Calculated Patent Term Expiry	
JP6023070 B2	20161109	LSGT	+	granted / extensions (spc, cpc, pte)	
JP6023070 B2	20160915	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP6023070 B2	20161011	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP6023070 B2	20161014	LSGT	+R150	特許証 (Patent certificate)	
JP6023070 B2	20311005	PEXP		Calculated Patent Term Expiry	
MX2013005899 A1	20140425	LSPB	+	published / reissued	
MX2013005899 A1	20160830	LSGT	+FG	GRANT OR REGISTRATION	
MX2014002376 A1	20141024	LSPB	+	published / reissued	
MX341670 B	20160830	LSGT	+	granted / extensions (spc, cpc, pte)	
MX341670 B	20311006	PEXP		Calculated Patent Term Expiry	
MX355900 B	20180503	LSGT	+	granted / extensions (spc, cpc, pte)	
MX355900 B	20180503	LSGT	+FG	GRANT OR REGISTRATION	
MX355900 B	20311230	PEXP		Calculated Patent Term Expiry	
US2012037733 AA	20120216	LSPB	+	published / reissued	
US2012037733 AA	20130220	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2012048974 AA	20120301	LSPB	+	published / reissued	
US2012048974 AA	20130227	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2012048975 AA	20120301	LSPB	+	published / reissued	
US2012048975 AA	20121114	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2012190102 AA	20120726	LSPB	+	published / reissued	
US2012190102 AA	20131231	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2013092770 AA	20130418	LSPB	+	published / reissued	
US2013092770 AA	20140312	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2013193244 AA	20130801	LSPB	+	published / reissued	
US2013193244 AA	20150603	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2014134694 AA	20140515	LSPB	+	published / reissued	
US2014134694 AA	20140121	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ORGANIC ENERGY CORPORATION, TEXAS OLDPARTY : ASSIGNMENT OF

					ASSIGNORS INTEREST; ASSIGNORS:GITSCHER, GEORGE; BUCKLE, LARRY T.; SIGNING DATES FROM 20120111 TO 20120116; REEL/FRAME:032011/0590
US2014134694 AA	20170420	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ORGANIC ENERGY CORPORATION, TEXAS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:BELANGER, BRANDON, MR.; COLLINS, COOPER, MR; REEL/FRAME:042086/0521 EFFECTIVE DATE : 20170417
US2014134694 AA	20170420	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ORGANIC ENERGY CORPORATION, TEXAS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:BELANGER, BRANDON, MR.; COLLINS, COOPER, MR; REEL/FRAME:042086/0521 EFFECTIVE DATE : 20170417
US2014134694 AA	20170426	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2014134694 AA	20170508	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ROLLIN HOLDINGS, LLC, TEXAS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ORGANIC ENERGY CORPORATION; REEL/FRAME:042272/0834 EFFECTIVE DATE : 20170228
US2014209514 AA	20140731	LSPB	+	published / reissued	
US2014209514 AA	20161021	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ORGANIC ENERGY CORPORATION, TEXAS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:GITSCHER, GEORGE; REEL/FRAME:040088/0630 EFFECTIVE DATE : 20121203
US2014209514 AA	20161021	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ORGANIC ENERGY CORPORATION, TEXAS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:GITSCHER, GEORGE; REEL/FRAME:040088/0630 EFFECTIVE DATE : 20121203
US2014209514 AA	20170420	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ORGANIC ENERGY CORPORATION, TEXAS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:BELANGER, BRANDON, MR.; COLLINS, COOPER, MR; REEL/FRAME:042086/0521 EFFECTIVE DATE : 20170417
US2014209514 AA	20170420	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ORGANIC ENERGY CORPORATION, TEXAS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:BELANGER, BRANDON, MR.; COLLINS, COOPER, MR; REEL/FRAME:042086/0521 EFFECTIVE DATE : 20170417
US2014209514 AA	20170426	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2014209514 AA	20170508	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ROLLIN HOLDINGS, LLC, TEXAS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ORGANIC ENERGY CORPORATION; REEL/FRAME:042272/0834 EFFECTIVE DATE : 20170228
US2015108042 AA	20150423	LSPB	+	published / reissued	

US2015108042 AA	20170328	LSES	NFA1	Non Final Action Mailed	
US2015108042 AA	20170420	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ORGANIC ENERGY CORPORATION, TEXAS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:BELANGER, BRANDON, MR.; COLLINS, COOPER, MR; REEL/FRAME:042086/0521 EFFECTIVE DATE : 20170417
US2015108042 AA	20170508	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ROLLIN HOLDINGS, LLC, TEXAS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ORGANIC ENERGY CORPORATION; REEL/FRAME:042272/0834 EFFECTIVE DATE : 20170228
US2015108042 AA	20170926	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2015108042 AA	20171006	LSFE	-AWA4	Awaiting TC Resp., Issue Fee Not Paid	
US2015108042 AA	20171007	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2015108042 AA	20171227	LSFE	+PPR1	Publications -- Issue Fee Payment Received	
US2015108042 AA	20171228	LSFE	+PPV1	Publications -- Issue Fee Payment Verified	
US2015108042 AA	20180117	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2015283551 AA	20151008	LSPB	+	published / reissued	
US2015283551 AA	20150622	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ORGANIC ENERGY CORPORATION, TEXAS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:GITSCHER, GEORGE; REEL/FRAME:035877/0482 EFFECTIVE DATE : 20101001
US2015283551 AA	20171004	LSES	NFA1	Non Final Action Mailed	
US2015283551 AA	20190106	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2015283551 AA	20190106	LSWD	-STCB	INFORMATION ON STATUS: APPLICATION DISCONTINUATION	TEXT : ABANDONED -- FAILURE TO RESPOND TO AN OFFICE ACTION
US2017253891 AA	20170907	LSPB	+	published / reissued	
US2017253891 AA	20170516	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ORGANIC ENERGY CORPORATION, TEXAS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:GITSCHER, GEORGE; REEL/FRAME:042401/0420 EFFECTIVE DATE : 20160524
US8322639 BB	20121204	LSGT	+	granted / extensions (spc, cpc, pte)	
US8322639 BB	20110831	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ORGANIC ENERGY CORPORATION, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:GITSCHER, GEORGE; REEL/FRAME:026837/0912

					EFFECTIVE DATE : 20110828
US8322639 BB	20121114	LSGT	PAT1	Patented Case	
US8322639 BB	20141001	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLINS, COOPER, LOUISIANA OLDPARTY : SECURITY INTEREST; ASSIGNOR:ORGANIC ENERGY CORPORATION; REEL/FRAME:033871/0924 EFFECTIVE DATE : 20140929
US8322639 BB	20141001	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BELANGER, BRANDON, LOUISIANA OLDPARTY : SECURITY INTEREST; ASSIGNOR:ORGANIC ENERGY CORPORATION; REEL/FRAME:033871/0924 EFFECTIVE DATE : 20140929
US8322639 BB	20150706	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLINS, COOPER, TEXAS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ORGANIC ENERGY CORPORATION; REEL/FRAME:036059/0748 EFFECTIVE DATE : 20150706
US8322639 BB	20150706	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BELANGER, BRANDON, TEXAS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ORGANIC ENERGY CORPORATION; REEL/FRAME:036059/0748 EFFECTIVE DATE : 20150706
US8322639 BB	20160217	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLINS, COOPER, TEXAS OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE NATURE OF CONVEYANCE PREVIOUSLY RECORDED AT REEL: 036059 FRAME: 0748. ASSIGNOR(S) HEREBY CONFIRMS THE SECURITY AGREEMENT; ASSIGNOR:ORGANIC ENERGY CORPORATION; REEL/FRAME:037845/0457 EFFECTIVE DATE : 20150706
US8322639 BB	20160217	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BELANGER, BRANDON, TEXAS OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE NATURE OF CONVEYANCE PREVIOUSLY RECORDED AT REEL: 036059 FRAME: 0748. ASSIGNOR(S) HEREBY CONFIRMS THE SECURITY AGREEMENT; ASSIGNOR:ORGANIC ENERGY CORPORATION; REEL/FRAME:037845/0457 EFFECTIVE DATE : 20150706
US8322639 BB	20160519	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8322639 BB	20170420	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ORGANIC ENERGY CORPORATION, TEXAS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:BELANGER, BRANDON, MR.; COLLINS, COOPER, MR; REEL/FRAME:042086/0521 EFFECTIVE DATE : 20170417
US8322639 BB	20170425	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ROLLIN HOLDINGS, LLC, TEXAS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ORGANIC ENERGY CORPORATION; REEL/FRAME:042137/0644 EFFECTIVE DATE : 20170228
US8322639 BB	20310830	PEXP		Calculated Patent Term Expiry	
US8393558 BB	20130312	LSGT	+	granted / extensions (spc,	

US8393558 BB	20101005	LSAS	AS	cpc, pte) ASSIGNMENT	PARTYTYPE : OWNER OWNER : ORGANIC ENERGY CORPORATION, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:GITSCHER, GEORGE; REEL/FRAME:025092/0128 EFFECTIVE DATE : 20101001
US8393558 BB	20130220	LSGT	PAT1	Patented Case	
US8393558 BB	20141001	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLINS, COOPER, LOUISIANA OLDPARTY : SECURITY INTEREST; ASSIGNOR:ORGANIC ENERGY CORPORATION; REEL/FRAME:033871/0924 EFFECTIVE DATE : 20140929
US8393558 BB	20141001	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BELANGER, BRANDON, LOUISIANA OLDPARTY : SECURITY INTEREST; ASSIGNOR:ORGANIC ENERGY CORPORATION; REEL/FRAME:033871/0924 EFFECTIVE DATE : 20140929
US8393558 BB	20150706	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BELANGER, BRANDON, TEXAS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ORGANIC ENERGY CORPORATION; REEL/FRAME:036059/0748 EFFECTIVE DATE : 20150706
US8393558 BB	20150706	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLINS, COOPER, TEXAS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ORGANIC ENERGY CORPORATION; REEL/FRAME:036059/0748 EFFECTIVE DATE : 20150706
US8393558 BB	20160217	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLINS, COOPER, TEXAS OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE NATURE OF CONVEYANCE PREVIOUSLY RECORDED AT REEL: 036059 FRAME: 0748. ASSIGNOR(S) HEREBY CONFIRMS THE SECURITY AGREEMENT; ASSIGNOR:ORGANIC ENERGY CORPORATION; REEL/FRAME:037845/0457 EFFECTIVE DATE : 20150706
US8393558 BB	20160217	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BELANGER, BRANDON, TEXAS OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE NATURE OF CONVEYANCE PREVIOUSLY RECORDED AT REEL: 036059 FRAME: 0748. ASSIGNOR(S) HEREBY CONFIRMS THE SECURITY AGREEMENT; ASSIGNOR:ORGANIC ENERGY CORPORATION; REEL/FRAME:037845/0457 EFFECTIVE DATE : 20150706
US8393558 BB	20160901	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8393558 BB	20170420	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ORGANIC ENERGY CORPORATION, TEXAS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:BELANGER, BRANDON, MR.; COLLINS, COOPER, MR.; REEL/FRAME:042086/0521 EFFECTIVE DATE : 20170417
US8393558 BB	20170508	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ROLLIN HOLDINGS, LLC, TEXAS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ORGANIC ENERGY CORPORATION;

US8393558 BB	20301107	PEXP		Calculated Patent Term Expiry (PTA 33 days)	
US8398006 BB	20130319	LSGT	+	granted / extensions (spc, cpc, pte)	
US8398006 BB	20110831	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ORGANIC ENERGY CORPORATION, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:GITSCHHEL, GEORGE; REEL/FRAME:026837/0695 EFFECTIVE DATE : 20110828
US8398006 BB	20130227	LSGT	PAT1	Patented Case	
US8398006 BB	20141001	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BELANGER, BRANDON, LOUISIANA OLDPARTY : SECURITY INTEREST; ASSIGNOR:ORGANIC ENERGY CORPORATION; REEL/FRAME:033871/0924 EFFECTIVE DATE : 20140929
US8398006 BB	20141001	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLINS, COOPER, LOUISIANA OLDPARTY : SECURITY INTEREST; ASSIGNOR:ORGANIC ENERGY CORPORATION; REEL/FRAME:033871/0924 EFFECTIVE DATE : 20140929
US8398006 BB	20150706	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BELANGER, BRANDON, TEXAS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ORGANIC ENERGY CORPORATION; REEL/FRAME:036059/0748 EFFECTIVE DATE : 20150706
US8398006 BB	20150706	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLINS, COOPER, TEXAS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ORGANIC ENERGY CORPORATION; REEL/FRAME:036059/0748 EFFECTIVE DATE : 20150706
US8398006 BB	20160217	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BELANGER, BRANDON, TEXAS OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE NATURE OF CONVEYANCE PREVIOUSLY RECORDED AT REEL: 036059 FRAME: 0748. ASSIGNOR(S) HEREBY CONFIRMS THE SECURITY AGREEMENT; ASSIGNOR:ORGANIC ENERGY CORPORATION; REEL/FRAME:037845/0457 EFFECTIVE DATE : 20150706
US8398006 BB	20160217	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLINS, COOPER, TEXAS OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE NATURE OF CONVEYANCE PREVIOUSLY RECORDED AT REEL: 036059 FRAME: 0748. ASSIGNOR(S) HEREBY CONFIRMS THE SECURITY AGREEMENT; ASSIGNOR:ORGANIC ENERGY CORPORATION; REEL/FRAME:037845/0457 EFFECTIVE DATE : 20150706
US8398006 BB	20160908	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8398006 BB	20170420	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ORGANIC ENERGY CORPORATION, TEXAS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:BELANGER, BRANDON, MR.; COLLINS, COOPER, MR.; REEL/FRAME:042086/0521

					EFFECTIVE DATE : 20170417
US8398006 BB	20170508	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ROLLIN HOLDINGS, LLC, TEXAS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ORGANIC ENERGY CORPORATION; REEL/FRAME:042272/0834 EFFECTIVE DATE : 20170228
US8398006 BB	20310830	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
US8632024 BB	20140121	LSGT	+	granted / extensions (spc, cpc, pte)	
US8632024 BB	20120120	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ORGANIC ENERGY CORPORATION, CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:GITSCHER, GEORGE; BUCKLE, LARRY T.; SIGNING DATES FROM 20120111 TO 20120116; REEL/FRAME:027566/0137
US8632024 BB	20131231	LSGT	PAT1	Patented Case	
US8632024 BB	20141001	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLINS, COOPER, LOUISIANA OLDPARTY : SECURITY INTEREST; ASSIGNOR:ORGANIC ENERGY CORPORATION; REEL/FRAME:033871/0924 EFFECTIVE DATE : 20140929
US8632024 BB	20141001	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BELANGER, BRANDON, LOUISIANA OLDPARTY : SECURITY INTEREST; ASSIGNOR:ORGANIC ENERGY CORPORATION; REEL/FRAME:033871/0924 EFFECTIVE DATE : 20140929
US8632024 BB	20150706	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLINS, COOPER, TEXAS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ORGANIC ENERGY CORPORATION; REEL/FRAME:036059/0748 EFFECTIVE DATE : 20150706
US8632024 BB	20150706	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BELANGER, BRANDON, TEXAS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ORGANIC ENERGY CORPORATION; REEL/FRAME:036059/0748 EFFECTIVE DATE : 20150706
US8632024 BB	20160217	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BELANGER, BRANDON, TEXAS OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE NATURE OF CONVEYANCE PREVIOUSLY RECORDED AT REEL: 036059 FRAME: 0748. ASSIGNOR(S) HEREBY CONFIRMS THE SECURITY AGREEMENT; ASSIGNOR:ORGANIC ENERGY CORPORATION; REEL/FRAME:037845/0457 EFFECTIVE DATE : 20150706
US8632024 BB	20160217	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLINS, COOPER, TEXAS OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE NATURE OF CONVEYANCE PREVIOUSLY RECORDED AT REEL: 036059 FRAME: 0748. ASSIGNOR(S) HEREBY CONFIRMS THE SECURITY AGREEMENT; ASSIGNOR:ORGANIC ENERGY CORPORATION; REEL/FRAME:037845/0457

US8632024 BB	20170420	LSAS	AS	ASSIGNMENT	EFFECTIVE DATE : 20150706 PARTYTYPE : OWNER OWNER : ORGANIC ENERGY CORPORATION, TEXAS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:BELANGER, BRANDON, MR.; COLLINS, COOPER, MR; REEL/FRAME:042086/0521 EFFECTIVE DATE : 20170417
US8632024 BB	20170508	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ROLLIN HOLDINGS, LLC, TEXAS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ORGANIC ENERGY CORPORATION; REEL/FRAME:042272/0834 EFFECTIVE DATE : 20170228
US8632024 BB	20170706	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8632024 BB	20320117	PEXP		Calculated Patent Term Expiry	
US8684288 BB	20140401	LSGT	+	granted / extensions (spc, cpc, pte)	
US8684288 BB	20121204	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ORGANIC ENERGY CORPORATION, TEXAS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:GITSCHHEL, GEORGE; REEL/FRAME:029403/0209 EFFECTIVE DATE : 20121203
US8684288 BB	20140312	LSGT	PAT1	Patented Case	
US8684288 BB	20141001	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLINS, COOPER, LOUISIANA OLDPARTY : SECURITY INTEREST; ASSIGNOR:ORGANIC ENERGY CORPORATION; REEL/FRAME:033871/0924 EFFECTIVE DATE : 20140929
US8684288 BB	20141001	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BELANGER, BRANDON, LOUISIANA OLDPARTY : SECURITY INTEREST; ASSIGNOR:ORGANIC ENERGY CORPORATION; REEL/FRAME:033871/0924 EFFECTIVE DATE : 20140929
US8684288 BB	20150706	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLINS, COOPER, TEXAS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ORGANIC ENERGY CORPORATION; REEL/FRAME:036059/0748 EFFECTIVE DATE : 20150706
US8684288 BB	20150706	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BELANGER, BRANDON, TEXAS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ORGANIC ENERGY CORPORATION; REEL/FRAME:036059/0748 EFFECTIVE DATE : 20150706
US8684288 BB	20160217	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BELANGER, BRANDON, TEXAS OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE NATURE OF CONVEYANCE PREVIOUSLY RECORDED AT REEL: 036059 FRAME: 0748. ASSIGNOR(S) HEREBY CONFIRMS THE SECURITY AGREEMENT; ASSIGNOR:ORGANIC ENERGY CORPORATION; REEL/FRAME:037845/0457 EFFECTIVE DATE : 20150706
US8684288 BB	20160217	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLINS, COOPER, TEXAS

					OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE NATURE OF CONVEYANCE PREVIOUSLY RECORDED AT REEL: 036059 FRAME: 0748. ASSIGNOR(S) HEREBY CONFIRMS THE SECURITY AGREEMENT; ASSIGNOR:ORGANIC ENERGY CORPORATION; REEL/FRAME:037845/0457 EFFECTIVE DATE : 20150706
US8684288 BB	20170420	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ORGANIC ENERGY CORPORATION, TEXAS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:BELANGER, BRANDON, MR.; COLLINS, COOPER, MR; REEL/FRAME:042086/0521 EFFECTIVE DATE : 20170417
US8684288 BB	20170508	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ROLLIN HOLDINGS, LLC, TEXAS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ORGANIC ENERGY CORPORATION; REEL/FRAME:042272/0834 EFFECTIVE DATE : 20170228
US8684288 BB	20170914	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8684288 BB	20321204	PEXP		Calculated Patent Term Expiry	
US9061289 BB	20150623	LSGT	+	granted / extensions (spc, cpc, pte)	
US9061289 BB	20130312	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ORGANIC ENERGY CORPORATION, TEXAS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:GITSCHHEL, GEORGE; REEL/FRAME:029970/0444 EFFECTIVE DATE : 20101001
US9061289 BB	20150603	LSGT	PAT1	Patented Case	
US9061289 BB	20150706	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BELANGER, BRANDON, TEXAS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ORGANIC ENERGY CORPORATION; REEL/FRAME:036059/0748 EFFECTIVE DATE : 20150706
US9061289 BB	20150706	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLINS, COOPER, TEXAS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ORGANIC ENERGY CORPORATION; REEL/FRAME:036059/0748 EFFECTIVE DATE : 20150706
US9061289 BB	20160217	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BELANGER, BRANDON, TEXAS OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE NATURE OF CONVEYANCE PREVIOUSLY RECORDED AT REEL: 036059 FRAME: 0748. ASSIGNOR(S) HEREBY CONFIRMS THE SECURITY AGREEMENT; ASSIGNOR:ORGANIC ENERGY CORPORATION; REEL/FRAME:037845/0457 EFFECTIVE DATE : 20150706
US9061289 BB	20160217	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : COLLINS, COOPER, TEXAS OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE NATURE OF CONVEYANCE PREVIOUSLY RECORDED AT REEL: 036059 FRAME: 0748. ASSIGNOR(S) HEREBY CONFIRMS THE SECURITY AGREEMENT; ASSIGNOR:ORGANIC ENERGY CORPORATION; REEL/FRAME:037845/0457 EFFECTIVE DATE : 20150706

US9061289 BB	20170420	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ORGANIC ENERGY CORPORATION, TEXAS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:BELANGER, BRANDON, MR.; COLLINS, COOPER, MR; REEL/FRAME:042086/0521 EFFECTIVE DATE : 20170417
US9061289 BB	20170508	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ROLLIN HOLDINGS, LLC, TEXAS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ORGANIC ENERGY CORPORATION; REEL/FRAME:042272/0834 EFFECTIVE DATE : 20170228
US9061289 BB	20181220	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US9061289 BB	20331113	PEXP		Calculated Patent Term Expiry (PTA 247 days and a terminal disclaimer has been filed)	
US9649666 BB	20170516	LSGT	+	granted / extensions (spc, cpc, pte)	
US9649666 BB	20170426	LSGT	PAT1	Patented Case	
US9649666 BB	20350912	PEXP		Calculated Patent Term Expiry (PTA 530 days and a terminal disclaimer has been filed)	
US9650650 BB	20170516	LSGT	+	granted / extensions (spc, cpc, pte)	
US9650650 BB	20140121	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ORGANIC ENERGY CORPORATION, TEXAS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:GITSCHHEL, GEORGE; BUCKLE, LARRY T.; SIGNING DATES FROM 20120111 TO 20120116; REEL/FRAME:032011/0590
US9650650 BB	20170426	LSGT	PAT1	Patented Case	
US9650650 BB	20350706	PEXP		Calculated Patent Term Expiry (PTA 531 days and a terminal disclaimer has been filed)	
US9700896 BA	20170711	LSGT	+	granted / extensions (spc, cpc, pte)	
US9700896 BA	20170420	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ORGANIC ENERGY CORPORATION, TEXAS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:BELANGER, BRANDON, MR.; COLLINS, COOPER, MR; REEL/FRAME:042086/0521 EFFECTIVE DATE : 20170417
US9700896 BA	20170508	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ROLLIN HOLDINGS, LLC, TEXAS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ORGANIC ENERGY CORPORATION; REEL/FRAME:042272/0834 EFFECTIVE DATE : 20170228
US9700896 BA	20170516	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ORGANIC ENERGY CORPORATION, TEXAS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:GITSCHHEL, GEORGE K.; REEL/FRAME:042400/0606 EFFECTIVE DATE : 20170428

US9700896 BA	20170621	LSGT	PAT1	Patented Case	
US9700896 BA	20170621	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US9700896 BA	20360514	PEXP		Calculated Patent Term Expiry (PTA 818 days)	
US9713812 BA	20170725	LSGT	+	granted / extensions (spc, cpc, pte)	
US9713812 BA	20120912	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ORGANIC ENERGY CORPORATION, TEXAS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:GITSCHER, GEORGE; REEL/FRAME:028946/0801 EFFECTIVE DATE : 20120911
US9713812 BA	20170420	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ORGANIC ENERGY CORPORATION, TEXAS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNORS:BELANGER, BRANDON, MR.; COLLINS, COOPER, MR; REEL/FRAME:042086/0521 EFFECTIVE DATE : 20170417
US9713812 BA	20170508	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ROLLIN HOLDINGS, LLC, TEXAS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ORGANIC ENERGY CORPORATION; REEL/FRAME:042272/0834 EFFECTIVE DATE : 20170228
US9713812 BA	20170703	LSGT	PAT1	Patented Case	
US9713812 BA	20170703	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US9713812 BA	20350702	PEXP		Calculated Patent Term Expiry (PTA 1023 days and a terminal disclaimer has been filed)	
US9884324 BB	20180206	LSGT	+	granted / extensions (spc, cpc, pte)	
US9884324 BB	20180117	LSGT	PAT1	Patented Case	
US9884324 BB	20360106	PEXP		Calculated Patent Term Expiry (PTA 371 days)	
WO12071060 A2	20120531	LSPB	+	published / reissued	
WO12071060 A3	20130524	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO12071060 A3	20131218	LSNE	-122	EP: PCT APPLICATION NON-ENTRY IN EUROPEAN PHASE	REF DOCUMENT NUMBER : 11843566 COUNTRY OF REF DOCUMENT : EP KIND CODE OF REF DOCUMENT : A2 DESIGNATED STATE(S) :
WO12071112 A1	20120531	LSPB	+	published / reissued	
WO12071112 A1	20130523	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2013540948 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO12071112 A1	20130523	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2818920 COUNTRY OF REF DOCUMENT : CA
WO12071112 A1	20130524	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO12071112 A1	20130615	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO	REF DOCUMENT NUMBER : 2011843519 COUNTRY OF REF DOCUMENT : EP

WO12071113 A1	20120531	LSPB	+	NATIONAL PHASE published / reissued	
WO12071113 A1	20130523	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2013540949 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO12071113 A1	20130523	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2818937 COUNTRY OF REF DOCUMENT : CA
WO12071113 A1	20130524	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO12071113 A1	20130524	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : MX/A/2013/005899 COUNTRY OF REF DOCUMENT : MX
WO12071113 A1	20130615	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2011843499 COUNTRY OF REF DOCUMENT : EP
WO12071113 A1	20170919	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 112013012860 COUNTRY OF REF DOCUMENT : BR KIND CODE OF REF DOCUMENT : A2 DESIGNATED STATE(S) : EFFECTIVE DATE : 20130523
WO13032516 A1	20130307	LSPB	+	published / reissued	
WO13032516 A1	20140228	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2847289 COUNTRY OF REF DOCUMENT : CA
WO13032516 A1	20140228	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO13032516 A1	20140228	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : MX/A/2014/002376 COUNTRY OF REF DOCUMENT : MX
WO13032516 A1	20170404	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 112014004919 COUNTRY OF REF DOCUMENT : BR KIND CODE OF REF DOCUMENT : A2 DESIGNATED STATE(S) : EFFECTIVE DATE : 20140228

Title: METHOD AND APPARATUS FOR COMMINUING AND CLEANING OF WASTE PLASTIC

Abstract: Method for comminuting and cleaning waste plastic, in particular, mixed plastic (MKS) with the following steps: a compacted material, especially, an agglomerate is produced from film scraps or film remnants comminuted into flakes and/or thick-walled plastic parts chopped up into chips, the compacted material is introduced into a disc or drum refiner and is ground therein in the presence of water, wherein the portion of compacted material of the goods located in the refiner amounts to at least 10 percent by weight, a fine grain fraction is removed from the ground stock exiting from the refiner, the remaining ground stock is washed and either mechanically dewatered and dried, or pulverized again in a further refiner stage in the presence of water, and subsequently dewatered and dried.

Classifications:

International (IPC 8-9): B02C19/00 B02C21/00 B02C23/14 B02C23/18 B02C7/12 B03B5/00 B29B13/10 B29B17/00 B29B17/02 B29B17/04 C02F1/00 (Advanced/Invention);

B29B17/00 B29B17/02 (Advanced/Non-invention);

B02C19/00 B02C21/00 B02C23/00 B02C23/18 B02C7/00 B03B5/00

B29B13/10 B29B17/00 B29B17/02 B29B17/04 C02F1/00 (Core/Invention)

International (IPC 1-7): B29B17/00 B29B17/02

CPC: Y02W30/523 Y02W30/524 Y02W30/622 Y02W30/625 B29B17/0404

B29B2017/0015 B29B2017/0203 B29B2017/0224 B29B2017/0244

B29B2017/0484 B29K2023/06 B29K2023/12 B29K2025/00 B29K2027/06

B29K2067/00 B29K2077/00 B29K2105/065 B29K2705/02 B29K2709/08

B29L2007/00 B29L2007/008 D21B1/12 B27N3/00 B29B17/02

European: B29B17/02 B29B17/04C D21B1/12 L29B17/00C1 L29B17/02B

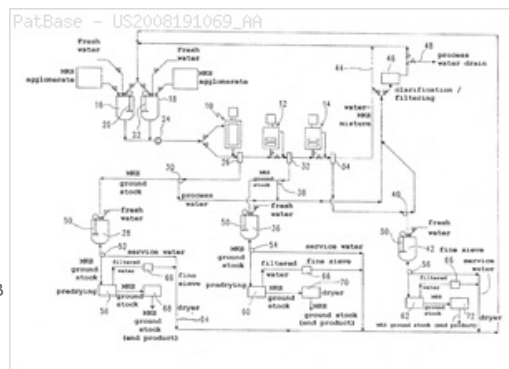
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L29K23/12 L29K25/00 L29K27/06 L29K67/00 L29K705/02 L29K709/08

L29K77/00 L29L7/00 L29L7/00G

US: 241/15 241/15P 241/20 241/21 241/24.14 241/24.21 241/24.210S

241/24.28 241/24.280S 241/29 241/3 241/62 241/62S 241/69 241/69S 241/76 241/76S 241/78 241/78S

**Family:**

Publication number	Publication date	Application number	Application date
AT410283 E	20081015	AT20060723603T	20060321
BRPI0609465 A2	20100413	BR2006PI09465	20060321
CA2602528 AA	20070921	CA20062602528	20060321
CN101151131 A	20080326	CN200680009265	20060321
CN101151131 B	20150422	CN200680009265	20060321
DE102005013693 A1	20060928	DE200510013693	20050321
DE502006001756 D1	20081120	DE200650001756T	20060321
DK1868786 T3	20090216	DK20060723603T	20060321
EA012098 B1	20090828	EA20070001972	20060321
EA200701972 A1	20080428	EA20070001972	20060321
EP1868786 A1	20071226	EP20060723603	20060321
EP1868786 B1	20081008	EP20060723603	20060321
EP1868786 B9	20090610	EP20060723603	20060321
ES2316055 T3	20090401	ES20060723603T	20060321
HR20080683 T3	20090228	HR20080000683	20081229
HR20080683 T5	20091130	HR20080000683	20081229
IN01540MN2007 A	20071109	IN2007MN01540	20070926
IN254991 B	20130118	IN2007MN01540	20070926
JP2008532762 T2	20080821	JP20080502313T	20060321
KR20070112471 A	20071126	KR20077023023	20071009
MX2007011647 A1	20071120	MX20070011647	20060321
PT1868786 T	20090116	PT20060723603T	20060321
US2008191069 AA	20080814	US20060909232	20060321
US7757974 BB	20100720	US20060909232	20060321
WO06100044 A1	20060928	WO2006EP02602	20060321

Priority:

DE200510013693 20050321 WO2006EP02602 20060321

Probable Assignee: CVP CLEAN VALUE PLASTICS GMBH

Assignee(s): (std): CVP CLEAN VALUE PLASTICS GMBH ; CVP CLEAN VALUE PLASTICS GMBH ; FEDDERN ALEXANDER ; HOFMANN MICHAEL ; LOEFFLER JENS MARTIN

Inventor(s): (std): MICHAEL HOFMANN ; ALEXANDER FEDDERN ; LIFFLER JENS MARTIN ; LOEFFLER JENS MARTIN ; FEDDERN ALEXANDER ; HOFMANN MICHAEL ; LOFFLER JENS MARTIN

Inventor(s): JENS MARTIN LIFFLER ; JENS MARTIN LOEFFLER

Agent(s): RIDOUT AND MAYBEE LLP; GRAALFS EDO ET AL; VIDAS ARRETT AND STEINKRAUS PA; VIDAS ARRETT AND STEINKRAUS

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
AT410283 E	20081015	LSGT	+	granted / extensions (spc, cpc, pte)	
AT410283 E	20260321	PEXP		Calculated Patent Term Expiry	
BRPI0609465 A2	20150324	LSFE	-B08F	APPLICATION FEES: DISMISSAL - ARTICLE 86 OF INDUSTRIAL PROPERTY LAW	TEXT : REFERENTE A 9A ANUIDADE.
BRPI0609465 A2	20150728	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 2307 DE 24/03/2015.
CA2602528 AA	20070921	LSPB	+	published / reissued	
CA2602528 AA	20120321	LSLE	-FZDE	DEAD	
CN101151131 A	20080326	LSPB	+	published / reissued	
CN101151131 A	20080326	LSPB	+C06	PUBLICATION	
CN101151131 B	20150422	LSGT	+	granted / extensions (spc, cpc, pte)	
CN101151131 B	20150422	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN101151131 B	20180406	LSLE	-CF01	TERMINATION OF PATENT RIGHT DUE TO NON-PAYMENT OF ANNUAL FEE	
CN101151131 B	20260321	PEXP		Calculated Patent Term Expiry	
DE102005013693 A1	20060928	LSPB	+	published / reissued	
DE102005013693 A1	20060928	LSES	+OP8	REQUEST FOR EXAMINATION AS TO PARAGRAPH 44 PATENT LAW	
DE102005013693 A1	20101202	LSRV	-8131	REJECTION	
DE502006001756 D1	20091029	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE502006001756 D1	20181002	LSDW	-R119	APPLICATION DEEMED WITHDRAWN, OR IP RIGHT LAPSED, DUE TO NON-PAYMENT OF RENEWAL FEE	
DK1868786 T3	20090216	LSGT	+	granted / extensions (spc, cpc, pte)	
DK1868786 T3	20260321	PEXP		Calculated Patent Term Expiry	
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EA012098 B1	20260321	PEXP		Calculated Patent Term Expiry	
EA200701972 A1	20080428	LSPB	+	published / reissued	
EP1868786 A1	20071226	LSPB	+	published / reissued	
EP1868786 A1	20071226	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20071011
EP1868786 A1	20080416	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20080318
EP1868786 B1	20081008	LSGT	+	granted / extensions	

(spc, cpc, pte)					
EP1868786 B1	20081008	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D TEXT : NOT ENGLISH
EP1868786 B1	20081015	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1868786 B1	20081112	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D TEXT : LANGUAGE OF EP DOCUMENT : GERMAN
EP1868786 B1	20081230	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : RO REF LEGAL EVENT CODE : EPE
EP1868786 B1	20090120	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : EP REF DOCUMENT NUMBER : 20080403572 COUNTRY OF REF DOCUMENT : GR
EP1868786 B1	20090227	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20081008
EP1868786 B1	20090401	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2316055 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
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EP1868786 B1	20260321	PEXP		Calculated Patent Term Expiry	
EP1868786 B9	20090629	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HU REF LEGAL EVENT CODE : AG4A REF DOCUMENT NUMBER : E005029 COUNTRY OF REF DOCUMENT : HU
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EP1868786 B9	20091030	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20090331
EP1868786 B9	20110930	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CY NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20081008
EP1868786 B9	20120531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20120320 YEAR OF FEE PAYMENT : 7
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EP1868786 B9	20130430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20130318 YEAR OF FEE PAYMENT : 8
EP1868786 B9	20130430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20130315 YEAR OF FEE PAYMENT : 8
EP1868786 B9	20130430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20130329 YEAR OF FEE PAYMENT : 8
EP1868786 B9	20130430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20130318 YEAR OF FEE PAYMENT : 8
EP1868786 B9	20130430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20130320 YEAR OF FEE PAYMENT : 8
EP1868786 B9	20130430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20130319 YEAR OF FEE PAYMENT : 8
EP1868786 B9	20130430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20130319 YEAR OF FEE PAYMENT : 8
EP1868786 B9	20130430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20130313 YEAR OF FEE PAYMENT : 8
EP1868786 B9	20130430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20130318 YEAR OF FEE PAYMENT : 8
EP1868786 B9	20130430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20130320 YEAR OF FEE PAYMENT : 8
EP1868786 B9	20130430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LT PAYMENT DATE : 20130315 YEAR OF FEE PAYMENT : 8

EP1868786 B9	20130430	LSFE	+PGFP	EPO] ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20130313 YEAR OF FEE PAYMENT : 8
EP1868786 B9	20130531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SK PAYMENT DATE : 20130215 YEAR OF FEE PAYMENT : 8
EP1868786 B9	20130531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20130319 YEAR OF FEE PAYMENT : 8
EP1868786 B9	20130531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20130206 YEAR OF FEE PAYMENT : 8
EP1868786 B9	20130531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LV PAYMENT DATE : 20130326 YEAR OF FEE PAYMENT : 8
EP1868786 B9	20130531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20130318 YEAR OF FEE PAYMENT : 8
EP1868786 B9	20130628	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20130318 YEAR OF FEE PAYMENT : 8
EP1868786 B9	20130628	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20130313 YEAR OF FEE PAYMENT : 8
EP1868786 B9	20130731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20130318 YEAR OF FEE PAYMENT : 8
EP1868786 B9	20140930	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 : 20140922
EP1868786 B9	20141020	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DK REF LEGAL EVENT CODE : EBP EFFECTIVE DATE : 20140331
EP1868786 B9	20141022	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : V1 EFFECTIVE DATE : 20141001
EP1868786 B9	20141027	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : LT REF LEGAL EVENT CODE : MM4D EFFECTIVE DATE : 20140321
EP1868786 B9	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 : 20140321
EP1868786 B9	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 NON- PAYMENT OF DUE FEES LAPSED DATE : 20140321
EP1868786 B9	20141031	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 : 20140321

EP1868786 B9	20141031	LSLE	-PG25	EPO] 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 : 20140321
EP1868786 B9	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 NON- PAYMENT OF DUE FEES LAPSED DATE : 20140321
EP1868786 B9	20141031	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP1868786 B9	20141104	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SE REF LEGAL EVENT CODE : EUG
EP1868786 B9	20141115	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MM01 REF DOCUMENT NUMBER : 410283 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20140321
EP1868786 B9	20141126	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON- PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20140321
EP1868786 B9	20141127	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : ML REF DOCUMENT NUMBER : 20080403572 COUNTRY OF REF DOCUMENT : GR EFFECTIVE DATE : 20141002
EP1868786 B9	20141128	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON- PAYMENT OF DUE FEES LAPSED DATE : 20140322
EP1868786 B9	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 NON- PAYMENT OF DUE FEES LAPSED DATE : 20140321
EP1868786 B9	20141204	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SK REF LEGAL EVENT CODE : MM4A REF DOCUMENT NUMBER : E 4829 COUNTRY OF REF DOCUMENT : SK EFFECTIVE DATE : 20140321
EP1868786 B9	20141226	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20141128
EP1868786 B9	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 : 20140922
EP1868786 B9	20141231	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP1868786 B9	20150130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM	COUNTRY OF REF DOCUMENT : FR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON- PAYMENT OF DUE FEES

				NATIONAL OFFICE TO EPO]	LAPSED DATE : 20140331
EP1868786 B9	20150130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20140331
EP1868786 B9	20150130	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 : 20141002
EP1868786 B9	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 : 20140321
EP1868786 B9	20150130	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 : 20140321
EP1868786 B9	20150130	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 : 20140321
EP1868786 B9	20150130	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 : 20140331
EP1868786 B9	20150227	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 : 20140322
EP1868786 B9	20150227	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20141001
EP1868786 B9	20150227	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 : 20140321
EP1868786 B9	20150331	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 : 20140321
EP1868786 B9	20150430	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 : 20140331
EP1868786 B9	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 NON-PAYMENT OF DUE FEES LAPSED DATE : 20140321
EP1868786 B9	20150630	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : PL REF LEGAL EVENT CODE : LAPE

EP1868786 B9	20150804	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20150804
EP1868786 B9	20151030	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20140322
EP1868786 B9	20170731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20140331
EP1868786 B9	20170731	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170524 YEAR OF FEE PAYMENT : 12
EP1868786 B9	20170831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20140321
EP1868786 B9	20181002	LSDW	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R119 REF DOCUMENT NUMBER : 502006001756 COUNTRY OF REF DOCUMENT : DE
EP1868786 B9	20190131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20181002
ES2316055 T3	20090401	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2316055 T3	20260321	PEXP		Calculated Patent Term Expiry	
HR20080683 T3	20090228	LSGT	+	granted / extensions (spc, cpc, pte)	
HR20080683 T3	20281229	PEXP		Calculated Patent Term Expiry	
IN01540MN2007 A	20071109	LSPB	+	published / reissued	
IN254991 B	20130118	LSGT	+	granted / extensions (spc, cpc, pte)	
IN254991 B	20270926	PEXP		Calculated Patent Term Expiry	
JP2008532762 T2	20090313	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20090312
JP2008532762 T2	20120516	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20120515
JP2008532762 T2	20121116	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20121115
JP2008532762 T2	20130703	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20130702
JP2008532762 T2	20140213	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20140212
KR20070112471 A	20071126	LSPB	+	published / reissued	

KR20070112471 A	20110422	LSDW	-WITN	WITHDRAWAL DUE TO NO REQUEST FOR EXAMINATION	
MX2007011647 A1	20071120	LSPB	+	published / reissued	
MX2007011647 A1	20090810	LSGT	+FG	GRANT OR REGISTRATION	
PT1868786 T	20090116	LSGT	+	granted / extensions (spc, cpc, pte)	
PT1868786 T	20260321	PEXP		Calculated Patent Term Expiry	
US2008191069 AA	20080814	LSPB	+	published / reissued	
US7757974 BB	20100720	LSGT	+	granted / extensions (spc, cpc, pte)	
US7757974 BB	20070926	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CVP CLEAN VALUE PLASTICS GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:HOFMANN, MICHAEL; FEDDERN, ALEXANDER; REEL/FRAME:019877/0845 EFFECTIVE DATE : 20070912
US7757974 BB	20100630	LSGT	PAT1	Patented Case	
US7757974 BB	20140117	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US7757974 BB	20171115	LSFE	FEPP	FEE PAYMENT PROCEDURE	TEXT : ENTITY STATUS SET TO UNDISCOUNTED (ORIGINAL EVENT CODE: BIG.)
US7757974 BB	20180305	LSFE	FEPP	FEE PAYMENT PROCEDURE	TEXT : MAINTENANCE FEE REMINDER MAILED (ORIGINAL EVENT CODE: REM.)
US7757974 BB	20180827	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	TEXT : PATENT EXPIRED FOR FAILURE TO PAY MAINTENANCE FEES (ORIGINAL EVENT CODE: EXP.); ENTITY STATUS OF PATENT OWNER: LARGE ENTITY
US7757974 BB	20180827	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US7757974 BB	20180827	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US7757974 BB	20180918	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20180720
US7757974 BB	20261121	PEXP		Calculated Patent Term Expiry (PTA 245 days)	
WO06100044 A1	20060928	LSPB	+	published / reissued	
WO06100044 A1	20070920	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 11909232 COUNTRY OF REF DOCUMENT : US
WO06100044 A1	20070920	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : MX/A/2007/011647 COUNTRY OF REF DOCUMENT : MX
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WO06100044 A1	20070921	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 200680009265.1 COUNTRY OF REF DOCUMENT : CN

WO06100044 A1	20070921	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2602528 COUNTRY OF REF DOCUMENT : CA
WO06100044 A1	20070926	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1540/MUMNP/2007 COUNTRY OF REF DOCUMENT : IN
WO06100044 A1	20071009	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1020077023023 COUNTRY OF REF DOCUMENT : KR
WO06100044 A1	20071011	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2006723603 COUNTRY OF REF DOCUMENT : EP
WO06100044 A1	20071021	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : RU
WO06100044 A1	20071021	LSWD	-WWW	WIPO INFORMATION: WITHDRAWN IN NATIONAL OFFICE	TEXT : RU
WO06100044 A1	20071023	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 200701972 COUNTRY OF REF DOCUMENT : EA
WO06100044 A1	20071226	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2006723603 COUNTRY OF REF DOCUMENT : EP
WO06100044 A1	20100413	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : PI0609465 COUNTRY OF REF DOCUMENT : BR KIND CODE OF REF DOCUMENT : A2 DESIGNATED STATE(S) :