

INFORME DE BÚSQUEDA DE PATENTES				
N° de solicitud: NC2017/0004303				
CRITERIOS PARA LA BÚSQUEDA				
PALABRAS CLAVE UTILIZADAS		Colistin AND methanesulfonate Polymyxin E Colistin AND hydrolyze* Xellia Pharmaceuticals		
CLASIFICACIONES UTILIZADAS PARA LA BÚSQUEDA		CIP: CPC:		
DOCUMENTOS CONSIDERADOS RELEVANTES (documentos patentes, literatura no patente, etc...)				
Informes/Base de datos	N° de solicitud/ Autor**	Fecha de Publicación/Presentación (DD/MM/AAAA)	Reiv. afectadas (Con indicación, si procede, de las partes relevantes o números de secuencias)	Categorías especiales de los documentos citados***
SIPI	-	-	-	-
EPO	Art*	09/2008	1-10	Y
	WO98/20836	22/05/1998	1-10	A
USPTO	Art**	11/2012	1-10	Y
Patbase	-	-	-	-
*** Categorías especiales de documentos citados:				
“A” documento que define el estado general de la técnica no considerado como particularmente relevante. “E” solicitud de patente o patente anterior pero publicada en la fecha de presentación internacional o en fecha posterior. “P” documento publicado antes de la fecha de presentación internacional pero con posterioridad a la fecha de prioridad reivindicada.		“X” documento particularmente relevante; la invención reivindicada no puede considerarse nueva o que implique una actividad inventiva por referencia al documento aisladamente considerado. “Y” documento particularmente relevante; la invención reivindicada no puede considerarse que implique una actividad inventiva cuando el documento se asocia a otro u otros documentos de la misma naturaleza, cuya combinación resulta evidente para un experto en la materia.		
Literatura no patente	* Wallace SJ et al. “Stability of Colistin Methanesulfonate in Pharmaceutical Products and Solutions for Administration to Patients”. Antimicrob Agents Chemother. 2008 Sep;52(9):3047-51. ** Athanassa ZE et al. “Pharmacokinetics of inhaled colistimethate sodium (CMS) in mechanically ventilated critically ill patients”. Intensive Care Med. 2012 Nov;38(11):1779-86.			
Fecha del reporte de búsqueda:		7/junio/2018		

PatBase - Search results 07 June 2018
 Search query (1): STAC=(Colistin AND methanesulfonate)
 Results: 19

Search history

Search 1: STAC=(Colistin AND methanesulfonate) (Results 19)

Title: CATTLE FEED**Abstract:**

PURPOSE: A cattle feed that contains an antibiotic, **colistin**, in form of salt with sodium **methanesulfonate**, thus showing high **colistin** activity even after storage of a long period of time. CONSTITUTION: Various kinds of cattle feed are combined with 2-40ppm of **colistin**-sodium **methanesulfonate**. Although the **colistin**-sodium **methanesulfonate** can be directly mixed, usually it is previously mixed with a part of feed or another base and the composition is preferably mixed for homogeneous dispersion. The base used is, e.g., lactose, white sugar, starch, calcium carbonate, caolin, calcium phosphate and so on.

Classifications:

International (IPC 8-9): [A23K1/17](#) [A23K20/195](#) [A61K38/00](#) [A61P3/00](#) (Advanced/Invention);
[A23K1/17](#) [A61K38/00](#) [A61P3/00](#) (Core/Invention)

International (IPC 1-7): [A23K1/17](#) [A61K37/02](#)

Family:

Publication number	Publication date	Application number	Application date
JP1343475 C3	19861029	JP19790043602	19790412
JP55135554 A2	19801022	JP19790043602	19790412
JP61009830 B4	19860326	JP19790043602	19790412

Priority:

JP19790043602 19790412

Probable Assignee: KAYAKU ANTIBIOTIC RESEARCH CO**Assignee(s):** (std): KAYAKU ANTIBIOTIC RESEARCH CO ; KAYAKU KOUSEIBUTSUSHITSU KENKY**Assignee(s):** KAYAKU KK**Inventor(s):** (std): ABE MASARU ; KOYAMA YASUO ; KUROSAWA AKIO ; NAKASHIMA NOBUHIRO ; SATOU HIROYUKI**Inventor(s):** SATO HIROYUKI ; NAKAJIMA MASAHIRO**Legal status (INPADOC)**[View legal status timeline](#)

Patent	Date recorded	Event group	Code	Event	Details
JP1343475 C3	19861029	LSGT	+	granted / extensions (spc, cpc, pte)	
JP55135554 A2	19801022	LSPB	+	published / reissued	
JP61009830 B4	19860326	LSPB	+	published / reissued	

Title: PREODUCTION OF NOVEL ANTIBIOTIC DERIVATIVE**Abstract:**

PURPOSE: The intermediate, resulting from reaction between **colistin** and a specific halide or aldehyde, is converted to its **methanesulfonate** sodium salt to produce an antibiotic derivative with lowered toxicity of **colistin** and increased antibiotic activity.

CONSTITUTION: **Colistin** is made to react with a compound of R_2X (R_2 is alkyl, alkenyl, benzyl; X is halogen or aldehyde) to give an N-substituted **colistin** of formula I (R_1 is residual group of **colistin**). Further, the product is made to react with sodium oxymethanesulfonate to produce an antibiotic derivative of formula II. In the compound of R_2X , an example having halogen as the reaction group is methyl halide or ethyl halide and having aldehyde is formaldehyde or acetaldehyde. The reaction readily proceeds when heated to 40W50 Degrees Centigrade

Classifications:

International (IPC 8-9): [C07C231/00](#)

[C07C231/12](#) [C07C67/00](#) [C07K1/113](#)

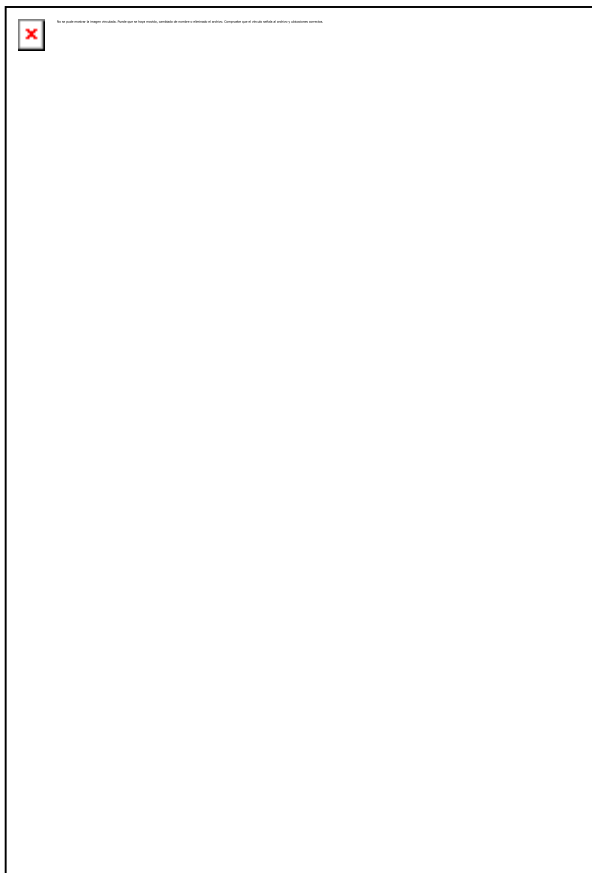
[C07K7/62](#) (Advanced/Invention);

[C07C231/00](#) [C07C67/00](#) [C07K1/00](#)

[C07K7/00](#) (Core/Invention)

International (IPC 1-7): [C07C102/00](#)

[C07C103/52](#)

**Family:**

Publication number	Publication date	Application number	Application date
JP57058655 A2	19820408	JP19800132387	19800925

Priority:

JP19800132387 19800925

Probable Assignee: KAYAKU ANTIBIOTIC RESEARCH CO

Assignee(s): (std): KAYAKU ANTIBIOTIC RESEARCH CO

Assignee(s): KAYAKU KOUSEIBUTSUSHITSU KENKYUSHO KK

Inventor(s): (std): KOYAMA YASUO ; KURIHARA TOUZABUROU ; KURIHARA TOZABURO ; SATO HIROYUKI ; SATOU HIROYUKI ; SUZUKI SHIGENORI

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
JP57058655 A2	19820408	LSPB	+	published / reissued	

Title: METHOD OF MANUFACTURING SOLID DISPERSION

Abstract: PCT No. PCT/JP92/00470 Sec. 371 Date Nov. 15, 1993 Sec. 102(e) Date Nov. 15, 1993 PCT Filed Dec. 23, 1993 PCT Pub. No. WO92/18106 PCT Pub. Date Oct. 29, 1992. The object of this invention is to provide a process for producing a solid dispersion, which has overcome the disadvantages of the conventional production technology for solid dispersions. The invention comprises employing a twin-screw extruder in the production of a solid dispersion. In accordance with the invention, a solid dispersion can be expediently produced without heating a drug and a polymer to or beyond their melting points and without using an organic solvent for dissolving both components and the resulting solid dispersion has excellent performance characteristics.

Classifications:**International (IPC 8-9):** [A61J3/06](#) [A61K9/00](#)[A61K9/14](#) [A61K9/16](#) [A61K9/22](#)[C07B61/00](#) (Advanced/Invention);[A61K9/00](#) [A61K9/22](#) [F02N11/10](#) (Advanced/Non-invention)**International (IPC 1-7):** [A61J3/00](#) [A61J3/06](#) [A61K47/30](#) [A61K9/00](#) [A61K9/10](#) [A61K9/14](#) [A61K9/16](#) [A61K9/22](#) [B01D9/00](#) [C07B61/00](#) [C07D209/32](#) [C07D223/24](#)**CPC:** [A61K9/14](#) [A61K9/146](#) [A61K9/1694](#) [Y10S514/937](#)**European:** [A61K9/14](#) [A61K9/14H6](#) [A61K9/16P4](#)**US:** [424/452](#) [424/455](#) [424/465](#) [424/489](#) [514/772.2](#) [514/772.3](#) [514/774](#) [514/778](#) [514/779](#) [514/781](#) [514/937](#) [540/589](#) [548/500](#) [564/213](#) [564/45](#)**Family:**

Publication number	Publication date	Application number	Application date
AT159426 E	19971115	AT19920907654T	19920414
AT189770 E	20000315	AT19930922625T	19931013
AU199215372 A1	19921117	AU19920015372	19920414
AU199351607 A1	19940509	AU19930051607	19931013
CA2108575 AA	19921017	CA19922108575	19920414
CA2108575 C	20021022	CA19922108575	19920414
CA2147279 AA	19940428	CA19932147279	19931013
DE69222847 D1	19971127	DE19926022847	19920414
DE69222847 T2	19980520	DE19926022847T	19920414
DE69222847 T3	20050915	DE19926022847T	19920414
DE69327877 D1	20000323	DE19936027877	19931013
DE69327877 T2	20001005	DE19936027877T	19931013
DK0580860 T3	19980525	DK19920907654T	19920414
DK0580860 T4	20050321	DK19920907654T	19920414
EP0580860 A1	19940202	EP19920907654	19920414
EP0580860 A4	19940615	EP19920907654	19920414
EP0580860 B1	19971022	EP19920907654	19920414
EP0580860 B2	20041215	EP19920907654	19920414
EP0665009 A1	19950802	EP19930922625	19931013
EP0665009 A4	19960228	EP19930922625	19931013

EP0665009 B1	20000216	EP19930922625	19931013
ES2111065 T3	19980301	ES19920907654T	19920414
ES2111065 T5	20050616	ES19920907654T	19920414
ES2145063 T3	20000701	ES19930922625T	19931013
GR3025864 T3	19980430	GR19980400035T	19980108
JP2527107 B2	19960821	JP19920507772T	19920414
JP2616251 B2	19970604	JP19930509833	19931013
JP2616251 B2	19970604	JP19940509833	19931013
KR100149525 B1	19981001	KR19940701657	19940516
KR100182801 B1	19990501	KR19930073143	19931015
KR100182801 B1	19990501	KR19930703143	19920414
KR100291361 B1	20010917	KR19950701366	19931013
KR19947000056 A	19940221	KR19937003143	19920414
KR19950702677 A	19950729	KR19940701657	19940516
KR19950703326 A	19950920	KR19950701366	19950410
KR19950703326 A	19950920	KR19950071366	19931013
US5456923 A	19951010	US19930129133	19931115
US5811547 A	19980922	US19950416815	19950609
WO9218106 A1	19921029	WO1992JP00470	19920414
WO9408561 A1	19940428	WO1993JP01469	19931013

Priority:

JP19910112554 19910416 JP19920507772 19920414 WO1992JP00470 19920414
JP19920303085 19921014 WO1993JP01469 19931013 US19930129133 19931115
US19950416815 19950609

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Inventor(s): (std): NAKAMICHI KOUICHI ; IZUMI SHOUGO ; YASUURA HIROYUKI ; OKA MASAOKI ; NAKAMICHI KOUICHI KITAYAMADA ; IZUMI SHOUGO NISHITSUTSUJIGA ; YASUURA HIROYUKI HIRAI CH ; IZUMI SHOGO ; HIROYUKI YASUURA

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

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT159426 E	19971115	LSGT	+	granted / extensions (spc, cpc, pte)	

AT159426 E	19980715	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	
AT159426 E	20061115	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	REF DOCUMENT NUMBER : 0580860 COUNTRY OF REF DOCUMENT : EP
AT159426 E	20120414	PEXP		Calculated Patent Term Expiry	
AT189770 E	20000315	LSGT	+	granted / extensions (spc, cpc, pte)	
AT189770 E	20000815	LSLE	-RER	CEASED AS TO PARAGRAPH 5 LIT. 3 LAW INTRODUCING PATENT TREATIES	
AT189770 E	20131013	PEXP		Calculated Patent Term Expiry	
AU199215372 A1	19921117	LSPB	+	published / reissued	
AU199351607 A1	19940509	LSPB	+	published / reissued	
CA2108575 AA	19921017	LSPB	+	published / reissued	
CA2108575 AA	19981214	LSSES	+EEER	EXAMINATION REQUEST	
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CA2108575 C	20120414	LSLE	-MKEX	EXPIRY	
CA2108575 C	20120414	PEXP		Calculated Patent Term Expiry	
CA2147279 AA	19940428	LSPB	+	published / reissued	
CA2147279 AA	20000614	LSSES	+EEER	EXAMINATION REQUEST	
CA2147279 AA	20050228	LSLE	-FZDE	DEAD	
DE69222847 D1	19981022	LSOP	-8363	OPPOSITION AGAINST THE PATENT	
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DE69222847 T2	19980520	LSGT	+	granted / extensions (spc, cpc, pte)	
DE69222847 T2	20120414	PEXP		Calculated Patent Term Expiry	
DE69222847 T3	20050915	LSGT	+	granted / extensions (spc, cpc, pte)	
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DE69327877 D1	20010308	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
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DE69327877 T2	20001005	LSGT	+	granted / extensions (spc, cpc, pte)	
DE69327877 T2	20131013	PEXP		Calculated Patent Term Expiry	
DK0580860 T3	19980525	LSGT	+	granted / extensions (spc, cpc, pte)	
DK0580860 T3	20120414	PEXP		Calculated Patent Term Expiry	
EP0580860 A1	19940202	LSPB	+	published / reissued	
EP0580860 A1	19940202	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19931026
EP0580860 A4	19940615	LSES	+A4	DESPATCH OF SUPPLEMENTARY SEARCH REPORT	
EP0580860 A4	19950830	LSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 19950719
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EP0580860 B1	19980301	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2111065 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
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EP0580860 B2	20140827	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20140827
EP0580860 B2	20141128	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : ES NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF EXPIRATION OF PROTECTION LAPSED DATE : 20120415

EP0580860 B2	20120413	PEXP		Calculated Patent Term Expiry	
EP0580860 B2	20120414	PEXP		Calculated Patent Term Expiry	
EP0665009 A1	19950802	LSPB	+	published / reissued	
EP0665009 A1	19950802	LSSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19950330
EP0665009 A4	19960228	LSSES	+A4	DESPATCH OF SUPPLEMENTARY SEARCH REPORT	
EP0665009 A4	19990519	LSSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 19990401
EP0665009 B1	20000216	LSGT	+	granted / extensions (spc, cpc, pte)	
EP0665009 B1	20000216	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : GR NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20000216
EP0665009 B1	20000216	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : AT 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 : 20000216
EP0665009 B1	20000229	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP0665009 B1	20000503	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP0665009 B1	20000516	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. 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 : 20000516
EP0665009 B1	20000516	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. 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 : 20000516
EP0665009 B1	20000516	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. 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 : 20000516
EP0665009 B1	20000701	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2145063 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP0665009 B1	20001013	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : IE NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20001013
EP0665009 B1	20001013	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : LU NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20001013
EP0665009 B1	20001031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : MC NOTIFICATION OF LAPSE : THE PATENT HAS BEEN ANNULLED BY A DECISION OF A NATIONAL AUTHORITY LAPSED DATE : 20001031
EP0665009 B1	20010131	LSGT	+26N	NO OPPOSITION FILED	
EP0665009 B1	20010808	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP0665009 B1	20030903	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20030903 YEAR OF FEE PAYMENT : 11
EP0665009 B1	20030919	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20030919 YEAR OF FEE PAYMENT : 11

EP0665009 B1	20031023	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20031023 YEAR OF FEE PAYMENT : 11
EP0665009 B1	20031031	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20031031 YEAR OF FEE PAYMENT : 11
EP0665009 B1	20040909	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20040909 YEAR OF FEE PAYMENT : 12
EP0665009 B1	20041007	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20041007 YEAR OF FEE PAYMENT : 12
EP0665009 B1	20041013	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20041013 YEAR OF FEE PAYMENT : 12
EP0665009 B1	20041014	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : ES NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON- PAYMENT OF DUE FEES LAPSED DATE : 20041014
EP0665009 B1	20041031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON- PAYMENT OF DUE FEES LAPSED DATE : 20041031
EP0665009 B1	20041031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : CH NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON- PAYMENT OF DUE FEES LAPSED DATE : 20041031
EP0665009 B1	20041031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : LI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON- PAYMENT OF DUE FEES LAPSED DATE : 20041031
EP0665009 B1	20050430	LSLE	-BERE	BE: LAPSED	PARTYTYPE : OWNER REF COUNTRY CODE : EP OWNER : *NIPPON SHINYAKU CY LTD EFFECTIVE DATE : 20041031

EP0665009 B1	20050501	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : NL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20050501
EP0665009 B1	20050615	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP0665009 B1	20050701	LSLE	-NLV4	NL: LAPSED OR ANULLED DUE TO NON-PAYMENT OF THE ANNUAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20050501
EP0665009 B1	20051013	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : GB NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20051013
EP0665009 B1	20051013	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : IT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20051013
EP0665009 B1	20060116	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20041014
EP0665009 B1	20060503	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : DE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20060503
EP0665009 B1	20060628	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20051013
EP0665009 B1	20060630	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : FR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20060630
EP0665009 B1	20061020	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20060630
EP0665009 B1	20071231	LSLE	BEPE	BE: LAPSED	PARTYTYPE : OWNER

REF COUNTRY CODE : EP
OWNER : *NIPPON SHINYAKU
CY LTD
EFFECTIVE DATE : 20041031

EP0665009 B1	20131013	PEXP		Calculated Patent Term Expiry	
ES2111065 T3	19980301	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2111065 T3	19980301	LSGT	+FG2A	DEFINITIVE PROTECTION	REF DOCUMENT NUMBER : 580860 COUNTRY OF REF DOCUMENT : ES
ES2111065 T3	20120414	PEXP		Calculated Patent Term Expiry	
ES2145063 T3	20000701	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2145063 T3	20000701	LSGT	+FG2A	DEFINITIVE PROTECTION	REF DOCUMENT NUMBER : 665009 COUNTRY OF REF DOCUMENT : ES
ES2145063 T3	20131013	PEXP		Calculated Patent Term Expiry	
GR3025864 T3	19980430	LSGT	+	granted / extensions (spc, cpc, pte)	
GR3025864 T3	20180108	PEXP		Calculated Patent Term Expiry	
JP2527107 B2	19960821	LSGT	+	granted / extensions (spc, cpc, pte)	
JP2527107 B2	20040525	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP2527107 B2	20050412	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP2527107 B2	20060418	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP2527107 B2	20070227	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP2527107 B2	20080605	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 12
JP2527107 B2	20080610	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 13

JP2527107 B2	20090319	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 13
JP2527107 B2	20090324	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 14
JP2527107 B2	20090422	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 14
JP2527107 B2	20091218	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 14
JP2527107 B2	20120414	PEXP		Calculated Patent Term Expiry	
JP2616251 B2	19970604	LSGT	+	granted / extensions (spc, cpc, pte)	
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JP2616251 B2	20060110	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
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JP2616251 B2	20071129	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 11
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JP2616251 B2	20071204	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 12
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JP2616251 B2	20090422	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 13
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JP2616251 B2	20100107	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 13
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JP2616251 B2	20100209	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 14
JP2616251 B2	20100209	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 14
JP2616251 B2	20110106	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 14
JP2616251 B2	20110106	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 14
JP2616251 B2	20110215	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS	YEAR OF FEE PAYMENT : 15

				RENEWAL DATE OF DATABASE)	
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JP2616251 B2	20111227	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 15
JP2616251 B2	20111227	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 15
JP2616251 B2	20120117	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 15
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JP2616251 B2	20120311	LSLE	-LAPS	CANCELLATION BECAUSE OF NO PAYMENT OF ANNUAL FEES	
JP2616251 B2	20120311	LSLE	-LAPS	CANCELLATION BECAUSE OF NO PAYMENT OF ANNUAL FEES	
JP2616251 B2	20131013	PEXP		Calculated Patent Term Expiry	
JP2616251 B2	20131013	PEXP		Calculated Patent Term Expiry	
KR100149525 B1	19981001	LSGT	+	granted / extensions (spc, cpc, pte)	
KR100149525 B1	20140516	PEXP		Calculated Patent Term Expiry	
KR100182801 B1	19990501	LSGT	+	granted / extensions (spc, cpc, pte)	
KR100182801 B1	19990501	LSGT	+	granted / extensions (spc, cpc, pte)	
KR100182801 B1	20140501	PEXP		Calculated Patent Term Expiry	
KR100182801 B1	20140501	PEXP		Calculated Patent Term Expiry	
KR100291361 B1	20010917	LSGT	+	granted / extensions (spc, cpc, pte)	

KR100291361 B1	20160917	PEXP		Calculated Patent Term Expiry	
KR19947000056 A	19940221	LSPB	+	published / reissued	
KR19950702677 A	19950729	LSPB	+	published / reissued	
KR19950703326 A	19950920	LSPB	+	published / reissued	
KR19950703326 A	19950920	LSPB	+	published / reissued	
US5456923 A	19951010	LSGT	+	granted / extensions (spc, cpc, pte)	
US5456923 A	19950414	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : NIPPON SHINYAKU COMPANY, LIMITED, JAPAN OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:NAKAMICHI, KOUICHI; IZUMI, SHOGO; YASUURA, HIROYUKI; REEL/FRAME:007455/0583 EFFECTIVE DATE : 19931021
US5456923 A	19950929	LSGT	PAT1	Patented Case	
US5456923 A	19990316	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5456923 A	20030317	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5456923 A	20070316	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5456923 A	20131115	PEXP		Calculated Patent Term Expiry	
US5811547 A	19980922	LSGT	+	granted / extensions (spc, cpc, pte)	
US5811547 A	19950609	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : NIPPON SHINYAKU CO., LTD., JAPAN OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:NAKAMICHI, KOUICHI; IZUMI, SHOUGO; OKA, MASAOKI; REEL/FRAME:007503/0202 EFFECTIVE DATE : 19950417
US5811547 A	20020301	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5811547 A	20060922	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5811547 A	20061026	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees	

				Under 37 CFR 1.362	
US5811547 A	20061121	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20060922
US5811547 A	20150609	PEXP		Calculated Patent Term Expiry	
WO9218106 A1	19921029	LSPB	+	published / reissued	
WO9218106 A1	19931015	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2108575 COUNTRY OF REF DOCUMENT : CA
WO9218106 A1	19931026	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1992907654 COUNTRY OF REF DOCUMENT : EP
WO9218106 A1	19931115	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 08129133 COUNTRY OF REF DOCUMENT : US
WO9218106 A1	19940202	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1992907654 COUNTRY OF REF DOCUMENT : EP
WO9218106 A1	19971022	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1992907654 COUNTRY OF REF DOCUMENT : EP
WO9408561 A1	19940428	LSPB	+	published / reissued	
WO9408561 A1	19950324	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1993922625 COUNTRY OF REF DOCUMENT : EP
WO9408561 A1	19950418	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2147279 COUNTRY OF REF DOCUMENT : CA
WO9408561 A1	19950609	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 08416815 COUNTRY OF REF DOCUMENT : US
WO9408561 A1	19950802	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1993922625 COUNTRY OF REF DOCUMENT : EP
WO9408561 A1	20000216	LSGT	+WWG	WIPO INFORMATION:	REF DOCUMENT NUMBER : 1993922625

	GRANT IN NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : EP
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Title: CONTROLLED RELEASE MICROCAPSULES, PROCESS FOR THEIR PREPARATION AND PHARMACEUTICAL OR VETERINARY COMPOSITIONS CONTAINING SAME

Abstract: Controlled release microcapsules, process for their preparation and pharmaceutical or veterinary compositions containing same. Said microcapsules are of the type comprising a polymer support material in which is included at least one active ingredient capable of being controllably released. The microcapsules are characterized in that said polymer material is selected from polyalkylenes and polyalkylene copolymers having a high content of alkylene units or mixtures thereof and is associated with a substance capable of participating in controlling the speed at which the active ingredient is released. The microcapsules are also characterized by having a diameter ranging from 25 to 250 μm , preferably from 50 to 125 μm , and in that they can be parenterally administered.

Classifications:

International (IPC 8-9): [A61K9/16](#) (Advanced/Invention);

[A61K9/16](#) (Core/Invention)

International (IPC 1-7): [A61K47/30](#) [A61K47/44](#) [A61K9/16](#) [A61K9/50](#)

CPC: [A61K9/1635](#) [A61K9/1694](#)

European: [A61K9/16H6B](#) [A61K9/16P4](#)

Family:

Publication number	Publication date	Application number	Application date
AU199462102 A1	19940926	AU19940062102	19940307
FR2702375 A1	19940916	FR19930002637	19930308
FR2702375 B1	19950505	FR19930002637	19930308
WO9420075 A1	19940915	WO1994FR00245	19940307

Priority:

FR19930002637 19930308 WO1994FR00245 19940307

Probable Assignee: VIRBAC LABORATOIRES

Assignee(s): (std): DERRIEU GUY ; RAYNIER BERNARD ; VIRBAC LAB ; VIRBAC LABORATOIRES

Assignee(s): LABORATOIRES VIRBAC

Inventor(s): (std): BERNARD RAYNIER ; DERRIEU GUY ; GUY DERRIEU ; RAYNIER BERNARD

Agent(s): GRIFFITH HACK

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

Legal status (INPADOC)

[View legal status timeline](#)

Patent	Date recorded	Event group	Code	Event	Details
AU199462102 A1	19940926	LSPB	+	published / reissued	
FR2702375 A1	19940916	LSPB	+	published / reissued	
FR2702375 B1	19950505	LSGT	+	granted / extensions (spc, cpc, pte)	
FR2702375 B1	19981231	LSLE	-ST	NOTIFICATION OF LAPSE	
FR2702375 B1	20130308	PEXP		Calculated Patent Term Expiry	
WO9420075 A1	19940915	LSPB	+	published / reissued	

WO9420075 A1	19950829	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 1995 522226 COUNTRY OF REF DOCUMENT : US DATE OF REF DOCUMENT : 19950829 KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO9420075 A1	19960710	LSNE	-122	EP: PCT APPLICATION NON- ENTRY IN EUROPEAN PHASE	REF COUNTRY CODE : WO
WO9420075 A1	19961108	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : CA

Title: Aqueous drug composition having property of reversible thermosetting gelation

Abstract: PCT No. PCT/JP93/01636 Sec. 371
Date Apr. 12, 1995 Sec. 102(e) Date Apr. 12,
1995 PCT Filed Nov. 10, 1993 PCT Pub. No.



WO94/23750 PCT Pub. Date Oct. 27, 1994 An aqueous drug composition having property of reversible thermosetting gelation for ophthalmic, dermatological and body cavital use which comprises effective amount of drugs used for pharmaceutical therapy or diagnosis, methylcellulose, citric acid and polyethylene glycol and has a pH of 3 to 10, characterized in that said aqueous drug composition is fluid liquid before administration or application and forms gel at a body temperature of a local region immediately after administration or application.

Classifications:

International (IPC 8-9): [A61K47/10](#) [A61K47/12](#) [A61K47/30](#) [A61K47/38](#) [A61K9/08](#)

[A61K9/14](#) (Advanced/Invention);

[A61K47/12](#) [A61K47/30](#) [A61K47/38](#) [A61K9/08](#) (Advanced/Non-invention);

[A61K47/10](#) [A61K47/12](#) [A61K47/30](#) [A61K47/38](#) [A61K9/08](#) [A61K9/14](#) (Core/Invention);

[A61K](#) (Subclass/Invention)

International (IPC 1-7): [A61K31/70](#) [A61K47/10](#) [A61K47/12](#) [A61K47/30](#) [A61K47/34](#) [A61K47/36](#)

[A61K47/38](#) [A61K9/00](#) [A61K9/08](#) [A61K9/10](#) [A61K9/14](#)

CPC: [A61K9/0014](#) [A61K47/10](#) [A61K47/38](#)

European: [A61K47/10](#) [A61K47/38](#) [A61K9/00M3](#)

US: [424/78.02](#) [514/772.2](#)

Family:

Publication number	Publication date	Application number	Application date
AT189772 E	20000315	AT19930924801T	19931110
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AU668447 B2	19960502	AU19940054333	19931110
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DE69327878 T2	20000615	DE19936027878T	19931110
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ZA9703330 A	19980128	ZA19970003330	19970418

Priority:

JP19930112345 19930416 JP19930522964 19931110 WO1993JP01636 19931110
IL19940111299 19941014 ZA19970003330 19970418

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Inventor(s): TOURU OGUMA[JP] ; TOSIE TAKAKHASI[JP] ; TAKAHASHI TOSHIE LTD ; TAKEUCHI MASASHI ; NAITOU KEIKO WAKAMOTO ; OGUMA TOORU ; TAKAHASHI TOSHE ; MIJAKO SASAKI (DEVICH'JA - FUKUSIMA)[JP] ; MASANOBU TAKEUTI[JP] ; KHIROKI MARUJAMA[JP] ; MASAESI GOTO[JP] ; KHIROE SUZUKI (DEVICH'JA - TAKAKHASI)[JP] ; FUKUSHIMA MYAKO ; KEJCO NAJTOU (DEVICH'JA - MASUDA)[JP]

Agent(s): SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD; OGILVY RENAULT LLP SENCRL SRL; SELIGSOHN GABRIELI AND CO

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

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT189772 E	20000315	LSGT	+	granted / extensions (spc, cpc, pte)	
AT189772 E	20110815	LSLE	-REN	CEASED DUE TO NON PAYMENT OF	

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AU199454333 A1	19941108	LSPB	+	published / reissued
AU668447 B2	19960502	LSGT	+	granted / extensions (spc, cpc, pte)
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CA2153234 AA	19950704	LSPB	+	published / reissued
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CA2153234 C	19990216	LSGT	+	granted / extensions (spc, cpc, pte)
CA2153234 C	20111110	LSLE	-MKLA	LAPSED
CA2153234 C	20131110	PEXP		Calculated Patent Term Expiry
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CN1048393 C	20000119	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL
CN1048393 C	20131225	LSLE	-C17	CESSATION OF PATENT RIGHT
CN1048393 C	20131115	PEXP		Calculated Patent Term Expiry
CN1097593 A	19950125	LSPB	+	published / reissued
CN1097593 A	19950125	LSPB	+C06	PUBLICATION
DE69327878 D1	20010308	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION
DE69327878 T2	20000615	LSGT	+	granted / extensions (spc, cpc, pte)
DE69327878 T2	20131110	PEXP		Calculated Patent Term Expiry
DK0694310 T3	20000605	LSGT	+	granted / extensions (spc, cpc, pte)
DK0694310 T3	20131110	PEXP		Calculated Patent Term Expiry
EP0694310 A1	19960131	LSPB	+	published / reissued
EP0694310 A1	19960131	LSSES	+17P	REQUEST FOR EXAMINATION FILED
EFFECTIVE DATE : 19950713				

EP0694310 A4	19960424	LSES	+A4	DESPATCH OF SUPPLEMENTARY SEARCH REPORT	
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EP0694310 B1	20010131	LSGT	+26N	NO OPPOSITION FILED	
EP0694310 B1	20100129	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20090918 YEAR OF FEE PAYMENT : 17
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EP0694310 B1	20110615	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : V1 EFFECTIVE DATE : 20110601
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IL107626 A1	20040104	LSFE	+KB	PATENT RENEWED	
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IL111299 A1	19990629	LSFE	+KB	PATENT RENEWED	

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JP2729859 B2	20101028	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 16
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RU95122560 A	19980210	LSPB	+	published / reissued	
US5624962 A	19970429	LSGT	+	granted / extensions (spc, cpc, pte)	
US5624962 A	19950412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WAKAMOTO PHARMACEUTICAL CO., LTD., JAPAN OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:TAKEUCHI, MASANOBU; SUZUKI, HIROE; TAKAHASHI, TOSHIE; AND OTHERS; REEL/FRAME:007610/0858 EFFECTIVE DATE : 19950406
US5624962 A	19970324	LSGT	PAT1	Patented Case	
US5624962 A	19971230	LSRE	CC	CERTIFICATE OF CORRECTION	
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WO9423750 A1	19941027	LSPB	+	published / reissued	
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WO9423750 A1	20040115	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 953575 COUNTRY OF REF DOCUMENT : FI
ZA9703330 A	19980128	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA9703330 A	20170417	PEXP		Calculated Patent Term Expiry	

Title: METHOD FOR DETECTING STAPHYLOCOCCI

Abstract: The present invention exploits the herein first reported, empirical observation that even though staphylococci produce the enzyme, beta-glucosidase, this genus of bacteria is not able to produce a metabolite that will enzymatically react with 5-bromo-4-chloro-3-indolyl-beta-D-glucopyranoside, a substrate commonly used to detect the presence of beta-glucosidase produced by other bacteria. In view of this unexpected observation, one embodiment of the present invention includes a selective medium containing inhibitors to enhance staphylococci growth as well as a first glucopyranoside substrate, such as 5-bromo-4-chloro-3-indolyl-beta-D-glucopyranoside, and a second phosphatase substrate, such as 6-chloro-3-indolylphosphate or 5-bromo-6-chloro-3-indolylphosphate. In this embodiment, staphylococci in a sample will produce metabolites that will react with the phosphate substrate in the medium to produce colonies having red to red-violet color while other bacteria in the sample will produce beta-glucosidase that will react with the glucopyranoside substrate in the medium and produce colonies having a blue color. In a particularly preferred embodiment of this invention, a thin film culture plate device, such as a PETRIFILM culture plate device, is prepared using a dry culture medium containing selected inhibitors, a first glucopyranoside substrate and a second phosphate substrate. When the thin film culture plate device is inoculated with a sample and then incubated for a sufficient period of time, staphylococci in the sample will produce colonies on the thin film device having a red color and other bacteria in the sample will produce colonies on the device having a blue color.

**Classifications:**

International (IPC 8-9): [C12M1/00](#) [C12M1/16](#) [C12M1/26](#) [C12M1/34](#) [C12Q1/04](#) [C12Q1/14](#) [C12Q1/34](#) (Advanced/Invention);

[C12M1/34](#) [C12N1/20](#) [C12Q1/34](#) (Advanced/Non-invention);

[C12M1/00](#) [C12M1/16](#) [C12M1/26](#) [C12M1/34](#) [C12Q1/04](#) [C12Q1/14](#) [C12Q1/34](#) (Core/Invention);

[C12N1/20](#) (Core/Non-invention)

International (IPC 1-7): [C12M01/16](#) [C12M01/26](#) [C12M1/16](#) [C12M1/26](#) [C12M1/34](#) [C12N1/00](#) [C12Q01/04](#) [C12Q01/34](#) [C12Q01/42](#) [C12Q1/04](#) [C12Q1/14](#) [C12Q1/34](#) [C12Q1/42](#) [C12Q1/54](#)

CPC: [Y10S435/805](#) [Y10S435/81](#) [Y10S435/882](#) [C12Q1/04](#) [C12Q1/14](#) [C12Q2334/50](#) [C12Q2334/52](#) [G01N2333/31](#) [G01N2333/315](#) [C12M25/06](#) [C12M41/36](#)

European: [C12M1/16](#) [C12M1/26D](#) [C12Q1/04](#) [C12Q1/14](#) [M12Q334/50](#) [M12Q334/52](#) [S01N333/31](#) [S01N333/315](#)

US: [435/14](#) [435/243](#) [435/253.6](#) [435/261](#) [435/29](#) [435/291](#) [435/299](#) [435/30](#) [435/310](#) [435/34](#) [435/39](#) [435/805](#) [435/810](#) [435/882](#)

Family:

Publication number	Publication date	Application number	Application date
AU199516047 A1	19950815	AU19950016047	19950120
AU681004 B2	19970814	AU19950016047	19950120
BRPI9506670 A	19970916	BR1995PI06670	19950120
CA2180540 AA	19960704	CA19952180540	19950120
CA2180540 C	20090714	CA19952180540	19950120
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DE69508921 T2	19991111	DE19956008921T	19950120
EP0741797 A1	19961113	EP19950908084	19950120
EP0741797 B1	19990407	EP19950908084	19950120
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US5635367 A	19970603	US19950441452	19950515
WO9520674 A1	19950803	WO1995US00778	19950120

Priority:

US19940189182 19940131 WO1995US00778 19950120 US19950441452 19950515

Probable Assignee: 3M CO

Assignee(s): (std): MINNESOTA MINING AND MFG

Assignee(s): MINNESOTA MINING AND MFG CO ; MINNESOTA MINING AND MFG CO SAINT PAUL MINN US ; MINNESOTA MINING AND MFG CO SAINT PAUL ; 3M CO ; LUND MARLYS E ; MINNESOTA MINING AND MANUFACTURING COMPANY

Inventor(s): (std): LUND MARLYS ; LUND MARLYS E

Inventor(s): LUND MARLYS E SAINT PAUL MN 55133 3427 US ; MARLYS E LUND

Agent(s): SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD; SMART AND BIGGAR

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

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AU199516047 A1	19950815	LSPB	+	published / reissued	
AU681004 B2	19970814	LSGT	+	granted / extensions (spc, cpc, pte)	
AU681004 B2	20000817	LSLE	-MK14	PATENT CEASED SECTION 143(A) (ANNUAL FEES NOT PAID) OR EXPIRED	
AU681004 B2	20150120	PEXP		Calculated Patent Term Expiry	
BRPI9506670 A	19970916	LSPB	+	published / reissued	
BRPI9506670 A	20040518	LSGT	B09A	DECISION: INTENTION TO GRANT	
BRPI9506670 A	20040803	LSGT	+B16A	PATENT OR CERTIFICATE OF ADDITION OF INVENTION GRANTED	
BRPI9506670 A	20151020	LSLE	-B21A	EXPIRY ACC. ART. 78, ITEM I OF IPL- EXPIRY OF THE TERM OF PROTECTION	TEXT : PATENTE EXTINTA EM 20/01/2015
CA2180540 AA	19960704	LSPB	+	published / reissued	
CA2180540 AA	20020118	LSSES	+EEER	EXAMINATION REQUEST	
CA2180540 C	20090714	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2180540 C	20150324	LSLE	-MKEX	EXPIRY	EFFECTIVE DATE : 20150120

CA2180540 C	20150120	PEXP		Calculated Patent Term Expiry	
DE69508921 D1	20000504	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE69508921 T2	19991111	LSGT	+	granted / extensions (spc, cpc, pte)	
DE69508921 T2	20150120	PEXP		Calculated Patent Term Expiry	
EP0741797 A1	19961113	LSPB	+	published / reissued	
EP0741797 A1	19961113	LSSE	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19960723
EP0741797 A1	19980128	LSSE	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 19971210
EP0741797 B1	19990407	LSGT	+	granted / extensions (spc, cpc, pte)	
EP0741797 B1	20000329	LSGT	+26N	NO OPPOSITION FILED	
EP0741797 B1	20140430	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20140115 YEAR OF FEE PAYMENT : 20
EP0741797 B1	20140530	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20140120 YEAR OF FEE PAYMENT : 20
EP0741797 B1	20140530	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20140108 YEAR OF FEE PAYMENT : 20
EP0741797 B1	20140630	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20140115 YEAR OF FEE PAYMENT : 20
EP0741797 B1	20150120	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R071 REF DOCUMENT NUMBER : 69508921 COUNTRY OF REF DOCUMENT : DE
EP0741797 B1	20150211	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : PE20 EXPIRY DATE : 20150119
EP0741797 B1	20150529	LSLE	-PG25	LAPSED IN A CONTRACTING	COUNTRY OF REF DOCUMENT : GB

				STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	NOTIFICATION OF LAPSE : LAPSE BECAUSE OF EXPIRATION OF PROTECTION LAPSED DATE : 20150119
EP0741797 B1	20150119	PEXP		Calculated Patent Term Expiry	
EP0741797 B1	20150120	PEXP		Calculated Patent Term Expiry	
JP3985070 B2	20071003	LSGT	+	granted / extensions (spc, cpc, pte)	
JP3985070 B2	20100706	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 4
JP3985070 B2	20110630	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 4
JP3985070 B2	20110705	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 5
JP3985070 B2	20120628	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 5
JP3985070 B2	20120703	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 6
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JP3985070 B2	20140708	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP3985070 B2	20150120	LSLE	-EXPY	CANCELLATION BECAUSE OF COMPLETION OF TERM	
JP3985070 B2	20150120	PEXP		Calculated Patent Term Expiry	
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JP9508279 T2	20040318	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20040301
JP9508279 T2	20051011	LSSE	-A131	NOTIFICATION OF REASONS FOR	TEXT : JAPANESE INTERMEDIATE CODE: A131

				REFUSAL	EFFECTIVE DATE : 20051011
JP9508279 T2	20060427	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20060407
JP9508279 T2	20070511	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP9508279 T2	20070522	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20070522
JP9508279 T2	20070628	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20070621
JP9508279 T2	20070712	LSAS	A72	NOTIFICATION OF CHANGE IN NAME OF APPLICANT	TEXT : JAPANESE INTERMEDIATE CODE: A721 EFFECTIVE DATE : 20070621
JP9508279 T2	20070720	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP9508279 T2	20070723	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
MX9602924 A1	19970628	LSPB	+	published / reissued	
US5443963 A	19950822	LSGT	+	granted / extensions (spc, cpc, pte)	
US5443963 A	19940131	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MINNESOTA MINING AND MANUFACTURING COMPANY, MINNES OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:LUND, MARLYS E.; REEL/FRAME:006866/0852 EFFECTIVE DATE : 19940131
US5443963 A	19950811	LSGT	PAT1	Patented Case	
US5443963 A	19961001	LSRE	CC	CERTIFICATE OF CORRECTION	
US5443963 A	19981223	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5443963 A	20030221	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5443963 A	20070222	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12

US5443963 A	20140131	PEXP		Calculated Patent Term Expiry	
US5635367 A	19970603	LSGT	+	granted / extensions (spc, cpc, pte)	
US5635367 A	19970523	LSGT	PAT1	Patented Case	
US5635367 A	19990420	LSRE	CC	CERTIFICATE OF CORRECTION	
US5635367 A	20000928	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5635367 A	20041203	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5635367 A	20081203	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5635367 A	20150515	PEXP		Calculated Patent Term Expiry	
WO9520674 A1	19950803	LSPB	+	published / reissued	
WO9520674 A1	19960704	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2180540 COUNTRY OF REF DOCUMENT : CA
WO9520674 A1	19960723	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1995908084 COUNTRY OF REF DOCUMENT : EP
WO9520674 A1	19961113	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1995908084 COUNTRY OF REF DOCUMENT : EP
WO9520674 A1	19990407	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1995908084 COUNTRY OF REF DOCUMENT : EP

Title: SUSTAINED RELEASE MICROCAPSULE CONTAINING AMORPHOUS WATER-SOLUBLE 2-PIPERAZINONE-1-ACETIC ACID COMPOUND

Abstract: A microcapsule contains a pharmaceutically effective amorphous water-soluble 2-piperazinone-1-acetic acid compound or salt thereof and a polymer binder and a method of preparing said microcapsule. The microcapsule is produced by dispersing in an aqueous phase a dispersion of the amorphous water-soluble 2-piperazinone-1-acetic acid compound or salt thereof in a solution of a polymer in an organic solvent to give an s/o/w type emulsion and subjecting the emulsion to in-water drying. The sustained-release microcapsule entraps 2-piperazinone-1-acetic acid compound or the salt thereof, as a drug, in high concentration, and in reducing the initial release of the drug, thereby reducing undesirable side effects of the drug.



Classifications:

International (IPC 8-9): [A61J3/07](#) [A61K31/495](#) [A61K31/546](#) [A61K31/66](#) [A61K38/00](#) [A61K38/04](#) [A61K38/05](#) [A61K38/09](#) [A61K38/11](#) [A61K38/22](#) [A61K38/23](#) [A61K38/24](#) [A61K38/27](#) [A61K38/28](#) [A61K38/46](#) [A61K38/48](#) [A61K45/00](#) [A61K47/16](#) [A61K47/32](#) [A61K47/34](#) [A61K9/16](#) [A61K9/50](#) [A61K9/52](#) [A61K9/66](#) [A61P11/00](#) [A61P13/02](#) [A61P15/00](#) [A61P19/10](#) [A61P31/04](#) [A61P7/02](#) [A61P9/00](#) [A61P9/08](#) [A61P9/10](#) [B01J13/02](#) [B01J13/04](#) [B01J13/06](#) [B01J13/12](#) [C07D241/08](#) [C07D413/12](#) [C07D413/14](#) [C08L67/00](#) [C08L67/04](#) (Advanced/Invention);
[A61K31/495](#) [A61K31/546](#) [A61K31/66](#) [A61K38/00](#) [A61K38/04](#) [A61K38/10](#) [A61K38/22](#) [A61K38/23](#) [A61K38/24](#) [A61K38/27](#) [A61K38/28](#) [A61K38/43](#) [A61K45/00](#) [A61K47/16](#) [A61K47/32](#) [A61K47/34](#) [A61K9/16](#) [A61K9/52](#) [A61P11/00](#) [A61P13/00](#) [A61P15/00](#) [A61P19/00](#) [A61P31/00](#) [A61P7/00](#) [A61P9/00](#) [B01J13/02](#) [B01J13/04](#) [B01J13/06](#) [C07D241/00](#) [C07D413/00](#) [C08L67/00](#) (Core/Invention)

International (IPC 1-7): [A61F13/00](#) [A61F2/00](#) [A61F9/02](#) [A61J3/07](#) [A61K31/495](#) [A61K38/00](#) [A61K38/04](#) [A61K38/05](#) [A61K38/09](#) [A61K38/11](#) [A61K38/22](#) [A61K38/23](#) [A61K38/24](#) [A61K38/27](#) [A61K38/28](#) [A61K38/46](#) [A61K38/48](#) [A61K45/00](#) [A61K47/16](#) [A61K47/32](#) [A61K47/34](#) [A61K9/16](#) [A61K9/50](#) [A61K9/52](#) [A61K9/66](#) [B01J13/04](#) [B01J13/06](#) [B01J13/12](#) [C07D241/08](#) [C07D413/12](#) [C07D413/14](#) [C08L67/04](#)

CPC: [Y10S514/821](#) [Y10S514/822](#) [Y10S514/951](#) [Y10S514/963](#) [Y10S514/964](#) [Y10S977/906](#) [Y10S977/915](#) [Y10S977/92](#) [Y10S977/775](#) [Y10S977/788](#) [Y10S977/801](#) [A61K9/1647](#) [A61K31/495](#) [A61K9/1611](#) [A61K9/1617](#) [A61K9/1623](#)

European: [A61K31/495](#) [A61K9/16H2](#) [A61K9/16H4](#) [A61K9/16H4B](#) [A61K9/16H6D4](#)

US: [264/4.6](#) [424/426](#) [424/433](#) [424/434](#) [424/436](#) [424/464](#) [424/489](#) [424/499](#) [424/501](#) [514/821](#) [514/822](#) [514/951](#) [514/963](#) [514/964](#) [977/775](#) [977/788](#) [977/801](#) [977/906](#) [977/915](#) [977/920](#)

Family:

Publication number	Publication date	Application number	Application date
AT198981 E	20010215	AT19950115568T	19951002
AT231390 E	20030215	AT19950106329T	19951002
CA2159552 AA	19960331	CA19952159552	19950929
CA2186709 AA	19970329	CA19962186709	19960927
DE69520021 D1	20010308	DE19956020021	19951002
DE69520021 T2	20010913	DE19956020021T	19951002
DE69529486 D1	20030227	DE19956029486	19951002
DE69529486 T2	20031204	DE19956029486T	19951002
DK0709085 T3	20010219	DK19950115568T	19951002
DK1022020 T3	20030303	DK19950106329T	19951002
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EP1022020 A2	20000726	EP20000106329	19951002
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US5876756 A	19990302	US19960724498	19960930
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Priority:

JP19940236846 19940930 JP19950250818 19950928 US19950535386 19950928
CA19952159552 19950929 EP19950115568 19951002 JP19960077012 19960329
JP19960252544 19960925 CA19962186709 19960927 US19960724498 19960930

Probable Assignee: TAKEDA CHEMICAL IND LTD

Assignee(s): (std): TAKEDA CHEMICAL INDUSTRIES LTD ; TAKEDA CHEMICAL IND LTD ; TAKEDA PHARMACEUTICAL

Assignee(s): TAKEDA PHARMACEUTICAL COMPANY LIMITED ; TAKEDA PHARMACEUTICAL COMPANY LIMITED ; IWASA SUSUMU ; KUROKAWA TOMOFUMI ; TAKADA SHIGEYUKI ; TAKEDA CHEM IND LTD ; TAKEDA CHEMICAL IND ; TAKEDA PHARMACEUTICAL CO LTD

Inventor(s): (std): IWASA SUSUMU ; KUROKAWA TOMOFUMI ; TAKADA SHIGEYUKI

Agent(s): FETHERSTONHAUGH AND CO; TANAKA MITSUO; AOYAMA TAMOTSU; TAKAHASHI SHUICHI; TAKASHIMA HAJIME

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

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT198981 E	20010215	LSGT	+	granted / extensions (spc, cpc, pte)	
AT198981 E	20151002	PEXP		Calculated Patent Term Expiry	
AT231390 E	20030215	LSGT	+	granted / extensions (spc, cpc, pte)	
AT231390 E	20030715	LSLE	-RER	CEASED AS TO PARAGRAPH 5 LIT. 3 LAW INTRODUCING PATENT TREATIES	
AT231390 E	20151002	PEXP		Calculated Patent Term Expiry	
CA2159552 AA	19960331	LSPB	+	published / reissued	
CA2159552 AA	20020227	LSES	+EEER	EXAMINATION REQUEST	
CA2159552 AA	20061106	LSLE	-FZDE	DEAD	
CA2186709 AA	19970329	LSPB	+	published / reissued	
CA2186709 AA	20060326	LSLE	-FZDE	DEAD	EFFECTIVE DATE : 20000927
DE69520021 D1	20050804	LSAS	8327	CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER	PARTYTYPE : OWNER OWNER : TAKEDA PHARMACEUTICAL CO. LTD, OSAKA, JP

DE69520021 T2	20010913	LSGT	+	granted / extensions (spc, cpc, pte)	
DE69520021 T2	20151002	PEXP		Calculated Patent Term Expiry	
DE69529486 D1	20040219	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE69529486 D1	20050804	LSAS	8327	CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER	PARTYTYPE : OWNER OWNER : TAKEDA PHARMACEUTICAL CO. LTD., OSAKA, JP
DE69529486 T2	20031204	LSGT	+	granted / extensions (spc, cpc, pte)	
DE69529486 T2	20151002	PEXP		Calculated Patent Term Expiry	
DK0709085 T3	20010219	LSGT	+	granted / extensions (spc, cpc, pte)	
DK0709085 T3	20151002	PEXP		Calculated Patent Term Expiry	
DK1022020 T3	20030303	LSGT	+	granted / extensions (spc, cpc, pte)	
DK1022020 T3	20151002	PEXP		Calculated Patent Term Expiry	
EP0709085 A1	19960501	LSPB	+	published / reissued	
EP0709085 A1	19961127	LSSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19960930
EP0709085 A1	19980114	LSSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 19971128
EP0709085 B1	20010131	LSGT	+	granted / extensions (spc, cpc, pte)	
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EP0709085 B1	20010131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. 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 : 20010131
EP0709085 B1	20010131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : BE 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 : 20010131
EP0709085 B1	20010131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : NL 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 : 20010131
EP0709085 B1	20010131	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP0709085 B1	20010307	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP0709085 B1	20010430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. 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 : 20010430
EP0709085 B1	20010702	LSLE	-NLV1	NL: LAPSED OR ANNULLED DUE TO FAILURE TO FULFILL THE REQUIREMENTS OF ART. 29P AND 29M OF THE PATENTS ACT	REF COUNTRY CODE : EP
EP0709085 B1	20011002	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : LU NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20011002
EP0709085 B1	20011002	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : IE 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 : 20011002
EP0709085 B1	20020123	LSGT	+26N	NO OPPOSITION FILED	
EP0709085 B1	20020807	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP0709085 B1	20050715	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : CH OWNER : TAKEDA PHARMACEUTICAL COMPANY LIMITED REF LEGAL EVENT CODE : PFA OLDPARTY : TAKEDA CHEMICAL INDUSTRIES, LTD.#1-1 DOSHOMACHI 4-CHOME, CHUO- KU#OSAKA-SHI, OSAKA 541-0045 (JP) -TRANSFER TO- TAKEDA PHARMACEUTICAL COMPANY LIMITED#1-1, DOSHOMACHI 4-CHOME CHUO-KU#OSAKA (JP)
EP0709085 B1	20051002	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : IT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON- PAYMENT OF DUE FEES LAPSED DATE : 20051002
EP0709085 B1	20051104	LSAS	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : CD
EP0709085 B1	20080625	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : CH OWNER : TAKEDA PHARMACEUTICAL COMPANY LIMITED REF LEGAL EVENT CODE : PFA OLDPARTY : TAKEDA PHARMACEUTICAL COMPANY LIMITED#1-1, DOSHOMACHI 4-CHOME CHUO-KU#OSAKA (JP) - TRANSFER TO- TAKEDA PHARMACEUTICAL COMPANY LIMITED#1-1, DOSHOMACHI 4-CHOME CHUO-KU#OSAKA (JP)
EP0709085 B1	20101231	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20100929 YEAR OF FEE PAYMENT : 16
EP0709085 B1	20110131	LSFE	+PGFP	POSTGRANT: ANNUAL	COUNTRY OF REF

				FEES PAID TO NATIONAL OFFICE	DOCUMENT : DK PAYMENT DATE : 20101014 YEAR OF FEE PAYMENT : 16
EP0709085 B1	20110131	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20101020 YEAR OF FEE PAYMENT : 16
EP0709085 B1	20110228	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20101012 YEAR OF FEE PAYMENT : 16
EP0709085 B1	20110228	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20100929 YEAR OF FEE PAYMENT : 16
EP0709085 B1	20110331	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20101012 YEAR OF FEE PAYMENT : 16
EP0709085 B1	20120531	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP0709085 B1	20120627	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20111002
EP0709085 B1	20120702	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DK REF LEGAL EVENT CODE : EBP
EP0709085 B1	20120703	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SE REF LEGAL EVENT CODE : EUG
EP0709085 B1	20120720	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20120629
EP0709085 B1	20120731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : LI NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20111031

EP0709085 B1	20120731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : DE NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120501
EP0709085 B1	20120731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : CH NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20111031
EP0709085 B1	20120809	LSDW	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R119 REF DOCUMENT NUMBER : 69520021 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20120501
EP0709085 B1	20120831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : GB NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20111002
EP0709085 B1	20120831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : FR NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20111102
EP0709085 B1	20121031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : SE NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20111003
EP0709085 B1	20121031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : DK NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20111031
EP0709085 B1	20151002	PEXP		Calculated Patent Term Expiry	
EP0765660 A2	19970402	LSPB	+	published / reissued	
EP0765660 A3	19990519	LSSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19990322
EP0765660 A3	20000927	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20000403
EP1022020 A2	20000726	LSPB	+	published / reissued	

EP1022020 A2	20010321	LSSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20010122
EP1022020 A3	20020116	LSFE	+AKX	PAYMENT OF DESIGNATION FEES	TEXT : AT BE CH DE DK ES FR GB GR IE IT LI LU NL PT SE
EP1022020 A3	20020502	LSSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 20020314
EP1022020 B1	20030122	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1022020 B1	20030122	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : AT 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 : 20030122
EP1022020 B1	20030122	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : BE 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 : 20030122
EP1022020 B1	20030122	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. 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 : 20030122
EP1022020 B1	20030122	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : NL 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 : 20030122
EP1022020 B1	20030122	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP1022020 B1	20030131	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP

EP1022020 B1	20030219	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP1022020 B1	20030422	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. 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 : 20030422
EP1022020 B1	20030701	LSLE	-NLV1	NL: LAPSED OR ANNULLED DUE TO FAILURE TO FULFILL THE REQUIREMENTS OF ART. 29P AND 29M OF THE PATENTS ACT	REF COUNTRY CODE : EP
EP1022020 B1	20030730	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : ES 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 : 20030730
EP1022020 B1	20031002	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : IE NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20031002
EP1022020 B1	20031002	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : LU NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20031002
EP1022020 B1	20040114	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20031023
EP1022020 B1	20040728	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP1022020 B1	20050715	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTY TYPE : OWNER REF COUNTRY CODE : CH OWNER : TAKEDA PHARMACEUTICAL COMPANY LIMITED REF LEGAL EVENT CODE : PFA OLD PARTY : TAKEDA CHEMICAL INDUSTRIES, LTD.#1-1 DOSHOMACHI 4-CHOME, CHUO-KU#OSAKA, SUT. OSAKA

					541 (JP) -TRANSFER TO-TAKEDA PHARMACEUTICAL COMPANY LIMITED#1-1, DOSHOMACHI 4-CHOME CHUO-KU#OSAKA (JP)
EP1022020 B1	20051002	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : IT NOTIFICATIONOF LAPSE : LAPSE BECAUSE OF NON- PAYMENT OF DUE FEES LAPSED DATE : 20051002
EP1022020 B1	20051104	LSAS	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : CD
EP1022020 B1	20080625	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : CH OWNER : TAKEDA PHARMACEUTICAL COMPANY LIMITED REF LEGAL EVENT CODE : PFA OLDPARTY : TAKEDA PHARMACEUTICAL COMPANY LIMITED#1-1, DOSHOMACHI 4-CHOME CHUO-KU#OSAKA (JP) - TRANSFER TO- TAKEDA PHARMACEUTICAL COMPANY LIMITED#1-1, DOSHOMACHI 4-CHOME CHUO-KU#OSAKA (JP)
EP1022020 B1	20101231	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20100929 YEAR OF FEE PAYMENT : 16
EP1022020 B1	20110131	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20101014 YEAR OF FEE PAYMENT : 16
EP1022020 B1	20110131	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20101020 YEAR OF FEE PAYMENT : 16
EP1022020 B1	20110228	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20101012 YEAR OF FEE PAYMENT : 16
EP1022020 B1	20110228	LSFE	+PGFP	POSTGRANT: ANNUAL	COUNTRY OF REF

				FEES PAID TO NATIONAL OFFICE	DOCUMENT : DE PAYMENT DATE : 20100929 YEAR OF FEE PAYMENT : 16
EP1022020 B1	20110331	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20101012 YEAR OF FEE PAYMENT : 16
EP1022020 B1	20120531	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP1022020 B1	20120627	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20111002
EP1022020 B1	20120702	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DK REF LEGAL EVENT CODE : EBP
EP1022020 B1	20120703	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SE REF LEGAL EVENT CODE : EUG
EP1022020 B1	20120720	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20120629
EP1022020 B1	20120731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : DE NOTIFICATIONOF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120501
EP1022020 B1	20120731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : CH NOTIFICATIONOF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20111031
EP1022020 B1	20120731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : LI NOTIFICATIONOF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20111031
EP1022020 B1	20120809	LSDW	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R119 REF DOCUMENT NUMBER : 69529486 COUNTRY OF REF DOCUMENT : DE

					EFFECTIVE DATE : 20120501
EP1022020 B1	20120831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : GB NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20111002
EP1022020 B1	20120831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : FR NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20111102
EP1022020 B1	20121031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : DK NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20111031
EP1022020 B1	20121031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : SE NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20111003
EP1022020 B1	20151002	PEXP		Calculated Patent Term Expiry	
JP3790567 B2	20060628	LSGT	+	granted / extensions (spc, cpc, pte)	
JP3790567 B2	20081224	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP3790567 B2	20090205	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP3790567 B2	20090310	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 4
JP3790567 B2	20090527	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 4
JP3790567 B2	20100204	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 4
JP3790567 B2	20100309	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 5
JP3790567 B2	20110202	LSFE	+FPAY	RENEWAL FEE PAYMENT	YEAR OF FEE PAYMENT : 5

				(EVENT DATE IS RENEWAL DATE OF DATABASE)	
JP3790567 B2	20120202	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 6
JP3790567 B2	20120313	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 7
JP3790567 B2	20121108	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 7
JP3790567 B2	20130407	LSLE	-LAPS	CANCELLATION BECAUSE OF NO PAYMENT OF ANNUAL FEES	
JP3790567 B2	20150928	PEXP		Calculated Patent Term Expiry	
JP8151321 A2	19960611	LSPB	+	published / reissued	
JP8151321 A2	20040616	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20040615
JP8151321 A2	20040813	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20040812
JP8151321 A2	20040902	LSAL	A911	TRANSFER OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A911 EFFECTIVE DATE : 20040901
JP8151321 A2	20041004	LSAL	-A912	REMOVAL OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A912 EFFECTIVE DATE : 20041001
JP8151321 A2	20060224	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20060223
JP8151321 A2	20060406	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20060403
JP8151321 A2	20060407	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF	TEXT : JAPANESE INTERMEDIATE CODE:

				UTILITY MODEL	R150
JP9315975 A2	19971209	LSPB	+	published / reissued	
JP9315975 A2	20031202	LSWD	-A300	WITHDRAWAL OF APPLICATION BECAUSE OF NO REQUEST FOR EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A300 EFFECTIVE DATE : 20031202
US5876756 A	19990302	LSGT	+	granted / extensions (spc, cpc, pte)	
US5876756 A	19961212	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : TAKEDA CHEMICAL INDUSTRIES, LTD., JAPAN OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:TAKADA, SHIGEYUKI; KUROKAWA, TOMOFUMI; IWASA, SUSUMU; REEL/FRAME:008349/0719 EFFECTIVE DATE : 19961127
US5876756 A	20000208	LSRE	CC	CERTIFICATE OF CORRECTION	
US5876756 A	20030303	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5876756 A	20030402	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US5876756 A	20030429	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20030302
US5876756 A	20160930	PEXP		Calculated Patent Term Expiry	
US6117455 A	20000912	LSGT	+	granted / extensions (spc, cpc, pte)	
US6117455 A	19950928	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : TAKEDA CHEMICAL INDUSTRIES, LTD., JAPAN OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:TAKADA, SHIGEYUKI; KUROKAWA, TOMOFUMI; IWASA, SUSUMU; REEL/FRAME:007681/0831 EFFECTIVE DATE : 19950920
US6117455 A	20040204	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6117455 A	20050110	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER

OWNER : TAKEDA
PHARMACEUTICAL
COMPANY, LIMITED,
JAPAN
OLDPARTY : CHANGE OF
NAME;
ASSIGNOR:TAKEDA
CHEMICAL INDUSTRIES,
LTD.;
REEL/FRAME:015612/0101
EFFECTIVE DATE :
20040629

US6117455 A	20080215	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US6117455 A	20120912	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US6117455 A	20121008	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US6117455 A	20121030	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20120912
US6117455 A	20150928	PEXP		Calculated Patent Term Expiry	

Title: ENZYMATIC METHOD FOR DETECTING COLIFORM BACTERIA OR E. COLI

Abstract: PCT No. PCT/BE95/00102 Sec. 371

Date Jul. 14, 1997 Sec. 102(e) Date Jul. 14,

1997 PCT Filed Nov. 7, 1995 PCT Pub. No.

WO96/14431 PCT Pub. Date May 17, 1996A two stage enzymatic method for the detection of coliform bacteria or E. coli wherein bacteria are concentrated on a membrane filter. This filter is placed on a growth medium containing nutrients, including preferably minerals, a protein hydrolysate and a sugar, preferably maltose or a polyalcohol, preferably mannitol, an inducer of a marker enzyme, in particular beta -galactosidase or beta -glucuronidase and inhibitors of the growth of competing bacteria. After a preincubation step, the filter is placed on an assay medium containing a fluorogenic or chemiluminogenic enzyme substrate and a membrane permeabilizer. The membrane filter and the assay medium are incubated to allow cleavage of the enzyme substrate producing fluorescent or chemiluminescent microcolonies on the membrane filter after triggering of light emission.

Classifications:

International (IPC 8-9): [C12N1/20](#) [C12Q1/04](#) [C12Q1/10](#) [C12Q1/40](#) (Advanced/Invention);

[C12N1/20](#) [C12Q1/04](#) [C12Q1/40](#) [C12Q1/70](#) [C12R1/19](#) (Advanced/Non-invention);

[C12N1/20](#) [C12Q1/04](#) [C12Q1/10](#) [C12Q1/40](#) (Core/Invention)

International (IPC 1-7): [C12N1/20](#) [C12Q1/04](#) [C12Q1/10](#) [C12Q1/40](#) [C12Q1/54](#) [G01N33/53](#)

CPG: [Y10S435/848](#) [Y10S435/849](#) [Y10S435/968](#) [C12N1/20](#) [C12Q1/10](#) [G01N2333/245](#)

European: [C12N1/20](#) [C12Q1/10](#) [S01N333/245](#)

US: [435/14](#) [435/34](#) [435/38](#) [435/848](#) [435/849](#) [435/968](#)

Family:

Publication number	Publication date	Application number	Application date
AU199538652 A1	19960531	AU19950038652	19951107
AU713480 B2	19991202	AU19950038652	19951107
DE69519747 D1	20010201	DE19956019747	19951107
DE69519747 T2	20010809	DE19956019747T	19951107
EP0791070 A1	19970827	EP19950937732	19951107
EP0791070 B1	20001227	EP19950937732	19951107
ES2155144 T3	20010501	ES19950937732T	19951107
JP11505405 T2	19990521	JP19960514911T	19951107
KR19970707302 A	19971201	KR19970703053	19970507
US5861270 A	19990119	US19970836140	19970714
WO9614431 A1	19960517	WO1995BE00102	19951107

Priority:

WO1994BE00083 19941107

WO1995BE00102 19951107

Probable Assignee: STUDIE EN SAMENWERKINGSVERBAND VLAAMS WATER AFGEKORT SVW

Assignee(s): (std): STUDIE EN SAMENWERKINGSVERBAND ; UNIVERSITEIT GENT GENT ; STUDIE EN SAMENWERKINGVERBAND ; UNIV GENT ; STUDIECENTRUM VOOR WATER ; UNIVERSITEIT GENT ; NELIS JOZEF CONSTANTIA FRANS H

Assignee(s): NELIS JOZEF CONSTANTIA FRANS HANS ; STUDIE EN SAMENWERKINGVERBAND VLAAMS WATER ; STUDIE EN SAMENWERKINGVERBAND VLAAMS WATER ANTWERP ; STUDIE EN SAMENWERKINGVERBAND VLAAMS WATER ANTWERPEN ; STUDIE EN SAMENWERKINGSVERBAND VLAAMS WATER AFGEKORT SVW ; UNIVERSITEIT GENT SINT PIETERSNIEUWSTRAAT ; UNIVERSITEIT GENT SINT PIETERSNIEUWSTRAA ; UNIVERSITEIT GENT SINT PIETERSNIENWSTRAAT ; STUDIE EN SAMENWERKINGSVERBAND VLAAMS WATER ; STUDIE EN SAMENWERKINGSVERBAND VLAAMS WATER AFGEKORT SVW ; STUDIE EN

Inventor(s): (std): SAMENWERKINGSVERBAND VLAAMS WATER
JOZEF CONSTANTIA FRANS HANS NELIS ; NELIS CONSTANTIA ; NELIS JOZEF CONSTANTIA FRANS H

Inventor(s): NELIS JOZEF CONSTANTIA FRANS HANS

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD

Designated states: AL AM AT AU BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CZ DE DK EE ES FI FR GA GB GE GN GR HU IE IS IT JP KE KG KP KR KZ 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 SN SZ TD TJ TM TT UA UG US UZ VN

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AU199538652 A1	19960531	LSPB	+	published / reissued	
AU713480 B2	19991202	LSGT	+	granted / extensions (spc, cpc, pte)	
AU713480 B2	20000330	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU713480 B2	20151107	PEXP		Calculated Patent Term Expiry	
DE69519747 D1	20020131	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE69519747 D1	20070913	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
DE69519747 T2	20010809	LSGT	+	granted / extensions (spc, cpc, pte)	
DE69519747 T2	20151107	PEXP		Calculated Patent Term Expiry	
EP0791070 A1	19970827	LSPB	+	published / reissued	
EP0791070 A1	19970827	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19970527
EP0791070 A1	19980930	LSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 19980819
EP0791070 A1	20000119	LSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 19980819
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				CODE	FG2A REF DOCUMENT NUMBER : 2155144 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP0791070 A1	20011219	LSGT	+26N	NO OPPOSITION FILED	
EP0791070 A1	20050928	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20050928 YEAR OF FEE PAYMENT : 11
EP0791070 A1	20051005	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20051005 YEAR OF FEE PAYMENT : 11
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EP0791070 A1	20070801	LSLE	-NLV4	NL: LAPSED OR ANULLED DUE TO NON-PAYMENT OF THE ANNUAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20070601
EP0791070 A1	20070803	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20070731
EP0791070 A1	20071124	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : GB NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20061107
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EP0791070 B1	20151107	PEXP		Calculated Patent Term Expiry	
ES2155144 T3	20010501	LSGT	+	granted / extensions (spc, cpc, pte)	
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JP11505405 T2	20050111	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP11505405 T2	20060110	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP11505405 T2	20070109	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
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JP11505405 T2	20070530	LSAS	S533	WRITTEN REQUEST FOR REGISTRATION OF CHANGE OF NAME	TEXT : JAPANESE INTERMEDIATE CODE: R313533
JP11505405 T2	20070606	LSAS	R350	WRITTEN NOTIFICATION OF REGISTRATION OF TRANSFER	TEXT : JAPANESE INTERMEDIATE CODE: R350
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JP11505405 T2	20121227	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 14
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KR19970707302 A	19971201	LSPB	+	published / reissued	
US5861270 A	19990119	LSGT	+	granted / extensions (spc, cpc, pte)	
US5861270 A	19970714	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : UNIVERSITEIT GENT, BELGIUM OLDPARTY : ASSIGNMENT AND NAME CHANGE; ASSIGNOR:NEILS, JOSEF CONSTANTIA FRANS HANS; REEL/FRAME:008826/0888 EFFECTIVE DATE : 19970602
US5861270 A	19970714	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : "STUDIE- EN SAMENWERKINGSVERBAND VIAAAMS WATER". A

					OLDPARTY : ASSIGNMENT AND NAME CHANGE; ASSIGNOR:NEILS, JOSEF CONSTANTIA FRANS HANS; REEL/FRAME:008826/0888 EFFECTIVE DATE : 19970602
US5861270 A	19980309	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : UNIVERSITEIT GENT, BELGIUM OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT ASSIGNOR'S NAME AND SERIAL NUMBER. PLEASE ALSO DELETE THE SECOND ASSIGNEE AT REEL 8826, FRAME 0888; ASSIGNOR:NELIS, JOZEF CONSTANTIA FRANS HANS; REEL/FRAME:009042/0290 EFFECTIVE DATE : 19970602
US5861270 A	19981014	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : UNIVERSITEIT GENT, BELGIUM OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:NELIS, JOZEF CONSTANTIA FRANS HANS; REEL/FRAME:009509/0245 EFFECTIVE DATE : 19970602
US5861270 A	19981014	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : "STUDIE-EN SAMENWERKINGSVERBAND VLAAMS WATER"; AFG OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:NELIS, JOZEF CONSTANTIA FRANS HANS; REEL/FRAME:009509/0245 EFFECTIVE DATE : 19970602
US5861270 A	20020704	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5861270 A	20070119	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5861270 A	20070221	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US5861270 A	20070320	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20070119
US5861270 A	20170714	PEXP		Calculated Patent Term Expiry	
WO0614431 A1	19960517	LSDB		published /	

reissued					
WO9614431 A1	19970507	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 1996 514911 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO9614431 A1	19970507	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1019970703053 COUNTRY OF REF DOCUMENT : KR
WO9614431 A1	19970527	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1995937732 COUNTRY OF REF DOCUMENT : EP
WO9614431 A1	19970714	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 08836140 COUNTRY OF REF DOCUMENT : US
WO9614431 A1	19970821	LSWD	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : 8642
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WO9614431 A1	19971201	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1019970703053 COUNTRY OF REF DOCUMENT : KR
WO9614431 A1	19980707	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : CA
WO9614431 A1	20001227	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1995937732 COUNTRY OF REF DOCUMENT : EP
WO9614431 A1	20031201	LSRV	-WWR	WIPO INFORMATION: REFUSED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1019970703053 COUNTRY OF REF DOCUMENT : KR

Title: TRANSCOBALAMIN RECEPTOR BINDING CONJUGATES USEFUL FOR TREATING ABNORMAL CELLULAR PROLIFERATION

Abstract: An agent, composition and method for the treatment, prophylaxis and/or diagnosis of proliferative disorders, which is highly and efficiently absorbed at the site of abnormal cellular proliferation is disclosed.



Classifications:

International (IPC 8-9): [A01N43/04](#) [A61K31/70](#) [A61K31/714](#) [A61K38/16](#) [A61K47/48](#) [A61K51/00](#) [A61M36/14](#) [A61P35/00](#) [C07H23/00](#) (Advanced/Invention);

[A61K31/70](#) [A61K31/7135](#) [A61K47/48](#) [A61K51/00](#) [A61P35/00](#) [C07H23/00](#) (Core/Invention)

International (IPC 1-7): [A61K31/675](#) [A61K31/70](#) [A61K31/714](#) [A61K47/48](#) [A61K51/00](#) [A61P35/00](#) [C07F15/06](#) [C07H23/00](#)

CPC: [A61K47/551](#) [C07H23/00](#)

European: [A61K47/48H4](#) [A61K47/48H4Q8](#) [C07H23/00](#)

US: [424/1.11](#) [424/1.65](#) [424/1.73](#) [514/1.9](#) [514/1.900S](#) [514/13.3](#) [514/13.300S](#) [514/19.5](#) [514/19.500S](#) [514/19.6](#) [514/19.600S](#) [514/27](#) [514/52](#) [514/52P](#) [514/6](#) [514/80](#) [514/80P](#) [530/322](#) [530/322S](#) [536/26.4](#) [536/26.44](#) [536/26.440S](#) [540/145](#) [540/145S](#)

Family:

Publication number	Publication date	Application number	Application date
AU2002243438 AA	20020724	AU20020243438	20011025
CA2427146 AA	20030425	CA20012427146	20011025
EP1334114 A2	20030813	EP20010989335	20011025
EP1754712 A2	20070221	EP20060076237	20011025
EP1754712 A3	20090114	EP20060076237	20011025
TWI228512 B	20050301	TW20010126465	20011025
US2002151525 AA	20021017	US20010027593	20011025
US2006166862 AA	20060727	US20060353810	20060213
US7531162 BB	20090512	US20060353810	20060213
WO02055530 A2	20020718	WO2001US51328	20011025
WO02055530 A3	20030123	WO2001US51328	20011025

Priority:

US20000243082P 20001025 US20000243112P 20001025 EP20010989335 20011025
 US20010027593 20011025 WO2001US51328 20011025 US20060353810 20060213

Probable Assignee: OF MINNESOTA UNIV

Assignee(s): (std): MAYO FOUNDATION ; UNIV MINNESOTA ; COLLINS DOUGLAS A ; HOGENKAMP HENRICUS P ; HOGENKAMP HENRICUS P C

Assignee(s): HOGENKAMP HENRICUS PC ; MAYO FOUNDATION FOR MEDICAL EDUCATION AND RESEARCH ; OF MINNESOTA UNIV ; MAYO FOUNDATION FOR MEDICAL EDUCATION AND ; MINNESOTA UNIV ; REGENTS OF THE UNIVERSITY OF MINNESOTA ; UNIV

Inventor(s): (std): HOGENKAMP HENRICUS P ; HOGENKAMP HENRICUS P C ; COLLINS DOUGLAS A

Inventor(s): DOUGLAS A COLLINS ; HENRICUS P C HOGENKAMP ; HOGENKAMP HENRICUS PC ; HOGENKAMP HENRICUS ; COLLINS DOUGLAS

Agent(s): MBM AND CO; HOWARD PAUL NICHOLAS ET AL; KING AND SPALDING LLP; FISH AND RICHARDSON PC

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR

GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC
MD MG MK ML MN MR MW MX MZ NE NL NO NZ PH PL PT RO RU SD SE SG SI
SK SL SN SZ TD TG TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AU2002243438 AA	20020724	LSPB	+	published / reissued	
AU2002243438 AA	20040129	LSLE	-MK6	APPLICATION LAPSED SECTION 142(2)(F)/REG. 8.3(3) - PCT APPLIC. NOT ENTERING NATIONAL PHASE	
CA2427146 AA	20030425	LSPB	+	published / reissued	
CA2427146 AA	20051025	LSLE	-FZDE	DEAD	
EP1334114 A2	20030813	LSPB	+	published / reissued	
EP1334114 A2	20030813	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20030520
EP1334114 A2	20091125	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20090505
EP1754712 A2	20070221	LSPB	+	published / reissued	
EP1754712 A3	20090812	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20090629
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TWI228512 B	20211025	PEXP		Calculated Patent Term Expiry	
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US2006166862 AA	20060727	LSPB	+	published / reissued	
US2006166862 AA	20060809	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MAYO FOUNDATION FOR MEDICAL EDUCATION AND RESEARCH OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:COLLINS, DOUGLAS A.; REEL/FRAME:018076/0783 EFFECTIVE DATE : 20060804
US2006166862 AA	20060829	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : REGENTS OF THE UNIVERSITY OF MINNESOTA, MINNESOTA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:HOGENKAMP, HENRICUS P.C.; REEL/FRAME:018183/0881 EFFECTIVE DATE : 20060828
US7531162 BB	20090512	LSGT	+	granted / extensions (spc, cpc, pte)	
US7531162 BB	20090422	LSGT	PAT1	Patented Case	

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WO02055530 A3	20030813	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2001989335 COUNTRY OF REF DOCUMENT : EP
WO02055530 A3	20030904	LSWD	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : 8642
WO02055530 A3	20050914	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : JP

Title: CULTURE MEDIUM AND METHOD FOR DETECTING THERMONUCLEASE-POSITIVE STAPHYLOCOCCI

Abstract: The present invention provides a method of detecting thermonuclease-positive staphylococci that does not require inactivation of DNase-positive/TNase-negative bacteria with heat. The method includes (a) providing a culture medium selective for growing staphylococci; (b) inoculating the culture medium with a sample; (c) incubating the inoculated culture medium under conditions effective to promote the growth of staphylococci; (d) providing an indicator system that produces a differentiable, detectable signal in the presence of thermonuclease-positive staphylococci; (e) contacting the indicator system with the inoculated, incubated culture medium, thereby forming a detection assembly; (f) incubating the detection assembly under conditions effective for generating the differentiable, detectable signal; and (g) detecting the detectable signal. The present invention also provides a culture medium for the selective identification of *Staphylococcus aureus*. The culture medium includes at least one first selective agent that selects for growth of staphylococci; at least one second selective agent for differentiating *Staphylococcus aureus* from other staphylococci; at least one first indicator for indicating the presence of staphylococci; and at least one second indicator for differentially indicating the presence of non-staphylococci bacteria. The present invention also provides a method of selectively identifying *Staphylococcus aureus* in a sample by using the culture medium of the present invention.

**Classifications:**

International (IPC 8-9): [C12N1/20](#) [C12Q1/02](#) [C12Q1/04](#) [C12Q1/14](#) [C12Q1/34](#) [C12Q1/42](#) (Advanced/Invention);

[C12N1/20](#) [C12Q1/02](#) [C12Q1/04](#) [C12Q1/14](#) [C12Q1/34](#) [C12Q1/42](#) (Core/Invention)

International (IPC 1-7): [C12M1/34](#) [C12N1/20](#) [C12Q1/14](#)

CPC: [Y10S435/883](#) [Y10S435/975](#) [C12N1/20](#) [C12Q1/045](#) [C12Q1/14](#)

European: [C12N1/20](#) [C12Q1/04B](#) [C12Q1/14](#)

US: [435/18](#) [435/21](#) [435/252.3](#) [435/253.6](#) [435/283.3](#) [435/287.1](#) [435/29](#) [435/34](#) [435/36](#) [435/883](#) [435/975](#)

Family:

Publication number	Publication date	Application number	Application date
US2003235879 AA	20031225	US20020177420	20020620
US7087401 BB	20060808	US20020177420	20020620

Priority:

US20020177420 20020620

Probable Assignee: 3M CO

Assignee(s): (std): 3M CO ; 3M INNOVATIVE PROPERTIES CO

Assignee(s): 3M INNOVATIVE PROPERTIES COMPANY

Inventor(s): (std): MACH PATRICK A ; SANDBERG GREGORY P

Agent(s): DANIEL R; NANCY M

Legal status (INPADOC)

[View legal status timeline](#)

Patent	Date recorded	Event group	Code	Event	Details
US2003235879 AA	20031225	LSPB	+	published / reissued	
US7087401 BB	20060808	LSCB	+	granted /	

					extensions (spc, cpc, pte)
US7087401 BB	20020620	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : 3M INNOVATIVE PROPERTIES COMPANY, MINNESOTA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:SANDBERG, GREGORY P.; MACH, PATRICK A.; REEL/FRAE:013040/0084 EFFECTIVE DATE : 20020620
US7087401 BB	20060719	LSGT	PAT1	Patented Case	
US7087401 BB	20061226	LSRE	CC	CERTIFICATE OF CORRECTION	
US7087401 BB	20100208	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US7087401 BB	20140108	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US7087401 BB	20180125	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US7087401 BB	20240201	PEXP		Calculated Patent Term Expiry (PTA 591 days)	

Title: REVERSIBLY HEAT-GELABLE AQUEOUS COMPOSITION

Abstract: The present invention relates to a reversibly heat-gelable aqueous composition comprising a reversibly heat-gelable aqueous composition according to conventional technique, to which a thixotropic property-increasing substance is added. The thixotropic property-increasing substance is preferably at least one member selected from the group consisting of sugar alcohol, lactose, carmellose or pharmaceutically acceptable salts thereof and cyclodextrin. This composition can be stored at room temperature and accordingly, it is quite convenient for users to carry about the same.

Classifications:

International (IPC 8-9): [A61K31/00](#) [A61K31/185](#) [A61K31/5383](#) [A61K31/717](#) [A61K31/737](#) [A61K31/77](#) [A61K45/00](#) [A61K47/10](#) [A61K47/12](#) [A61K47/18](#) [A61K47/26](#) [A61K47/34](#) [A61K47/38](#) [A61K47/40](#) [A61K9/00](#) [A61K9/06](#) [A61P27/02](#) [A61P27/06](#) [A61P29/00](#) [A61P3/10](#) [A61P31/04](#) [A61P31/10](#) [A61P31/12](#) [A61P35/00](#) [A61P37/02](#) [A61P37/08](#) (Advanced/Invention); [A61K47/34](#) [A61K47/38](#) (Advanced/Non-invention); [A61K31/00](#) [A61K47/12](#) [A61K47/16](#) [A61K47/26](#) [A61K47/34](#) [A61K47/38](#) [A61K47/40](#) [A61K9/00](#) [A61K9/06](#) (Core/Invention)

International (IPC 1-7): [A61K47/12](#) [A61K47/18](#) [A61K47/26](#) [A61K47/34](#) [A61K47/38](#) [A61K47/40](#) [A61K9/06](#)

CPC: [A61K9/0014](#) [A61K9/0019](#) [A61K9/0024](#) [A61K9/0043](#) [A61K9/0046](#) [A61K9/0048](#) [A61K31/5383](#) [A61K47/26](#)

European: [A61K31/5383](#) [A61K47/26](#) [A61K9/00M14](#) [A61K9/00M15](#) [A61K9/00M16](#) [A61K9/00M3](#) [A61K9/00M4](#) [A61K9/00M5](#) [A61K9/00M5D](#)

US: [514/1](#) [514/1P](#) [514/230.2](#) [514/230.200P](#) [514/781](#) [514/781S](#)

Family:

Publication number	Publication date	Application number	Application date
EP1681065 A1	20060719	EP20040799523	20041101
EP1681065 A4	20111228	EP20040799523	20041101
JP2005042026 A1	20070426	JP20050515218T	20041101
JP4947977 B1	20120606	JP20050515218T	20041101
JP4947977 B2	20120606	JP20050515218T	20041101
KR101144647 B1	20120508	KR20067008092	20041101
KR20060108628 A	20061018	KR20067008092	20041101
US2006211599 AA	20060921	US20060414498	20060501
US2011263587 AA	20111027	US20110175394	20110701
WO05042026 A1	20050512	WO2004JP16500	20041101

Priority:

JP20030371572 20031031 JP20050515218 20041101 WO2004JP16500 20041101
US20060414498 20060501 US20110175394 20110701

Probable Assignee: WAKAMOTO PHARMACEUTICAL CO LTD

Assignee(s): (std): SUZUKI HIDEKAZU ; WAKAMOTO PHARMA CO LTD

Assignee(s): WAKAMOTO PHARMACEUTICAL CO ; WAKAMOTO PHARMACEUTICAL CO LTD

Inventor(s): (std): SUZUKI HIDEKAZU

Inventor(s): SUZUKI HIDEKAZU C O WAKAMOTO PHARMACEUTICAL

Agent(s): KUMAKURA YOSHIO; OGAWA NOBUO; HAKODA ATSUSHI; ASAI KENJI;
HIRAYAMA KOJI; C IRVIN MCCLELLAND OBLON SPIVAK MCCLELLAND MAIER
AND NEUSTADT PC

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

RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ
VC VN YU ZA ZM ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
EP1681065 A1	20060719	LSPB	+	published / reissued	
EP1681065 A1	20060719	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20060524
EP1681065 A4	20111228	LSES	+A4	DESPATCH OF SUPPLEMENTARY SEARCH REPORT	EFFECTIVE DATE : 20111130
EP1681065 A4	20111228	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : A61K 47/38 20060101AFI20111124BHEP
EP1681065 A4	20111228	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : A61K 9/06 20060101ALI20111124BHEP
EP1681065 A4	20111228	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : A61K 47/12 20060101ALI20111124BHEP
EP1681065 A4	20111228	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : A61K 47/18 20060101ALI20111124BHEP
EP1681065 A4	20111228	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : A61K 47/26 20060101ALI20111124BHEP
EP1681065 A4	20111228	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : A61K 47/34 20060101ALI20111124BHEP
EP1681065 A4	20111228	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : A61K 47/40 20060101ALI20111124BHEP
EP1681065 A4	20111228	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC

					CLASSIFICATIONSYMBOL : A61K 9/00 20060101ALI20111124BHEP
EP1681065 A4	20120704	LSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 20120608
EP1681065 A4	20141203	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20140603
JP2005042026 A1	20070426	LSPB	+	published / reissued	
JP2005042026 A1	20071003	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20071002
JP2005042026 A1	20110118	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20110117
JP2005042026 A1	20111025	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20111024
JP2005042026 A1	20111223	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20111222
JP2005042026 A1	20120217	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2005042026 A1	20120228	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20120227
JP2005042026 A1	20120301	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01
JP2005042026 A1	20120315	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20120306
JP2005042026 A1	20120316	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3

JP2005042026 A1	20120316	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP4947977 B1	20120606	LSGT	+	granted / extensions (spc, cpc, pte)	
JP4947977 B1	20120301	LSGT	+A01	特許査定書 Decision of patent grant	
JP4947977 B1	20120313	LSFE	R100	特許料納付書 Patent fee payment form	
JP4947977 B1	20120316	LSGT	+R150	特許証 Patent certificate	
JP4947977 B1	20140514	LSRE	R313531	表示変更登録申請書 (住所) Display change registration application (address)	
JP4947977 B1	20140522	LSAS	R350	移転登録済通知書 Transfer registered notice	
JP4947977 B1	20150122	LSFE	R20	特許料納付書 Patent fee payment form	
JP4947977 B1	20150127	LSFE	+R250	年金領収書, 年金領収書 (分納) Pension receipt, annuity receipt (scheduled)	
JP4947977 B1	20160317	LSFE	R20	特許料納付書 Patent fee payment form	
JP4947977 B1	20161019	LSFE	R2521	自動納付登録通知書 Automatic payment registration notice	
JP4947977 B1	20170110	LSFE	R2522	自動納付事前通知書 Automatic advance notice	
JP4947977 B1	20170112	LSFE	R2001	特許料納付書 (自動納付) Patent fee payment form (automatic payment)	
JP4947977 B1	20170221	LSFE	+R250	年金領収書, 年金領収書 (分納) Pension receipt, annuity receipt (scheduled)	
JP4947977 B1	20180109	LSFE	R2522	自動納付事前通知書 Automatic advance notice	

JP4947977 B1	20180111	LSFE	R2001	特許料納付書 (自動納付) Patent fee payment form (automatic payment)	
JP4947977 B1	20180220	LSFE	+R250	年金領收書, 年金領收書 (分納) Pension receipt, annuity receipt (scheduled)	
JP4947977 B1	20241101	PEXP		Calculated Patent Term Expiry	
JP4947977 B2	20120606	LSGT	+	granted / extensions (spc, cpc, pte)	
JP4947977 B2	20140522	LSAS	R350	WRITTEN NOTIFICATION OF REGISTRATION OF TRANSFER	TEXT : JAPANESE INTERMEDIATE CODE: R350
JP4947977 B2	20150127	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4947977 B2	20160322	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4947977 B2	20170221	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4947977 B2	20180220	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP4947977 B2	20241101	PEXP		Calculated Patent Term Expiry	
KR101144647 B1	20120508	LSGT	+	granted / extensions (spc, cpc, pte)	
KR101144647 B1	20150428	LSLE	-LAPS	LAPSE DUE TO UNPAID ANNUAL FEE	
KR101144647 B1	20241101	PEXP		Calculated Patent Term Expiry	
KR20060108628 A	20061018	LSPB	+	published / reissued	
KR20060108628 A	20091026	LSSES	A201	REQUEST FOR EXAMINATION	
KR20060108628 A	20110711	LSSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR20060108628 A	20120321	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
KR20060108628 A	20120427	LSGT	LOPNT	WRITTEN	

				DECISION TO GRANT	
US2006211599 AA	20060921	LSPB	+	published / reissued	
US2006211599 AA	20060501	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WAKAMOTO PHARMACEUTICAL CO., LTD., JAPAN OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:SUZUKI, HIDEKAZU; REEL/FRAME:017848/0782 EFFECTIVE DATE : 20060421
US2006211599 AA	20111021	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2011263587 AA	20111027	LSPB	+	published / reissued	
US2011263587 AA	20130419	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
WO05042026 A1	20050512	LSPB	+	published / reissued	
WO05042026 A1	20060426	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1020067008092 COUNTRY OF REF DOCUMENT : KR
WO05042026 A1	20060427	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2004799523 COUNTRY OF REF DOCUMENT : EP
WO05042026 A1	20060428	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2005515218 COUNTRY OF REF DOCUMENT : JP
WO05042026 A1	20060501	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 11414498 COUNTRY OF REF DOCUMENT : US
WO05042026 A1	20060719	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2004799523 COUNTRY OF REF DOCUMENT : EP
WO05042026 A1	20060921	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 11414498 COUNTRY OF REF DOCUMENT : US
WO05042026 A1	20061018	LSPB	+WWP	WIPO INFORMATION:	REF DOCUMENT NUMBER : 1020067008092

PUBLISHED IN
NATIONAL
OFFICE

COUNTRY OF REF
DOCUMENT : KR

Title: PREVENTION OF NEPHROTOXICITY III**Abstract:** The present invention relates to the use of compounds for the manufacture of a medicament for the prophylaxis and/or

treatment of induced cell toxicity, such as nephrotoxicity and ototoxicity, in particular where the cell toxicity is induced by a medical treatment. In an embodiment, the compounds have at least two nitrogen atoms, more preferably at least two amino groups. The compounds according to the invention are capable of blocking binding of cell toxic compounds to the megalin receptor, and thereby inhibiting uptake of the cell toxic compounds into cells. The invention further relates to novel compounds for use in said treatment, as well as a method for reducing the cell toxicity of cell toxic compounds.

Classifications:

International (IPC 8-9): [A61K31/132](#) [A61K31/133](#) [A61K31/136](#) [A61K31/14](#) [A61K31/155](#) [A61K31/166](#) [A61K31/18](#) [A61K31/195](#) [A61K31/198](#) [A61K31/381](#) [A61K31/4035](#) [A61K31/4045](#) [A61K31/4164](#) [A61K31/417](#) [A61K31/4412](#) (Advanced/Invention);

[A61K31/132](#) [A61K31/133](#) [A61K31/136](#) [A61K31/14](#) [A61K31/155](#) [A61K31/166](#) [A61K31/18](#) [A61K31/185](#) [A61K31/381](#) [A61K31/403](#) [A61K31/4164](#) [A61K31/4412](#) (Core/Invention)

CPC: [A61K31/132](#) [A61K31/133](#) [A61K31/136](#) [A61K31/14](#) [A61K31/155](#) [A61K31/166](#) [A61K31/18](#) [A61K31/195](#) [A61K31/198](#) [A61K31/381](#) [A61K31/4035](#) [A61K31/4045](#) [A61K31/4164](#) [A61K31/417](#) [A61K31/4412](#) [A61K31/4418](#) [A61K31/454](#) [A61K31/4545](#) [A61K31/473](#) [A61K31/495](#) [A61K31/498](#) [A61K31/505](#) [A61K31/506](#) [A61K31/517](#) [A61K31/5375](#) [A61K31/5513](#) [Y02A50/483](#)

European: [A61K31/132](#) [A61K31/133](#) [A61K31/136](#) [A61K31/14](#) [A61K31/155](#) [A61K31/166](#) [A61K31/18](#) [A61K31/195](#) [A61K31/198](#) [A61K31/381](#) [A61K31/4035](#) [A61K31/4045](#) [A61K31/4164](#) [A61K31/417](#) [A61K31/4412](#) [A61K31/4418](#) [A61K31/454](#) [A61K31/4545](#) [A61K31/473](#) [A61K31/495](#) [A61K31/498](#) [A61K31/505](#) [A61K31/506](#) [A61K31/517](#) [A61K31/5375](#) [A61K31/5513](#)

Family:

Publication number	Publication date	Application number	Application date
EP2139461 A2	20100106	EP20080715624	20080319
WO08113364 A2	20080925	WO2008DK50070	20080319
WO08113364 A3	20090416	WO2008DK50070	20080319

Priority:

DK20070000424 20070320 DK20070000958 20070629 WO2008DK50070 20080319

Probable Assignee: RECEPTICON APS**Assignee(s):** (std): BOYE SOEREN VALDGAARD ; RECEPTICON APS ; THINGGAARD JACOB**Assignee(s):** BOYE SOEREN VALDGARD**Inventor(s):** (std): THINGGAARD JACOB ; BOYE SOEREN VALDGAARD**Inventor(s):** BOYE SOEREN VALDGARD**Agent(s):** HOEIBERG SUSANNE; HOEIBERG A/S

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

Legal status (INPADOC)

[View legal status timeline](#)

Patent	Date recorded	Event group	Code	Event	Details
EP2139461 A2	20100106	LSPB	+	published / reissued	
EP2139461 A2	20100106	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20091020
EP2139461 A2	20100331	LSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 20100226
EP2139461 A2	20101229	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20100709
WO08113364 A2	20080925	LSPB	+	published / reissued	
WO08113364 A3	20090922	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE

Title: SUBSTRATES FOR DELIVERY OF PHYSIOLOGICALLY ACTIVE AGENTS

Abstract: Disclosed are substrates that can deliver one or more physiologically active agents. The substrates can be combined with regenerated cellulose to form cellulose composites that serve as a method for delivering the physiologically active agents in vivo, in vitro, and ex vivo.

Classifications:

International (IPC 8-9): [A61L15/16](#) (Advanced/Invention);

[A61L15/16](#) (Core/Invention)

CPC: [C08B16/00](#) [C08L1/02](#) [C08L3/02](#) [C08L5/06](#) [C08L5/08](#) [A61K47/61](#)

European: [A61K47/48K8](#)

Family:

Publication number	Publication date	Application number	Application date
WO09131692 A1	20091029	WO2009US02519	20090422

Priority:

US20080047194P 20080423

Probable Assignee: UNIV ALABAMA

Assignee(s): (std): DALY DANIEL T ; FRAZIER RACHEL M ; HOUGH TROUTMAN WHITNEY LAUREN ; ROGERS ROBIN D ; SPEAR SCOTT K ; UNIV ALABAMA

Assignee(s): BOARD OF TRUSTEES OF UNIV OF ALABAMA ; THE BOARD OF TRUSTEES OF THE UNIVERSITY OF ALABAMA

Inventor(s): (std): DALY DANIEL T ; FRAZIER RACHEL M ; HOUGH TROUTMAN WHITNEY LAUREN ; ROGERS ROBIN D ; SPEAR SCOTT K

Agent(s): NEEDLE WILLIAM H ET AL

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

Legal status (INPADOC)

[View legal status timeline](#)

Patent	Date recorded	Event group	Code	Event	Details
WO09131692 A1	20091029	LSPB	+	published / reissued	
WO09131692 A1	20101026	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO09131692 A1	20110615	LSNE	-122	EP: PCT APPLICATION NON-ENTRY IN EUROPEAN PHASE	REF DOCUMENT NUMBER : 09734907 COUNTRY OF REF DOCUMENT : EP KIND CODE OF REF DOCUMENT : A1 DESIGNATED STATE(S) :

Title: GAMMA-AAPEPTIDES WITH POTENT AND BROAD-SPECTRUM ANTIMICROBIAL ACTIVITY

Abstract: The present invention is directed to a novel class of antimicrobial agents called gamma-AApeptides. The current invention



provides various categories of gamma-AApeptides, for example, linear gamma-AApeptides, cyclic gamma-AApeptides, and lipidated gamma-AApeptides. gamma-AApeptides of the current invention are designed to exert antimicrobial activity while being stable and non-toxic. gamma-AApeptides also do not appear to lead to the development of microbial resistance in treated microorganisms. Thus, the disclosed gamma-AApeptides can be used for the treatment of various medical conditions associated with pathogenic microorganisms.

Classifications:

International (IPC 8-9): [A61K38/00](#) [A61K38/04](#) [A61K38/08](#) [A61K38/12](#) [A61K45/06](#) [A61K47/48](#) [A61K49/00](#) [A61P31/04](#) [C07K1/10](#) [C07K1/16](#) [C07K5/08](#) [C07K5/12](#) [C07K7/06](#) [C07K7/56](#) [C07K7/64](#) [G01N33/569](#) [G01N33/68](#) (Advanced/Invention)

CPC: [C07K7/06](#) [A61K45/06](#) [A61K49/0056](#) [A61K38/00](#) [A61K38/08](#) [A61K38/12](#) [G01N33/569](#) [C07K7/56](#) [C07K1/16](#) [C07K1/10](#) [C07K7/64](#) [A61K47/543](#) [Y02A50/40](#) [Y02A50/401](#) [Y02A50/402](#) [Y02A50/411](#) [Y02A50/469](#) [Y02A50/471](#) [Y02A50/473](#) [Y02A50/478](#) [Y02A50/479](#) [Y02A50/481](#) [Y02A50/483](#) [Y02A50/52](#) [Y02A50/56](#) [Y02A50/59](#)

US: [424/9.6](#) [514/2.4](#) [514/2.9](#) [530/317](#) [530/329](#)

Family:

Publication number	Publication date	Application number	Application date
US2015274782 AA	20151001	US20130374018	20130123
US2017058002 AA	20170302	US20160292162	20161013
US9499587 BB	20161122	US20130374018	20130123
WO13112548 A1	20130801	WO2013US22695	20130123

Priority:

US20120589496P 20120123 US20130374018 20130123 WO2013US22695 20130123
 US20140374018 20140723 US20160292162 20161013

Probable Assignee: OF SOUTH FLORIDA UNIV

Assignee(s): (std): PADHEE SHRUTI ; UNIV SOUTH FLORIDA ; WU HAIFAN ; UNIV OF SOUTH FLORIDA ; CAI JIANFENG ; NIU YOUHONG

Assignee(s): OF SOUTH FLORIDA UNIV

Inventor(s): (std): CAI JIANFENG ; NIU YOUHONG ; PADHEE SHRUTI ; WU HAIFAN

Agent(s): SALIWANCHIK LLOYD AND EISENSCHENK; EISENSCHENK FRANK C ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC 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
US2015274782 AA	20151001	LSPB	+	published / reissued	

US2017058002 AA	20170302	LSPB	+	published / reissued	
US2017058002 AA	20161014	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : UNIVERSITY OF SOUTH FLORIDA, FLORIDA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:CAI, JIANFENG; NIU, YOUHONG; WU, HAIFAN; AND OTHERS; SIGNING DATES FROM 20160926 TO 20160930; REEL/FRAME:040011/0785
US2017058002 AA	20180410	LSES	NFA1	Non Final Action Mailed	
US9499587 BB	20161122	LSGT	+	granted / extensions (spc, cpc, pte)	
US9499587 BB	20130220	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : UNIVERSITY OF SOUTH FLORIDA, FLORIDA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:CAI, JIANFENG; NIU, YOUHONG; WU, HAIFAN; AND OTHERS; REEL/FRAME:029838/0634 EFFECTIVE DATE : 20130218
US9499587 BB	20140724	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : UNIVERSITY OF SOUTH FLORIDA, FLORIDA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:CAI, JIANFENG; NIU, YOUHONG; WU, HAIFAN; AND OTHERS; REEL/FRAME:033378/0624 EFFECTIVE DATE : 20130218
US9499587 BB	20151019	LSES	NFA1	Non Final Action Mailed	
US9499587 BB	20161102	LSGT	PAT1	Patented Case	
US9499587 BB	20170502	LSRE	CC	CERTIFICATE OF CORRECTION	
US9499587 BB	20330220	PEXP		Calculated Patent Term Expiry (PTA 28 days)	
WO13112548 A1	20130801	LSPB	+	published / reissued	
WO13112548 A1	20140723	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO13112548 A1	20150218	LSNE	-122	EP: PCT APPLICATION NON-ENTRY IN EUROPEAN PHASE	REF DOCUMENT NUMBER : 13740648 COUNTRY OF REF DOCUMENT : EP KIND CODE OF REF DOCUMENT :

A1
DESIGNATED STATE(S) :

Title: FULVIC ACID AND ANTIBIOTIC COMBINATION FOR THE INHIBITION OR TREATMENT OF MULTI-DRUG RESISTANT BACTERIA

Abstract: Fulvic acid as the active ingredient is used in the treatment or inhibition of multi-drug resistant bacteria, in particular NDM-1 bacteria producing carbapenemase or extended-spectrum lactamase (ESBL) resistant bacteria. The multi-drug resistant bacteria may be gram negative bacteria including, but not limited to, *Klebsiella pneumoniae* or *Escherichia coli*. The fulvic acid can be provided in combination with one or more antibiotics from the class of carbapenems or polymyxin antibiotics.



Classifications:

International (IPC 8-9): [A01N37/10](#) [A01N43/16](#) [A61K31/194](#) [A61K31/352](#) [A61K31/407](#) [A61K38/12](#) [A61K45/06](#) [A61P31/04](#) (Advanced/Invention)

CPC: [A61K45/06](#) [A61K31/407](#) [A61K38/12](#) [A61K2300/00](#) [A61K31/194](#) [A61K31/352](#) [A61K2121/00](#) [Y02A50/473](#)

US: [1/1](#) [514/569](#)

Family:

Publication number	Publication date	Application number	Application date
BR112014020715 A2	20170620	BR20141120715	20130306
BR112014020715 A8	20170718	BR20141120715	20130306
CN104203227 A	20141210	CN201380012421	20130306
DE602013015583 D1	20170202	DE201360015583T	20130306
EP2822551 A1	20150114	EP20130717565	20130306
EP2822551 B1	20161221	EP20130717565	20130306
ID201601885 A	20160325	ID2014P0006071	20130306
IN07194DN2014 A	20150424	IN2014DN07194	20140827
KR20140135813 A	20141126	KR20147028255	20130306
RU2014140227 A	20160427	RU20140140227	20130306
RU2640928 C2	20180112	RU20140140227	20130306
US2015031767 AA	20150129	US20130383429	20130306
US9265744 BB	20160223	US20130383429	20130306
WO13132444 A1	20130912	WO2013IB51772	20130306

Priority:

ZA20120001683 20120307

EP20130717565 20130306

WO2013IB51772 20130306

Probable Assignee: NATRACINE UK LTD

Assignee(s): (std): DONALD HEATHER JUNE ; LEIVERS STEPHEN WILLIAM ; NATRACINE UK LTD ; WARN PETER

Assignee(s): NATRACINE UK LTD MACCLESFIELD

Inventor(s): (std): LEIVERS STEPHEN WILLIAM ; LEJVERS STIVEN UILLYAMS ; UORN PITER ; WARN PETER

Inventor(s): PETER WARN ; STEPHEN WILLIAM LEIVERS

Agent(s): KLING SIMONE; LAVOIX; EVROMARKPAT; JOHN P; COOPER AND DUNHAM LLP; SPOOR AND FISHER ET AL

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

US UZ VC VN ZA ZM ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
CN104203227 A	20141210	LSPB	+	published / reissued	
CN104203227 A	20141210	LSPB	+C06	PUBLICATION	
CN104203227 A	20171208	LSRV	-RJ01	REJECTION OF INVENTION PATENT APPLICATION AFTER PUBLICATION	
EP2822551 A1	20150114	LSPB	+	published / reissued	
EP2822551 A1	20150114	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20140818
EP2822551 A1	20160113	LSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 20151211
EP2822551 A1	20161005	LSGT	+INTG	ANNOUNCEMENT OF INTENTION TO GRANT	EFFECTIVE DATE : 20160908
EP2822551 B1	20161221	LSGT	+	granted / extensions (spc, cpc, pte)	
EP2822551 B1	20161221	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP2822551 B1	20161230	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP2822551 B1	20170111	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP2822551 B1	20170115	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 854866 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20170115
EP2822551 B1	20170202	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602012015592

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EP2822551 B1	20170215	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 5
EP2822551 B1	20170228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. 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 : 20161221
EP2822551 B1	20170425	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : LT REF LEGAL EVENT CODE : MG4D
EP2822551 B1	20170428	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. 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 : 20170322
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EP2822551 B1	20170515	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MK05 REF DOCUMENT NUMBER : 854866 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20161221
EP2822551 B1	20170531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. 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 : 20161221
EP2822551 B1	20170531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. 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 : 20161221
EP2822551 B1	20170531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. 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 : 20161221
EP2822551 B1	20170531	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20170323 YEAR OF FEE PAYMENT : 5
EP2822551 B1	20170630	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : NL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20161221

EP2822551 B1	20170731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. 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 : 20161221
EP2822551 B1	20170731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : RO 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 : 20161221
EP2822551 B1	20170731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. 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 : 20161221
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EP2822551 B1	20170731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : IS 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 : 20170421
EP2822551 B1	20170831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : AT 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 : 20161221
EP2822551 B1	20170831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. 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 : 20161221

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EP2822551 B1	20171227	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP2822551 B1	20180131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON- PAYMENT OF DUE FEES LAPSED DATE : 20170306
EP2822551 B1	20180223	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 6
EP2822551 B1	20180228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : LI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON- PAYMENT OF DUE FEES LAPSED DATE : 20170331
EP2822551 B1	20180228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. 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 : 20161221

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EP2822551 B1	20330306	PEXP		Calculated Patent Term Expiry	
ID201601885 A	20160325	LSPB	+	published / reissued	
IN07194DN2014 A	20150424	LSPB	+	published / reissued	
KR20140135813 A	20141126	LSPB	+	published / reissued	
KR20140135813 A	20180306	LSSES	A201	REQUEST FOR EXAMINATION	
RU2014140227 A	20160427	LSPB	+	published / reissued	
RU2640928 C2	20180112	LSGT	+	granted / extensions (spc, cpc, pte)	
RU2640928 C2	20330306	PEXP		Calculated Patent Term Expiry	
US2015031767 AA	20150129	LSPB	+	published / reissued	
US2015031767 AA	20141121	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : NATRACINE UK LIMITED, UNITED KINGDOM OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS: LEIVERS, STEPHEN WILLIAM; WARN, PETER; SIGNING DATES FROM 20140824 TO 20140924; REEL/FRAAME: 034233/0177

US9265744 BB	20160223	LSGT	+	granted / extensions (spc, cpc, pte)	
US9265744 BB	20151209	LSFE	- AWA4	Awaiting TC Resp., Issue Fee Not Paid	
US9265744 BB	20160203	LSGT	PAT1	Patented Case	
US9265744 BB	20330306	PEXP		Calculated Patent Term Expiry	
WO13132444 A1	20130912	LSPB	+	published / reissued	
WO13132444 A1	20140908	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO13132444 A1	20141007	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 20147028255 COUNTRY OF REF DOCUMENT : KR KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO13132444 A1	20141007	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2014140227 COUNTRY OF REF DOCUMENT : RU KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO13132444 A1	20170620	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 112014020715 COUNTRY OF REF DOCUMENT : BR KIND CODE OF REF DOCUMENT : A2 DESIGNATED STATE(S) : EFFECTIVE DATE : 20140822

Title: MEGALIN ANTAGONIST**Abstract:** The present invention includes cilastatin or a pharmaceutically acceptable salt thereof as an active component and a

suppressant for renal impairment or inner ear disorders, induced via megalin by at least one megalin ligand which is selected from the group consisting of polymyxins, aminoglycoside antibiotics, glycopeptide antibiotics, cisplatin, and pharmaceutically acceptable salts thereof

Classifications:**International (IPC 8-9):** [A61K31/198](#) [A61K31/201](#) [A61K31/436](#) [A61K31/7036](#) [A61K33/24](#) [A61K38/00](#) [A61K38/12](#) [A61K38/14](#) [A61K45/00](#) [A61K45/06](#) [A61P13/12](#) [A61P27/16](#) [A61P31/04](#) [A61P43/00](#) [B65D81/32](#) (Advanced/Invention)**CPC:** [A61K45/06](#) [A61K2300/00](#) [A61K33/24](#) [A61K31/436](#) [B65D81/32](#) [A61K31/198](#) [A61K38/12](#) [A61K38/14](#) [A61K31/7036](#)**US:** [424/649](#)**Family:**

Publication number	Publication date	Application number	Application date
CA2937311 AA	20160719	CA20152937311	20150122
EP3097912 A1	20161130	EP20150740494	20150122
EP3097912 A4	20170802	EP20150740494	20150122
JP2015111666 A1	20170323	JP20150559110T	20150122
KR20160110399 A	20160921	KR20167020029	20150122
US2016324813 AA	20161110	US20160216225	20160721
WO15111666 A1	20150730	WO2015JP51718	20150122

Priority:

JP20140011530 20140124 WO2015JP51718 20150122

Probable Assignee: EA PHARMA CO LTD**Assignee(s):** (std): AJINOMOTO KK ; EA PHARMA CO LTD ; UNIV NIIGATA**Assignee(s):** SAITO AKIHIKO ; AJINOMOTO CO ; AJINOMOTO CO INC ; MATSUDA SAORI ; HORI YOSHIHISA ; IWATA HIROSHI ; EA PHARMA CO ; AOKI NOBUMASA ; NIIGATA UNIV ; KUWAHARA SHOJI ; HOSOJIMA MICHIIHIRO**Inventor(s):** (std): AOKI NOBUMASA ; HORI YOSHIHISA ; HOSOJIMA MICHIIHIRO ; IWATA HIROSHI ; KUWAHARA SHOJI ; MATSUDA SAORI ; SAITO AKIHIKO**Agent(s):** NORTON ROSE FULBRIGHT CANADA LLP SENCRL SRL; WILLS ANDREW JONATHAN; SHIGA MASATAKE 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)**[View legal status timeline](#)

Patent	Date recorded	Event group	Code	Event	Details
CA2937311 AA	20160719	ICPB	1	published /	

				reissued	
EP3097912 A1	20161130	LSPB	+	published / reissued	
EP3097912 A1	20161130	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20160720
EP3097912 A4	20170802	LSES	+A4	DESPATCH OF SUPPLEMENTARY SEARCH REPORT	EFFECTIVE DATE : 20170705
EP3097912 A4	20170802	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : A61K 31/7036 20060101ALI20170629BHEP
EP3097912 A4	20170802	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : A61P 43/00 20060101ALI20170629BHEP
EP3097912 A4	20170802	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : A61P 13/12 20060101ALI20170629BHEP
EP3097912 A4	20170802	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : A61K 45/00 20060101ALI20170629BHEP
EP3097912 A4	20170802	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : A61K 38/00 20060101ALI20170629BHEP
EP3097912 A4	20170802	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : A61K 31/201 20060101AFI20170629BHEP
EP3097912 A4	20171213	LSAS	RAP1	TRANSFER OF RIGHTS OF AN APPLICATION	PARTYTYPE : OWNER OWNER : NIIGATA UNIVERSITY
JP2015111666 A1	20170323	LSPB	+	published / reissued	
JP2015111666 A1	20171201	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20171201
JP2015111666 A1	20171219	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A821 EFFECTIVE DATE : 20171201

KR20160110399 A	20160921	LSPB	+	published / reissued	
US2016324813 AA	20161110	LSPB	+	published / reissued	
US2016324813 AA	20160722	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : EA PHARMA CO., LTD., JAPAN OLDPARTY : ASSIGNMENT OF ASSIGNNORS INTEREST; ASSIGNNORS:SAITO, AKIHIKO; AOKI, NOBUMASA; HORI, YOSHIHISA; AND OTHERS; SIGNING DATES FROM 20160628 TO 20160706; REEL/FRAME:039218/0939
US2016324813 AA	20160722	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : NIIGATA UNIVERSITY, JAPAN OLDPARTY : ASSIGNMENT OF ASSIGNNORS INTEREST; ASSIGNNORS:SAITO, AKIHIKO; AOKI, NOBUMASA; HORI, YOSHIHISA; AND OTHERS; SIGNING DATES FROM 20160628 TO 20160706; REEL/FRAME:039218/0939
US2016324813 AA	20180216	LSES	NFA1	Non Final Action Mailed	
WO15111666 A1	20150730	LSPB	+	published / reissued	
WO15111666 A1	20160613	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2015559110 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO15111666 A1	20160719	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2937311 COUNTRY OF REF DOCUMENT : CA
WO15111666 A1	20160721	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 20167020029 COUNTRY OF REF DOCUMENT : KR KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO15111666 A1	20160725	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE

Title: ENRICHMENT AND SELECTIVE CULTURE OF MYCOBACTERIA

Abstract: A process for the enrichment and selective culture of mycobacteria contained in a biological sample, wherein all or part of the sample is inoculated in/on a culture medium including a nutritive component suitable for the development and growth of mycobacteria, wherein the culture medium includes, as selective agents, at least 9-chloro-9-(4'-diethylamino)phenyl-9,10-dihydro-10-phenylacridine hydrochloride (or C-390) and an agent capable of inhibiting *Pseudomonas aeruginosa* bacteria. The invention also relates to a culture medium suitable for implementing this process for the enrichment and selective culture of mycobacteria.

Classifications:

International (IPC 8-9): [C12Q1/04](#) [C12Q1/24](#) [C12R1/32](#) (Advanced/Invention);
[C12R1/32](#) (Advanced/Non-invention)

CPC: [C12Q1/045](#) [C12Q1/04](#) [G01N2333/35](#)

Family:

Publication number	Publication date	Application number	Application date
CN107208127 A	20170926	CN201680008539	20160204
EP3253885 A1	20171213	EP20160707181	20160204
FR3032448 A1	20160812	FR20150050959	20150206
IN201717026198 A	20171117	IN201717026198	20170724
US2018030500 AA	20180201	US20160549370	20160204
WO16124863 A1	20160811	WO2016FR50239	20160204

Priority:

FR20150050959 20150206 WO2016FR50239 20160204

Probable Assignee: BIOMERIEUX SA

Assignee(s): (std): BIOMERIEUX ; BIOMERIEUX INC ; BIOMERIEUX SA

Assignee(s): BIOM RIEUX

Inventor(s): (std): PREECE CLAIR ; PERRY JOHN ; PERRY AUDREY ; ORENGA SYLVAIN

Inventor(s): AUDREY PERRY ; CLAIR PREECE ; JOHN PERRY ; SYLVAIN ORENGA

Agent(s): BIOMERIEUX; TRUONG JEAN PHILIPPE

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
CN107208127 A	20170926	LSPB	+	published / reissued	
CN107208127 A	20170926	LSPB	PB01	PUBLICATION	
EP3253885 A1	20171213	LSPB	+	published / reissued	

EP3253885 A1	20171213	LSSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20170718
FR3032448 A1	20160812	LSPB	+	published / reissued	
FR3032448 A1	20160217	LSFE	+PLFP	FEE PAYMENT	YEAR OF FEE PAYMENT : 2
FR3032448 A1	20160812	LSSES	PLSC	SEARCH REPORT READY	EFFECTIVE DATE : 20160812
FR3032448 A1	20170223	LSFE	+PLFP	FEE PAYMENT	YEAR OF FEE PAYMENT : 3
FR3032448 A1	20180227	LSFE	+PLFP	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
IN201717026198 A	20171117	LSPB	+	published / reissued	
US2018030500 AA	20180201	LSPB	+	published / reissued	
US2018030500 AA	20170927	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BIOMERIEUX, FRANCE OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ORENGA, SYLVAIN; PERRY, AUDREY; PERRY, JOHN; AND OTHERS; REEL/FRA:043714/0282 EFFECTIVE DATE : 20170725
WO16124863 A1	20160811	LSPB	+	published / reissued	
WO16124863 A1	20170808	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE

Title: MEDIUM FOR DETECTING STAPHYLOCOCCUS AUREUS, SHEET FOR DETECTING S. AUREUS COMPRISING SAME, AND METHOD FOR DETECTING S. AUREUS USING SAME

Abstract:

The purpose of the present invention is to provide a detection means whereby Staphylococcus aureus can be identified at a high accuracy. An aspect of the present invention relates to a medium for detecting S. aureus which comprises one or more kinds of nutritional components, a color developing agent capable of developing a color in the presence of a-glucosidase, a color developing agent capable of developing a color in the presence of phosphatase and 0.5 m grams per cubic centimetre or more of sodium **colistin methanesulfonate**. Another aspect of the present invention relates to a sheet for detecting S. aureus, said sheet comprising the aforesaid medium, and a method for detecting S. aureus with the use of the medium and sheet as described above.



Classifications:

International (IPC 8-9): [C12M1/00](#) [C12M1/34](#) [C12N1/20](#) [C12Q1/04](#)

[G01N33/569](#) (Advanced/Invention)

CPC: [C12M1/34](#) [C12N1/20](#) [C12Q1/04](#) [G01N33/569](#)

Family:

Publication number	Publication date	Application number	Application date
JP2017136061 A2	20170810	JP20160113278	20160607
WO17131062 A1	20170803	WO2017JP02629	20170126

Priority:

JP20160016378 20160129 JP20160113278 20160607

Probable Assignee: DAINIPPON PRINTING CO LTD

Assignee(s): (std): DAINIPPON PRINTING CO LTD

Assignee(s): DAI NIPPON PRINTING CO ; DAI NIPPON PRINTING CO LTD

Inventor(s): (std): KAZAMA KEISUKE ; SAITO RUI ; SAITOU RUI

Agent(s): FUJITA TAKASHI; HIRAKI YUSUKE

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 KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
JP2017136061 A2	20170810	LSPB	+	published / reissued	
WO17131062 A1	20170803	LSPB	+	published / reissued	

Title: COMPOSITIONS AND METHODS FOR TREATING AN INFECTION

Abstract: The present application relates to compounded compositions, methods of making compounded compositions, and methods of using compounded compositions. For example, disclosed herein are compounded compositions and methods of making compounded compositions comprising one or more anti-infective agents such as mupirocin and doxycycline.

Classifications:

International (IPC 8-9): [A61K31/351](#) [A61K31/496](#) [A61K31/506](#) [A61K31/5383](#) [A61K31/65](#) [A61K31/7036](#) [A61K31/7048](#) [A61K31/7056](#) [A61K38/12](#) [A61K9/00](#) [A61K9/06](#) [A61K9/08](#) [A61K9/14](#) [A61K9/48](#) (Advanced/Invention)

CPC: [A61K31/65](#) [A61K31/496](#) [A61K31/506](#) [A61K9/0019](#) [A61K31/7048](#) [A61K31/431](#) [A61K45/06](#) [A61K31/7056](#) [A61K31/5383](#) [A61K9/14](#) [A61K9/48](#) [A61K31/351](#) [A61K9/0014](#) [A61K9/06](#) [A61K9/08](#) [A61K31/7036](#) [A61K38/12](#) [A61K9/0043](#) [A61K9/16](#) [A61K47/26](#)

Family:

Publication number	Publication date	Application number	Application date
US2017239277 AA	20170824	US20170440800	20170223
US2017246140 AA	20170831	US20170597936	20170517
US2017333464 AA	20171123	US20170668449	20170803

Priority:

US20140566313	20141210	US20150819342	20150805	US20150975172	20151218
US20160298991P	20160223	US20160298994P	20160223	US20170440800	20170223
US20170597936	20170517	US20170668449	20170803		

Probable Assignee: CMPD LICENSING LLC

Assignee(s): (std): CMPD LICENSING LLC

Inventor(s): (std): RAY II JAY RICHARD

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US2017239277 AA	20170824	LSPB	+	published / reissued	
US2017239277 AA	20170822	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CMPD LICENSING LLC, TEXAS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:RAY, JAY RICHARD, II; REEL/FRAME:043351/0825 EFFECTIVE DATE : 20170710
US2017239277 AA	20171102	LSES	NFA1	Non Final Action Mailed	
US2017246140 AA	20170831	LSPB	+	published / reissued	
US2017246140 AA	20170517	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CMPD LICENSING, LLC, TEXAS OLDPARTY : ASSIGNMENT OF

					ASSIGNORS INTEREST; ASSIGNOR:RAY, JAY RICHARD, II; REEL/FRAME:042415/0612 EFFECTIVE DATE : 20170514
US2017246140 AA	20171129	LSES	NFA1	Non Final Action Mailed	
US2017333464 AA	20171123	LSPB	+	published / reissued	
US2017333464 AA	20170822	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CMPD LICENSING LLC, TEXAS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:RAY, JAY RICHARD, II; REEL/FRAME:043351/0864 EFFECTIVE DATE : 20170804
US2017333464 AA	20180111	LSES	NFA1	Non Final Action Mailed	