

INFORME DE BÚSQUEDA DE PATENTES				
N° de solicitud: NC2017/0003132				
CRITERIOS PARA LA BÚSQUEDA				
PALABRAS CLAVE UTILIZADAS		CYPB11B2 Aldosterone NEXT synthase Dihidroisoquinolin* OR *isoquinolin* OR isoindol* HOFFMANN LA ROCHE		
CLASIFICACIONES UTILIZADAS PARA LA BÚSQUEDA		CIP: C07D 471/10; C07D 487/10; C07D 519/00; A61K 9/20; A61K 31/4725; A61K 31/4439; A61K 31/444; A61P 9/04; A61P 9/12; A61P 13/12; A61P 5/42. 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	US2013143863	6/junio/2013	1 y 2	Y
	WO2013/033059	7/marzo/2013	-	A
USPTO	US9695151 B2	Julio/2017	1-16	P
	US9695152 B2	Julio/2017	1-16	P
	US9505742 B2	Noviembre/2016	1-16	P
PATBASE	US2016075688 A	17/marzo/2016	1-16	P
Google Patents	US2007/0225232 A1	27/septiembre/2007	1 y 2	Y
*** 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				
Fecha del reporte de búsqueda:		9/mayo/2018		

http://10.20.100.160/sipi/Intra/IP/PT/Qbe.aspx?sid=636614368710625629

Buscar...

Bandeja de entrada de LEONA... Esperando a 10.20.100.160 Búsqueda de solicitudes de ...

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F. HOFFMANN-LA ROCHE AG [Suprimir](#)

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Contacto de la solicitud [Buscar](#) Inventor [Buscar](#)

Referencia

Número de solicitud internacional PCT Fecha de Solicitud Internacional PCT desde hasta

Número de Publicación Internacional PCT Fecha de Publicación Internacional PCT desde hasta

Número de la gaceta Fecha de la Gaceta desde hasta

Fórmula Química Nombre(s) común(es) [Adicionar](#)

Indicación

Con/Sin Oposición Número de Resolución

Examinador Principal [Seleccionar](#)

[Buscar](#) [Limpiar](#)

23 Casos asociados

Expediente No.	Título	Figura Característica	Estado(s)	Examinador Principal	Titular	Sector Tecnológico
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fiveIPOffices - CCD

Number: WO2016055394 Search examples: EP1612402, US2006000447A1, JP20090214944

WO2015EP72887

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CCD Viewer Export

Citations only view Compact view Sort by country Filter

#	CC	Cat.	Citation details	Claims
1	CL		Application N° CL2017000804 (CL2017000804) - 3 April 2017	
2	JP		Application N° JP20170518822 (JP2017518822) - 5 October 2015	
3	PH		Application N° PH20171500658 (PH12017500658) - 7 April 2017	
4	EA		Application N° EA20170090765 (EA201790765) - 5 October 2015	
5	MX		Application N° MX20170004541 (MX20170004541) - 5 October 2015	
6	CR		Application N° CR20170000118 (CR201701118) - 5 October 2015	
7	PE		Application N° PE20170000519 (PE2017000519) - 5 October 2015	
8	US		Application N° US201715479701 (US15479701) - 5 April 2017	
			National Search Report	
			US9695151 B2 (HOFFMANN-LA ROCHE INC [US]) - 4 July 2017	
			US9695152 B2 (HOFFMANN-LA ROCHE INC [US]) - 4 July 2017	
			US9505742 B2 (HOFFMANN-LA ROCHE INC [US]) - 29 November 2016	
9	CN		Application N° CN2015854658 (CN201580054658.3) - 5 October 2015	
10	CA		Application N° CA20152962122 (CA2962122) - 5 October 2015	
11	KR		Application N° KR20177009208 (KR1020177009208) - 5 October 2015	
12	SG		Application N° SG20171102335V (SG11201702335V) - 5 October 2015	
13	AU		Application N° AU20150330141 (AU2015330141) - 5 October 2015	

Simple families: 1 Total family members: 15

Inspector: classifications and fields searched

Classifications

CL	IPC	A61K31/4439, A61K9/20, A61K31/444, A61K31/4725, A61P5/42, A61P9/04, A61P9/12, C07D471/10, C07D487/10, C07D519/00
CPC		A61K9/2054, A61K9/2059, C07D471/10, C07D487/10, C07D519/00
JP	IPC	C07D471/10, A61K31/4439, A61K31/444, A61K31/4725, A61K31/497, A61K31/506, A61P5/42, A61P5/46, A61P9/04, A61P9/12, A61P13/12, A61P43/00, C07D487/10, C07D519/00
CPC		A61K9/2054, A61K9/2059, C07D471/10, C07D487/10, C07D519/00
PH	IPC	A61P9/12, A61K9/20, A61K31/4439, A61K31/444, A61K31/4725, A61P5/42, A61P9/04, A61P13/12, C07D471/10, C07D487/10, C07D519/00
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Search type:
Identity **Similarity** Substructure

Similarity search

Tanimoto threshold %: 65

Return structures:
Filter by molecular weight: -

Filter by molecular formula: contains

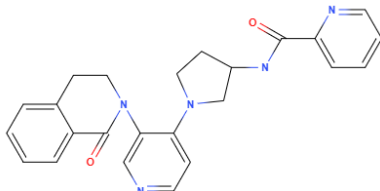
☐ Found in claims ☒ All

Country: All

Number of structures to return: 50

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Google aldosterone synthase inhibitor AND isoquinolin*

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Cerca de 3.180 resultados (0,41 segundos)

Phenyl-dihydropyridine derivatives as aldosterone synthase inhibitors
www.google.com.co/patents/US9636339 - Traducir esta página
 Otorgada - Presentada el 14/04/2016 - Emitido el 2/05/2017 - Johannes Aebi - Hoffman-La Roche Inc.
 The present invention relates to organic compounds useful for therapy or prophylaxis in a mammal, and in particular to aldosterone synthase inhibitors for the A-3 Ethyl (2E)-2-[4-[2-fluoro-4-(trifluoromethyl)phenyl]-6,7-dihydro-5H-isoquinolin-8-ylidene]acetate and Ethyl (2Z)-2-[4-[2-fluoro-4-(trifluoromethyl)phenyl]-6,7-dihydro-5H-isoquinolin-8-ylidene]acetate and Ethyl ...
 Descripción general Información relacionada Debatir

New phenyl-dihydropyridine derivatives as aldosterone synthase ...
www.google.com.co/patents/WO2015055604A1?cl=en - Traducir esta página
 Solicitud - Presentada el 14/10/2014 - Publicada el 23/04/2015 - Johannes Aebi - F. Hoffmann-La Roche Ag
 The present invention relates to organic compounds useful for therapy or prophyl in a mammal, and in particular to aldosterone synthase inhibitors for the treatment or prophylaxis of chronic kidney disease, ... Ethyl (2E)-2-[4-[2-fluoro-4-(trifluoromethyl)phenyl]-6,7-dihydro-5H-isoquinolin-8-ylidene]acetate and Ethyl ...
 Descripción general Información relacionada Debatir

New phenyl-dihydropyridine derivatives as aldosterone synthase ...
www.google.com.co/patents/US9636339 - Traducir esta página

patbase_rad72597....doc **Mostrar todo** X

PatBase - Search results 09 May 2018

Search query (1): [Chemical Explorer]: Selected structures (50)

Results: 35

Search history

Search 1: [Chemical Explorer]: Selected structures (50) (Results 35)

Title: NEW BENZANILIDE DERIVATIVE**Abstract:** PURPOSE:To obtain a new derivative, having vasopressin antagonistic action and useful as a water diuretic agent, an anticardiac

failure agent, an antihypertensive agent, etc. CONSTITUTION:The derivative of formula I [A is bond, lower alkylene or carbonyl; R<1> is carboxy, phenyl, amino, etc.; R<2> is lower alkyl) or its salt, e.g. 2-methyl-4'-[[5-(N-methylcarbamoylmethyl)-2,3,4,5-tetrahydro-1H1,5- benzodiazepin-1-yl[carbonyl]benzanilide. This compound of formula I is obtained by reacting, e.g. a compound of formula II with a compound of formula III in the presence of a condensing agent and a base such as trimethylamine in an inert organic solvent under cooling conditions, cooling to ambient temperature conditions or ambient temperature to heating conditions and further removing the protecting group when the resultant compound has the protecting group.

Classifications:**International (IPC 8-9):** [A61K31/55](#) [A61K31/551](#) [A61P13/02](#) [A61P15/00](#) [A61P7/02](#) [A61P7/10](#) [A61P9/00](#) [A61P9/08](#) [A61P9/12](#) [C07D243/14](#) [C07D401/12](#) (Advanced/Invention); [A61K31/55](#) [A61K31/551](#) [A61P13/00](#) [A61P15/00](#) [A61P7/00](#) [A61P9/00](#) [C07D243/00](#) [C07D401/00](#) (Core/Invention)**International (IPC 1-7):** [A61K31/55](#) [C07D213/00](#) [C07D243/00](#) [C07D243/14](#) [C07D401/12](#)**CPC:** [Y02P20/55](#)**Family:**

Publication number	Publication date	Application number	Application date
JP6157480 A2	19940603	JP19920343118	19921130

Priority:

JP19920343118 19921130

Probable Assignee: YAMANOUCI PHARMA CO LTD**Assignee(s):** (std): ASTELLAS PHARMA INC ; YAMANOUCI PHARMA CO LTD**Assignee(s):** YAMANOUCI PHARMACEUT CO LTD ; YAMANOUCI PHARMACEUTICAL CO LTD ; N A**Inventor(s):** (std): KIKUCHI KAZUMI ; MATSUHISA AKIRA ; MATSUMOTO YUZO ; SAKAMOTO KENICHIRO ; TANAKA AKIHIRO ; TANITSU TAKEYUKI ; YANAGISAWA ISAO**Agent(s):** MORITA HIROSHI; NAGAI SHOZO**Legal status (INPADOC)**[View legal status timeline](#)

Patent	Date recorded	Event group	Code	Event	Details
JP6157480 A2	19940603	LSPB	+	published / reissued	

Title: Peripheral vasodilating agent containing piperidine derivative as active ingredient

Abstract: PCT No. PCT/JP94/00549 Sec. 371
Date Dec. 6, 1994 Sec. 102(e) Date Dec. 6,
1994 PCT Filed Apr. 4, 1994 PCT Pub. No.



WO94/22826 PCT Pub. Date Oct. 13, 1994 The present invention relates to novel peripheral vasodilating agents characterized by each containing as an active ingredient, a piperidine derivative or pharmaceutically acceptable salt thereof having excellent peripheral vasodilating activity. Said piperidine derivative or pharmaceutically acceptable salt thereof is represented by the general formula (1): (1) (wherein R, R1 and R2 are the same as defined above).

Classifications:

International (IPC 8-9): [A61K31/435](#) [A61K31/4427](#) [A61K31/443](#) [A61K31/4433](#) [A61K31/445](#) [A61K31/4468](#) [A61K31/451](#) [A61K31/535](#) [A61P7/02](#) [A61P9/00](#) [A61P9/08](#) [C07D211/58](#) [C07D211/76](#) [C07D401/00](#) [C07D401/04](#) [C07D401/06](#) [C07D401/10](#) [C07D401/12](#) [C07D401/14](#) [C07D405/00](#) [C07D405/06](#) [C07D405/12](#) [C07D405/14](#) [C07D409/00](#) [C07D409/06](#) [C07D409/12](#) [C07D409/14](#) [C07D413/00](#) [C07D413/04](#) [C07D413/10](#) [C07D413/14](#) [C07D417/06](#) [C07D521/00](#) (Advanced/Invention); [C07D211/58](#) [C07D401/06](#) (Advanced/Non-invention); [A61K31/4427](#) [A61K31/445](#) [A61K31/4468](#) [A61K31/451](#) [A61K31/535](#) [A61P7/00](#) [A61P9/00](#) [C07D211/00](#) [C07D401/00](#) [C07D405/00](#) [C07D409/00](#) [C07D413/00](#) [C07D417/00](#) (Core/Invention); [C07D211/58](#) [C07D401/00](#) [C07D405/00](#) (Core/Non-invention)

International (IPC 1-7): [A61K 31/445](#) [A61K31/435](#) [A61K31/445](#) [A61K31/535](#) [C07D211/58](#) [C07D211/76](#) [C07D401/00](#) [C07D401/04](#) [C07D401/06](#) [C07D401/10](#) [C07D401/12](#) [C07D401/14](#) [C07D405/00](#) [C07D405/06](#) [C07D405/12](#) [C07D405/14](#) [C07D409/00](#) [C07D409/06](#) [C07D409/12](#) [C07D409/14](#) [C07D413/00](#) [C07D413/04](#) [C07D413/10](#) [C07D413/14](#) [C07D417/06](#)

CPC: [C07D211/58](#) [C07D231/12](#) [C07D233/56](#) [C07D249/08](#) [C07D401/06](#) [C07D401/10](#) [C07D401/12](#) [C07D401/14](#) [C07D405/06](#) [C07D405/12](#) [C07D409/06](#) [C07D409/12](#) [C07D409/14](#) [C07D413/04](#) [C07D413/10](#) [C07D417/06](#)

European: [C07D211/58](#) [C07D231/12](#) [C07D233/56](#) [C07D249/08](#) [C07D401/06](#) [C07D401/10](#) [C07D401/12](#) [C07D401/14](#) [C07D405/06](#) [C07D405/12](#) [C07D409/06](#) [C07D409/12](#) [C07D409/14](#) [C07D413/04](#) [C07D413/10](#) [C07D417/06](#)

US: [514/235.8](#) [514/236.2](#) [514/236.5](#) [514/236.8](#) [514/307](#) [514/309](#) [514/316](#) [514/318](#) [514/322](#) [514/323](#) [514/324](#) [514/326](#) [514/329](#) [544/124](#) [544/129](#) [546/139](#) [546/141](#) [546/187](#) [546/193](#) [546/198](#) [546/199](#) [546/201](#) [546/202](#) [546/207](#) [546/208](#) [546/209](#) [546/210](#) [546/211](#)

Family:

Publication number	Publication date	Application number	Application date
AT219766 E	20020715	AT19940910593T	19940404
AU199462928 A1	19941024	AU19940062928	19940404
AU674207 B2	19961212	AU19940062928	19940404
CA2136999 AA	19941129	CA19942136999	19940404
CA2136999 C	20040511	CA19942136999	19940404
CN1052224 C	20000510	CN19941090181	19940404
CN1104412 A	19950628	CN19941090181	19940404
DE69430861 D1	20020801	DE19946030861	19940404
DE69430861 T2	20030123	DE19946030861T	19940404
DK0650476 T3	20020722	DK19940910593T	19940404
EP0650476 A1	19950503	EP19940910593	19940404
EP0650476 B1	20020626	EP19940910593	19940404
ES2179071 T3	20030116	ES19940910593T	19940404
HK1003708 A1	20020927	HK19980102819	19980403
JP2825755 B2	19981118	JP19940095532	19940407
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KR100238346 B1	20000302	KR19940704467	19941207

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KR19957001911 A	19950517	KR19947004467	19940404
PT650476 T	20021129	PT19940910593T	19940404
TH16352 A	19950817	TH19941000657	19940405
TW288011 B	19961011	TW19940103001	19940407
US5656642 A	19970812	US19940347454	19941206
US5760058 A	19980602	US19970794322	19970203
US6136826 A	20001024	US19980066930	19980428
WO9422826 A1	19941013	WO1994JP00549	19940404

Priority:

JP19930080712 19930407 WO1994JP00549 19940404 JP19940095532 19940407
US19940347454 19941206 US19970794322 19970203 US19980066930 19980428

Probable Assignee: HERAEUS ELEKTROCHEMIE GMBH

Assignee(s): (std): TERAMOTO SHUJI ; TANAKA MICHINORI ; SHIMIZU HIROSHI ; TABUSA FUJIO ; TOMINAGA MICHIAKI ; OTSUKA PHARMACEUTICAL CO LTD ; FUJIOKA TAKAFUMI ; OTSUKA PHARMA CO LTD

Assignee(s): OTSUKA PHARMACEUT CO LTD ; OTSUKA PHARMACEUTICAL CO ; HERAEUS ELEKTROCHEMIE GMBH ; Ltd. ; OOTSUKA SEIYAKU KK ; Otsuga Pharmaceutical Co. ; OTSUKA SEIYAKU KK ; OTSUKA SEIYAKU KKJP

Inventor(s): (std): DABUSA HUIRO ; DANAKAMIZZI NORI ; DERAMOTTO SUGI ; DOMINAKA MIZZIAMI ; FUJIOKA TAKAFUMI ; HUSIOKA DAKAOMI ; SHIMIZU HIROSHI ; SIMIZU HIROSI ; TABUSA FUJIO ; TAFUSA FUJIO ; TANAKA MASAKI ; TANAKA MICHINORI ; TERAMOTO SHUJI ; TOMINAGA MICHIAKI ; TAKAFUMI FUJIOKA ; SHUJI TERAMOTO ; MICHINORI TANAKA ; MICHIAKI TOMINAGA ; HIROSHI SHIMIZU ; FUJIO TABUSA

Inventor(s): Takfumi ; etc. ; Fujioka

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

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

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT219766 E	20020715	LSGT	+	granted / extensions (spc, cpc, pte)	
AT219766 E	20021015	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	
AT219766 E	20140404	PEXP		Calculated Patent Term Expiry	
AU199462928 A1	19941024	LSPB	+	published / reissued	
AU674207 B2	19961212	LSGT	+	granted / extensions (spc, cpc, pte)	
AU674207 B2	20140404	PEXP		Calculated Patent Term Expiry	

CA2136999 AA	19941129	LSPB	+	published / reissued	
CA2136999 AA	20000802	LSSES	+EEER	EXAMINATION REQUEST	
CA2136999 C	20040511	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2136999 C	20140608	LSLE	-MKEX	EXPIRY	EFFECTIVE DATE : 20140404
CA2136999 C	20140404	PEXP		Calculated Patent Term Expiry	
CN1052224 C	20000510	LSGT	+	granted / extensions (spc, cpc, pte)	
CN1052224 C	20000510	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN1052224 C	20140521	LSLE	-C17	CESSATION OF PATENT RIGHT	
CN1052224 C	20140404	PEXP		Calculated Patent Term Expiry	
CN1104412 A	19950628	LSPB	+	published / reissued	
CN1104412 A	19950628	LSPB	+C06	PUBLICATION	
DE69430861 D1	20030724	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE69430861 T2	20030123	LSGT	+	granted / extensions (spc, cpc, pte)	
DE69430861 T2	20140404	PEXP		Calculated Patent Term Expiry	
DK0650476 T3	20020722	LSGT	+	granted / extensions (spc, cpc, pte)	
DK0650476 T3	20140404	PEXP		Calculated Patent Term Expiry	
EP0650476 A1	19950503	LSPB	+	published / reissued	
EP0650476 A1	19950503	LSSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19941128
EP0650476 A1	19991006	LSSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 19990819
EP0650476 A1	20020626	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP0650476 A1	20020628	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP

EP0650476 A1	20020724	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
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EP0650476 A1	20030116	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2179071 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP0650476 A1	20030618	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20030327
EP0650476 A1	20080625	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : CH OWNER : OTSUKA PHARMACEUTICAL CO., LTD. REF LEGAL EVENT CODE : PFA OLDPARTY : OTSUKA PHARMACEUTICAL CO., LTD.#9, KANDATSUKASA-CHO 2-CHOME#CHIYODA-KU, TOKYO 101-0048 (JP) - TRANSFER TO- OTSUKA PHARMACEUTICAL CO., LTD.#9, KANDATSUKASA-CHO 2-CHOME#CHIYODA-KU, TOKYO 101-0048 (JP)
EP0650476 A1	20121231	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20120424 YEAR OF FEE PAYMENT : 19
EP0650476 A1	20130329	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20120327 YEAR OF FEE PAYMENT : 19
EP0650476 A1	20130430	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : MC PAYMENT DATE : 20130311 YEAR OF FEE PAYMENT : 20
EP0650476 A1	20130531	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20130326 YEAR OF FEE PAYMENT : 20
EP0650476 A1	20130531	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20130415 YEAR OF FEE PAYMENT : 20

				OFFICE	
EP0650476 A1	20130731	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20130327 YEAR OF FEE PAYMENT : 20
EP0650476 A1	20130731	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20130403 YEAR OF FEE PAYMENT : 20
EP0650476 A1	20130731	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20130410 YEAR OF FEE PAYMENT : 20
EP0650476 A1	20130731	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20130417 YEAR OF FEE PAYMENT : 20
EP0650476 A1	20130731	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20130415 YEAR OF FEE PAYMENT : 20
EP0650476 A1	20130731	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20130412 YEAR OF FEE PAYMENT : 20
EP0650476 A1	20130731	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20130412 YEAR OF FEE PAYMENT : 20
EP0650476 A1	20130830	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20130416 YEAR OF FEE PAYMENT : 20
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EP0650476 A1	20130830	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20130416 YEAR OF FEE PAYMENT : 20
EP0650476 A1	20130830	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20130404 YEAR OF FEE PAYMENT : 20
EP0650476 A1	20140405	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R071 REF DOCUMENT NUMBER : 60430861

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EP0650476 A1	20140407	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DK REF LEGAL EVENT CODE : EUP EFFECTIVE DATE : 20140404
EP0650476 A1	20140411	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : PT REF LEGAL EVENT CODE : MM4A TEXT : MAXIMUM VALIDITY LIMIT REACHED EFFECTIVE DATE : 20140404
EP0650476 A1	20140415	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP0650476 A1	20140416	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : V4 EFFECTIVE DATE : 20140404
EP0650476 A1	20140423	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : PE20 EXPIRY DATE : 20140403
EP0650476 A1	20140430	LSLE	-BE20	BE: PATENT EXPIRED	PARTYTYPE : OWNER REF COUNTRY CODE : EP OWNER : *OTSUKA PHARMACEUTICAL CO. LTD EFFECTIVE DATE : 20140404
EP0650476 A1	20140515	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MK07 REF DOCUMENT NUMBER : 219766 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20140404
EP0650476 A1	20140603	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SE REF LEGAL EVENT CODE : EUG
EP0650476 A1	20140604	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MK9A
EP0650476 A1	20140611	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20140611
EP0650476 A1	20140626	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : MA REF DOCUMENT NUMBER : 200304023765

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EP0650476 B1	20020626	LSGT	+	granted / extensions (spc, cpc, pte)	
EP0650476 B1	20140403	PEXP		Calculated Patent Term Expiry	
EP0650476 B1	20140404	PEXP		Calculated Patent Term Expiry	
ES2179071 T3	20030116	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2179071 T3	20140404	PEXP		Calculated Patent Term Expiry	
HK1003708 A1	20020927	LSGT	+	granted / extensions (spc, cpc, pte)	
HK1003708 A1	20041215	LSFE	+PF	PATENT IN FORCE	

HK1003708 A1	20140502	LSLE	-PE	PATENT EXPIRED	EFFECTIVE DATE : 20140403
HK1003708 A1	20180403	PEXP		Calculated Patent Term Expiry	
JP2825755 B2	19981118	LSGT	+	granted / extensions (spc, cpc, pte)	
JP2825755 B2	20040914	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP2825755 B2	20070807	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 12
JP2825755 B2	20100803	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 15
JP2825755 B2	20130813	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP2825755 B2	20140407	LSLE	-EXPY	CANCELLATION BECAUSE OF COMPLETION OF TERM	
JP2825755 B2	20140407	PEXP		Calculated Patent Term Expiry	
JP6340627 A2	19941213	LSPB	+	published / reissued	
KR100238346 B1	20000302	LSGT	+	granted / extensions (spc, cpc, pte)	
KR100238346 B1	20150302	PEXP		Calculated Patent Term Expiry	
KR19950701911 A	19950517	LSPB	+	published / reissued	
KR19957001911 A	19950517	LSPB	+	published / reissued	
PT650476 T	20021129	LSGT	+	granted / extensions (spc, cpc, pte)	
PT650476 T	20171129	PEXP		Calculated Patent Term Expiry	
TH16352 A	19950817	LSPB	+	published / reissued	
TW288011 B	19961011	LSGT	+	granted / extensions (spc, cpc, pte)	
TW288011 B	20140521	LSLE	-MK4A	EXPIRATION OF PATENT TERM OF AN INVENTION PATENT	

TW288011 B	20140407	PEXP		Calculated Patent Term Expiry	
US5656642 A	19970812	LSGT	+	granted / extensions (spc, cpc, pte)	
US5656642 A	19941206	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : OTSUKA PHARMACEUTICAL CO., LTD., JAPAN OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:FUJIOKA, TAKAFUMI; TERAMOTO, SHUJI; TANAKA, MICHINORI; AND OTHERS; REEL/FRAME:007315/0312 EFFECTIVE DATE : 19941116
US5656642 A	19970808	LSGT	PAT1	Patented Case	
US5656642 A	19980623	LSRE	CC	CERTIFICATE OF CORRECTION	
US5656642 A	20010125	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5656642 A	20050118	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5656642 A	20090115	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5656642 A	20141206	PEXP		Calculated Patent Term Expiry	
US5760058 A	19980602	LSGT	+	granted / extensions (spc, cpc, pte)	
US5760058 A	19950714	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : HERAEUS ELEKTROCHEMIE GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:HERAEUS ELEKTRODEN GMBH; REEL/FRAME:007558/0657 EFFECTIVE DATE : 19950421
US5760058 A	19980427	LSGT	PAT1	Patented Case	
US5760058 A	20011108	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5760058 A	20051104	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5760058 A	20070717	LSRE	CC	CERTIFICATE OF CORRECTION	
US5760058 A	20091104	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5760058 A	20170203	PEXP		Calculated Patent Term Expiry	
US6136826 A	20001024	LSGT	+	granted / extensions (spc, cpc, pte)	

cpc, pte)					
US6136826 A	20001006	LSGT	PAT1	Patented Case	
US6136826 A	20010529	LSRE	CC	CERTIFICATE OF CORRECTION	
US6136826 A	20040317	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US6136826 A	20080411	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US6136826 A	20120411	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US6136826 A	20180428	PEXP		Calculated Patent Term Expiry	
WO9422826 A1	19941013	LSPB	+	published / reissued	
WO9422826 A1	19941128	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1994910593 COUNTRY OF REF DOCUMENT : EP
WO9422826 A1	19941129	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2136999 COUNTRY OF REF DOCUMENT : CA
WO9422826 A1	19941206	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 08347454 COUNTRY OF REF DOCUMENT : US
WO9422826 A1	19950503	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1994910593 COUNTRY OF REF DOCUMENT : EP
WO9422826 A1	20020626	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1994910593 COUNTRY OF REF DOCUMENT : EP

Title: 1,5 Benzodiazepine derivatives

Abstract: 1,5-Benzodiazepine derivatives represented by formula (I), salts thereof, and medicines containing the same as the active ingredient: The compounds exhibit excellent gastrin and/or CCK-B receptor antagonism and are useful as remedies for gastric ulcer and gastrointestinal movement disorder.



Classifications:

International (IPC 8-9): [A61K31/55](#) [A61P1/04](#) [A61P1/06](#) [A61P25/16](#) [A61P25/18](#) [A61P25/22](#) [A61P25/24](#) [A61P25/30](#) [A61P43/00](#) [B41M1/12](#) [C07C253/30](#) [C07D243/12](#) [C07D401/06](#) [C07D401/12](#) [C07D403/06](#) [C07D403/12](#) [C07D405/06](#) [C07D405/12](#) [C07D409/06](#) [C07D409/12](#) [C07D409/14](#) [C07D413/12](#) [H02H11/00](#) (Advanced/Invention); [A61P1/00](#) [C07D243/00](#) [C07D401/00](#) [C07D403/00](#) [C07D405/00](#) [C07D409/00](#) [C07D413/00](#) (Core/Invention)

International (IPC 1-7): [A61K31/55](#) [A61P1/04](#) [B41M1/12](#) [C07C253/30](#) [C07D243/12](#) [C07D401/06](#) [C07D401/12](#) [C07D403/06](#) [C07D403/12](#) [C07D405/06](#) [C07D405/12](#) [C07D409/06](#) [C07D409/12](#) [C07D409/14](#) [C07D413/12](#) [H02H11/00](#) [H02H11/00](#)

CPC: [C07D401/06](#) [C07D403/06](#) [C07D403/12](#) [C07D405/06](#) [C07D405/12](#) [C07D409/06](#) [C07D409/12](#) [C07D409/14](#) [C07D413/12](#) [C07D243/12](#)

European: [C07D243/12](#) [C07D401/06](#) [C07D403/06](#) [C07D403/12](#) [C07D405/06](#) [C07D405/12](#) [C07D409/06](#) [C07D409/12](#) [C07D409/14](#) [C07D413/12](#)

US: [514/221](#) [540/517](#)

Family:

Publication number	Publication date	Application number	Application date
AT248823 E	20030915	AT19970947872T	19971210
AU199854100 A1	19980703	AU19980054100	19971210
AU721081 B2	20000622	AU19980054100	19971210
CA2274669 AA	19990610	CA19972274669	19971210
CA2274669 C	20061114	CA19972274669	19971210
CN1130351 C	20031210	CN19971081599	19971210
CN1246850 A	20000308	CN19971081599	19971210
DE69724644 D1	20031009	DE19976024644	19971210
DE69724644 T2	20040617	DE19976024644T	19971210
DE69724644 T4	20060810	DE19976024644T	19971210
EP0945445 A1	19990929	EP19970947872	19971210
EP0945445 A4	20020508	EP19970947872	19971210
EP0945445 B1	20030903	EP19970947872	19971210
EP0945445 B9	20051228	EP19970947872	19971210
ES2206754 T3	20040516	ES19970947872T	19971210
JP3999819 B2	20071031	JP19980526495T	19971210
KR100531235 B1	20060112	KR19997005193	19971210
KR20000057506 A	20000915	KR19997005193	19971210
PT945445 T	20040130	PT19970947872T	19971210
US6239131 BA	20010529	US19990319249	19990608
WO9825911 A1	19980618	WO1997JP04534	19971210

Priority:

JP19960344498 19961210

JP19970156132 19970530

WO1997JP04534 19971210

Probable Assignee: ZERIA PHARMACEUTICAL CO LTD

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KATSUO ; YONETA TOMOYUKI ; ZERIA PHARM CO LTD ; ZERIA
PHARMACEUTICAL CO LTD

Assignee(s): ZERIA PHARMACEUTICAL CO ; ZERIA PHARM CO

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; MURATA MASAKAZU ; SHINOZAKI KATSUO ; TOMOYUKI YONETA ; YONETA
TOMOYUKI ; SASAZAKI KATSUO ; NAOYOSHI MIURA ; KIYOTO MAEDA ;
KATSUO SHINOZAKI

Inventor(s): YONETA TOMOYUKI ZERIA

Agent(s): PHILLIPS ORMONDE FITZPATRICK; GOWLING LAFLEUR HENDERSON LLP

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

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT248823 E	20030915	LSGT	+	granted / extensions (spc, cpc, pte)	
AT248823 E	20040515	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	REF DOCUMENT NUMBER : 0945445 COUNTRY OF REF DOCUMENT : EP
AT248823 E	20171210	PEXP		Calculated Patent Term Expiry	
AU199854100 A1	19980703	LSPB	+	published / reissued	
AU721081 B2	20000622	LSGT	+	granted / extensions (spc, cpc, pte)	
AU721081 B2	20000706	LSPB	SREP	SPECIFICATION REPUBLISHED	
AU721081 B2	20001019	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU721081 B2	20171210	PEXP		Calculated Patent Term Expiry	
CA2274669 AA	19990610	LSPB	+	published / reissued	
CA2274669 AA	20021115	LSSES	+EEER	EXAMINATION REQUEST	
CA2274669 C	20061114	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2274669 C	20180212	LSLE	-MKEX	EXPIRY	EFFECTIVE DATE : 20171211
CA2274669 C	20171210	PEXP		Calculated Patent Term Expiry	
CN1130351 C	20031210	LSGT	+	granted / extensions (spc, cpc, pte)	

CN1130351 C	20031210	LSGT	+C14	cpc, pte) GRANT OF PATENT OR UTILITY MODEL	
CN1130351 C	20180123	LSLE	-CX01	EXPIRY OF PATENT TERM	
CN1130351 C	20171210	PEXP		Calculated Patent Term Expiry	
CN1246850 A	20000308	LSPB	+	published / reissued	
CN1246850 A	20000308	LSPB	+C06	PUBLICATION	
DE69724644 D1	20040930	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE69724644 T2	20040617	LSGT	+	granted / extensions (spc, cpc, pte)	
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EP0945445 A1	19990929	LSPB	+	published / reissued	
EP0945445 A1	19990929	LSSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19990609
EP0945445 A1	20160229	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20151210 YEAR OF FEE PAYMENT : 19
EP0945445 A1	20160229	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20151111 YEAR OF FEE PAYMENT : 19
EP0945445 A1	20160229	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20151207 YEAR OF FEE PAYMENT : 19
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EP0945445 A1	20160229	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20151211 YEAR OF FEE PAYMENT : 19
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SEARCH REPORT					
EP0945445 A4	20020508	LSRE	RIC1	CLASSIFICATION (CORRECTION)	TEXT : 7C 07D 243/12 A, 7C 07D 401/12 B, 7C 07D 403/12 B, 7C 07D 405/12 B, 7C 07D 409/12 B, 7C 07D 401/06 B, 7C 07D 403/06 B, 7C 07D 405/06 B, 7C 07D 409/06 B, 7C 07D 409/14 B, 7C 07D 413/12 B, 7A 61K 31/55 B
EP0945445 A4	20020904	LSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 20020718
EP0945445 B1	20030903	LSGT	+	granted / extensions (spc, cpc, pte)	
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EP0945445 B1	20031015	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
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EP0945445 B1	20031210	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT	COUNTRY OF REF DOCUMENT : IE NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES

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EP0945445 B1	20031231	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON- PAYMENT OF DUE FEES LAPSED DATE : 20031231
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EP0945445 B1	20040825	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20040604
EP0945445 B1	20040922	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
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EP0945445 B1	20171210	PEXP		Calculated Patent Term Expiry	
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EP0945445 B9	20151110	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 19

EP0945445 B9	20161111	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 20
EP0945445 B9	20170131	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20161207 YEAR OF FEE PAYMENT : 20
EP0945445 B9	20170131	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20161111 YEAR OF FEE PAYMENT : 20
EP0945445 B9	20170131	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20161206 YEAR OF FEE PAYMENT : 20
EP0945445 B9	20170131	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20161213 YEAR OF FEE PAYMENT : 20
EP0945445 B9	20170131	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20161110 YEAR OF FEE PAYMENT : 20
EP0945445 B9	20170228	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20161114 YEAR OF FEE PAYMENT : 20
EP0945445 B9	20170228	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20161111 YEAR OF FEE PAYMENT : 20
EP0945445 B9	20170228	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20161125 YEAR OF FEE PAYMENT : 20
EP0945445 B9	20170228	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20161209 YEAR OF FEE PAYMENT : 20
EP0945445 B9	20170228	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20161213 YEAR OF FEE PAYMENT : 20
EP0945445 B9	20170228	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20161221 YEAR OF FEE PAYMENT : 20

EP0945445 B9	20171210	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R071 REF DOCUMENT NUMBER : 69724644 COUNTRY OF REF DOCUMENT : DE
EP0945445 B9	20171215	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP0945445 B9	20180103	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : PE20 EXPIRY DATE : 20171209
EP0945445 B9	20180115	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MK07 REF DOCUMENT NUMBER : 248823 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20171210
EP0945445 B9	20180130	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SE REF LEGAL EVENT CODE : EUG
EP0945445 B9	20180228	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 EXPIRATION OF PROTECTION LAPSED DATE : 20171209
EP0945445 B9	20180326	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20180326
EP0945445 B9	20180430	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 EXPIRATION OF PROTECTION LAPSED DATE : 20171211
ES2206754 T3	20040516	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2206754 T3	20171210	PEXP		Calculated Patent Term Expiry	
JP3999819 B2	20071031	LSGT	+	granted / extensions (spc, cpc, pte)	
JP3999819 B2	20040810	LSFG	L A621	WRITTEN	TEXT : JAPANESE

				REQUEST FOR APPLICATION EXAMINATION	INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20040728
JP3999819 B2	20070215	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20070122
JP3999819 B2	20070424	LSSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20070424
JP3999819 B2	20070712	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20070620
JP3999819 B2	20070730	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP3999819 B2	20070807	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20070807
JP3999819 B2	20070816	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20070810
JP3999819 B2	20070817	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP3999819 B2	20070820	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP3999819 B2	20100720	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 4
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JP3999819 B2	20120712	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 5
JP3999819 B2	20120724	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 6

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JP3999819 B2	20140722	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP3999819 B2	20150721	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP3999819 B2	20160719	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
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KR100531235 B1	20060112	LSGT	+	granted / extensions (spc, cpc, pte)	
KR100531235 B1	20121114	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20121114 YEAR OF FEE PAYMENT : 8
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KR100531235 B1	20151016	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20151016 YEAR OF FEE PAYMENT : 11
KR100531235 B1	20161019	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20161019 YEAR OF FEE PAYMENT : 12
KR100531235 B1	20171210	PEXP		Calculated Patent Term Expiry	
KR20000057506 A	20000915	LSPB	+	published / reissued	
KR20000057506 A	20021111	LSES	A201	REQUEST FOR EXAMINATION	
KR20000057506 A	20041027	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR20000057506 A	20050513	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR20000057506 A	20051107	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
KR20000057506 A	20051121	LSGT	+GRNT	WRITTEN DECISION TO	

PT945445 T	20040130	LSGT	+	GRANT granted / extensions (spc, cpc, pte)	
PT945445 T	20171210	PEXP		Calculated Patent Term Expiry	
US6239131 BA	20010529	LSGT	+	granted / extensions (spc, cpc, pte)	
US6239131 BA	20010305	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ZERIA PHARMACEUTICAL CO., LTD., JAPAN OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:SHINOZAKI, KATSUO; YONETA, TOMOYUKI; MURATA, MASAKAZU; AND OTHERS; REEL/FRAME:011572/0975 EFFECTIVE DATE : 19990521
US6239131 BA	20010511	LSGT	PAT1	Patented Case	
US6239131 BA	20020219	LSRE	CC	CERTIFICATE OF CORRECTION	
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US6239131 BA	20081030	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US6239131 BA	20120928	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US6239131 BA	20190608	PEXP		Calculated Patent Term Expiry	
WO9825911 A1	19980618	LSPB	+	published / reissued	
WO9825911 A1	19990604	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 54100/98 COUNTRY OF REF DOCUMENT : AU
WO9825911 A1	19990608	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 09319249 COUNTRY OF REF DOCUMENT : US
WO9825911 A1	19990609	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1997947872 COUNTRY OF REF DOCUMENT : EP
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WO9825911 A1	20000915	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1019997005193 COUNTRY OF REF DOCUMENT : KR
WO9825911 A1	20001005	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 54100/98 COUNTRY OF REF DOCUMENT : AU
WO9825911 A1	20030903	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1997947872 COUNTRY OF REF DOCUMENT : EP
WO9825911 A1	20051107	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1019997005193 COUNTRY OF REF DOCUMENT : KR

Title: PROTEIN-PROTEIN INTERACTIONS IN NEURODEGENERATIVE DISORDERS

Abstract: The present invention relates to the discovery of protein-protein interactions that are involved in the pathogenesis of



neurodegenerative disorders, including Alzheimer's disease (AD). Thus, the present invention is directed to complexes of these proteins and/or their fragments, antibodies to the complexes, diagnosis of neurodegenerative disorders (including diagnosis of a predisposition to and diagnosis of the existence of the disorder), drug screening for agents which modulate the interaction of proteins described herein, and identification of additional proteins in the pathway common to the proteins described herein.

Classifications:

International (IPC 8-9): [A01K67/00](#) [A01K67/027](#) [A01K67/033](#) [A61K31/496](#) [A61K31/497](#) [A61K31/501](#) [A61K31/506](#) [A61K31/7052](#) [A61K38/04](#) [A61K38/17](#) [A61K39/395](#) [A61K45/00](#) [A61K48/00](#) [A61P25/00](#) [A61P25/28](#) [A61P3/04](#) [A61P3/10](#) [A61P9/00](#) [C07K1/00](#) [C07K14/00](#) [C07K14/435](#) [C07K14/47](#) [C07K16/18](#) [C07K16/28](#) [C07K16/40](#) [C07K17/00](#) [C07K19/00](#) [C07K4/12](#) [C12N15/09](#) [C12N15/87](#) [C12N5/00](#) [C12N5/02](#) [C12N5/10](#) [C12N9/00](#) [C12N9/12](#) [C12N9/64](#) [C12P21/08](#) [C12Q1/02](#) [C12Q1/26](#) [C12Q1/68](#) [C40B40/10](#) [G01N33/00](#) [G01N33/15](#) [G01N33/48](#) [G01N33/50](#) [G01N33/53](#) [G01N33/537](#) [G01N33/542](#) [G01N33/543](#) [G01N33/567](#) [G01N33/68](#) (Advanced/Invention); [A61K45/00](#) [C07K16/18](#) [C07K19/00](#) [C12N15/09](#) [C12N5/10](#) [C12P21/08](#) [C12Q1/02](#) [G01N33/15](#) [G01N33/50](#) [G01N33/53](#) (Advanced/Non-invention); [A61K31/496](#) [A61K31/4965](#) [A61K31/501](#) [A61K31/506](#) [A61K31/7042](#) [A61K39/395](#) [A61K48/00](#) [A61P25/00](#) [A61P3/00](#) [A61P9/00](#) [C07K14/00](#) [C12N15/87](#) [C12Q1/02](#) [C12Q1/26](#) [C12Q1/68](#) [C40B40/04](#) [G01N33/48](#) [G01N33/68](#) (Core/Invention)

International (IPC 1-7): [A01K67/00](#) [A01K67/027](#) [A01K67/033](#) [A01N43/04](#) [A61B](#) [A61K31/70](#) [A61K38/17](#) [A61K39/395](#) [A61K45/00](#) [A61P25/28](#) [C07H21/04](#) [C07K1/00](#) [C07K14/00](#) [C07K14/435](#) [C07K14/47](#) [C07K16/00](#) [C07K16/18](#) [C07K16/40](#) [C07K16/42](#) [C07K17/00](#) [C07K19/00](#) [C12N1/14](#) [C12N15/00](#) [C12N15/09](#) [C12N15/63](#) [C12N15/85](#) [C12N5/00](#) [C12N5/02](#) [C12N5/06](#) [C12N5/10](#) [C12N9/00](#) [C12N9/12](#) [C12N9/16](#) [C12N9/64](#) [C12P21/02](#) [C12P21/06](#) [C12P21/08](#) [C12Q1/02](#) [C12Q1/16](#) [C12Q1/68](#) [G01N33/00](#) [G01N33/15](#) [G01N33/48](#) [G01N33/50](#) [G01N33/53](#) [G01N33/537](#) [G01N33/542](#) [G01N33/543](#) [G01N33/567](#) [G01N33/68](#)

CPC: [A61K38/1709](#) [C07K14/47](#) [C07K16/18](#) [C07K16/2833](#) [C07K2317/32](#) [C12Q1/6897](#) [C12Q2600/156](#) [G01N2800/28](#) [C07K2319/00](#) [A01K2217/05](#) [G01N2333/4719](#) [C12N15/1137](#) [C12N2310/14](#) [C12Y114/19001](#) [G01N2333/90241](#) [A61K38/00](#) [C07K14/4711](#) [G01N2500/00](#) [C12Q2600/136](#) [C12N15/1055](#) [A61K31/7052](#) [C12Q1/02](#) [C12Q1/6883](#) [C12Q2600/158](#) [G01N33/6896](#) [G01N2500/02](#) [Y10T436/143333](#)

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Family:

Publication number	Publication date	Application number	Application date
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AU200213239 A1	20020429	AU20020013239	20011016
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Priority:

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US20050717799P 20050916	US20050748419P 20051207	US20050751918P 20051219
US20060802018P 20060519	US20060523767 20060918	US20070669939 20070131
US20070862978 20070927		

Probable Assignee: MYREXIS INC

Assignee(s): (std): BARTEL PAUL L ; HEICHMAN KAREN ; MYRIAD GENETICS INC ; ROCH JEAN MARC

Assignee(s): MYRIAD PHARMACEUTICALS INC ; MYRIAD GENETICS INC A DULY ORGANIZED UNDER LAWS OF ; MYRIAD GENETICS INC A DULY ORGANIZED U ; MYRAID GENETICS INC ; MYREXIS INC ; MYRIAD GENETICS ICN

Inventor(s): (std): BARTEL PAUL ; DUFFORD MAX ; MAUCK KIMBERLY ; ROCH JEAN MARC DR ; ROCH JEAN MARK ; SUGIYAMA JANICE ; ROCH JEAN MARC ; HEICHMAN KAREN ; BARTEL PAUL L

Inventor(s): PAUL L BARTEL ; KAREN HEICHMAN ; JEAN MARC ROCH

Agent(s): SHELSTON IP; SHELSTON IP PTY LTD; GOWLING LAFLEUR HENDERSON LLP; MYRIAD GENETICS INC INTELLECUTAL PROPERTY DEPARTMENT

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 UZ VN YU ZA ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AU200022009 A1	20000712	LSPB	+	published / reissued	
AU200213239 A1	20020429	LSPB	+	published / reissued	
AU200213241 A1	20020429	LSPB	+	published / reissued	
AU200214589 A1	20020429	LSPB	+	published / reissued	
AU200214590 A1	20020429	LSPB	+	published / reissued	
AU2002213239 AA	20020429	LSPB	+	published / reissued	
AU2002213241 AA	20020429	LSPB	+	published / reissued	
AU2002214589 AA	20020429	LSPB	+	published / reissued	

AU2002214590 AA	20020429	LSPB	+	published / reissued	
CA2358086 AA	20010621	LSPB	+	published / reissued	
CA2358086 AA	20041221	LSLE	-FZDE	DEAD	
EP1140973 A1	20011010	LSPB	+	published / reissued	
EP1140973 A1	20011010	LSSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20010710
EP1140973 A4	20021030	LSSES	+A4	DESPATCH OF SUPPLEMENTARY SEARCH REPORT	EFFECTIVE DATE : 20020912
EP1140973 A4	20040107	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20030701
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US2002040484 AA	20020404	LSPB	+	published / reissued	
US2002040484 AA	20040322	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2002045201 AA	20020418	LSPB	+	published / reissued	
US2002045201 AA	20031001	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2002048769 AA	20020425	LSPB	+	published / reissued	
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US2002054876 AA	20020509	LSPB	+	published / reissued	
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US2002069424 AA	20020606	LSPB	+	published / reissued	
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US2002106676 AA	20020808	LSPB	+	published / reissued	
US2002106676 AA	20020107	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MYRIAD GENETICS, INC., UTAH OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ROCH, JEAN- MARC; BARTEL, PAUL L.; HEICHMAN, KAREN; REEL/FRAME:012434/0716 EFFECTIVE DATE : 20011204
US2002106676 AA	20030805	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MYRIAD GENETICS, INC., UTAH OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:MAUCK, KIMBERLY; DUFFORD, MAX; REEL/FRAME:014364/0619 EFFECTIVE DATE : 20030730
US2002106773 AA	20020808	LSPB	+	published / reissued	
US2002106773 AA	20011226	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MYRIAD GENETICS, INC. A DULY ORGANIZED UNDER THE L OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ROCH, JEAN- MARC A CITIZEN OF SWITZERLAND; BARTEL, PAUL L. A CITIZEN OF THE UNITED STATES; HEICHMAN, KAREN, A CITIZEN OF THE UNITED STATES; REEL/FRAME:012394/0533 EFFECTIVE DATE : 20011211
US2002106773 AA	20031112	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2002114799 AA	20020822	LSPB	+	published / reissued	
US2002114799 AA	20011226	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MYRIAD GENETICS, INC., UTAH OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ROCH, JEAN- MARC A CITIZEN OF SWITZERLAND; BARTEL, PAUL L. A CITIZEN OF THE UNITED STATES; HEICHMAN, KAREN A CITIZEN OF THE UNITED STATES; REEL/FRAME:012394/0554 EFFECTIVE DATE : 20011203
US2002114799 AA	20031028	LSWD	-ABD3	Abandoned -- Failure to Respond to an	

Office Action					
US2002115119 AA	20020822	LSPB	+	published / reissued	
US2002115119 AA	20020109	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MYRIAD GENETICS, INC., UTAH OLDPARTY : ASSIGNMENT OF ASSIGNNORS INTEREST; ASSIGNNORS:ROCH, JEAN-MARC; BARTEL, PAUL L.; HEICHMAN, KAREN; REEL/FRAME:012439/0569 EFFECTIVE DATE : 20011204
US2002115119 AA	20031023	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2002115606 AA	20020822	LSPB	+	published / reissued	
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US2002115606 AA	20031209	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2002115607 AA	20020822	LSPB	+	published / reissued	
US2002115607 AA	20020110	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MYRIAD GENETICS, INC., UTAH OLDPARTY : ASSIGNMENT OF ASSIGNNORS INTEREST; ASSIGNNORS:ROCH, JEAN-MARC; BARTEL, PAUL L.; HEICHMAN, KAREN; REEL/FRAME:012444/0461 EFFECTIVE DATE : 20011211
US2002115607 AA	20040504	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2002119155 AA	20020829	LSPB	+	published / reissued	
US2002119155 AA	20020110	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MYRIAD GENETICS, INC., UTAH OLDPARTY : ASSIGNMENT OF ASSIGNNORS INTEREST; ASSIGNNORS:ROCH, JEAN-MARC; BARTEL, PAUL L.; HEICHMAN, KAREN;

REEL/FRAME:012444/0464
EFFECTIVE DATE : 20011204

US2002119155 AA	20030714	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
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US2002119927 AA	20020109	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MYRIAD GENETICS, ICN., UTAH OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ROCH, JEAN- MARC; BARTEL, PAUL L.; HEICHMAN, KAREN; REEL/FRAME:012439/0581 EFFECTIVE DATE : 20011204
US2002119927 AA	20031201	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2002120947 AA	20020829	LSPB	+	published / reissued	
US2002120947 AA	20040322	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2002124273 AA	20020905	LSPB	+	published / reissued	
US2002124273 AA	20020109	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MYRIAD GENETICS, INC., UTAH OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ROCH, JEAN- MARC; BARTEL, PAUL L.; HEICHMAN, KAREN; REEL/FRAME:012439/0566 EFFECTIVE DATE : 20011204
US2002124273 AA	20030815	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2002164655 AA	20021107	LSPB	+	published / reissued	
US2002164655 AA	20020107	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MYRIAD GENETICS, INC., UTAH OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ROCH, JEAN- MARC; BARTEL, PAUL L.; HEICHMAN, KAREN; REEL/FRAME:012431/0727 EFFECTIVE DATE : 20011204
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				Failure to Respond to an Office Action	
US2003186317 AA	20031002	LSPB	+	published / reissued	
US2003186317 AA	20020109	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MYRIAD GENETICS, INC., UTAH OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ROCH, JEAN-MARC; BARTEL, PAUL L.; HEICHMAN, KAREN; REEL/FRAME:012439/0601 EFFECTIVE DATE : 20011204
US2003186317 AA	20031201	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2004226056 AA	20041111	LSPB	+	published / reissued	
US2004226056 AA	20040712	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MYRIAD GENETICS, INC., UTAH OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ROCH, JEAN-MARC; BARTEL, PAUL; HEICHMAN, KAREN; REEL/FRAME:015566/0098 EFFECTIVE DATE : 20040712
US2004226056 AA	20070207	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2007087363 AA	20070419	LSPB	+	published / reissued	
US2007087363 AA	20061211	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MYRIAD GENETICS, INC., UTAH OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BARTEL, PAUL L.; ROCH, JEAN-MARC; SUGIYAMA, JANICE; REEL/FRAME:018619/0685; SIGNING DATES FROM 20061206 TO 20061207
US2007087363 AA	20090713	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2007225209 AA	20070927	LSPB	+	published / reissued	
US2007225209 AA	20070201	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MYRIAD GENETICS, INC., UTAH OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST;

					ASSIGNORS:ROCH, JEAN-MARC; BARTEL, PAUL; HEICHMAN KAREN; REEL/FRAME:018846/0048; SIGNING DATES FROM 20061211 TO 20061219
US2007225209 AA	20090821	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MYRIAD PHARMACEUTICALS, INC., UTAH OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:MYRIAD GENETICS, INC.; REEL/FRAME:023131/0528 EFFECTIVE DATE : 20090630
US2007225209 AA	20091021	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2009087436 AA	20090402	LSPB	+	published / reissued	
US2009087436 AA	20080313	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MYRIAD GENETICS, INC., UTAH OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ROCH, JEAN-MARC; HEICHMAN, KAREN; REEL/FRAME:020646/0015; SIGNING DATES FROM 20071112 TO 20080114
US2009087436 AA	20090821	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MYRIAD PHARMACEUTICALS, INC., UTAH OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:MYRIAD GENETICS, INC.; REEL/FRAME:023131/0965 EFFECTIVE DATE : 20090630
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US6653102 BB	20031125	LSGT	+	granted / extensions (spc, cpc, pte)	
US6653102 BB	20070424	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
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US6653102 BB	20111125	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US6653102 BB	20111226	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US6653102 BB	20120117	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20111125
US6653102 BB	20211011	PEXP		Calculated Patent Term Expiry	
WO0037483 A1	20000629	LSPB	+	published / reissued	
WO0037483 A1	20010621	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2358086 COUNTRY OF REF DOCUMENT : CA
WO0037483 A1	20010621	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2358086 COUNTRY OF REF DOCUMENT : CA KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO0037483 A1	20010622	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2000 589552 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO0037483 A1	20010627	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 22009/00 COUNTRY OF REF DOCUMENT : AU
WO0037483 A1	20010710	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1999966485 COUNTRY OF REF DOCUMENT : EP
WO0037483 A1	20011010	LSPB	+WWE	WIPO	REF DOCUMENT NUMBER :

				INFORMATION: PUBLISHED IN NATIONAL OFFICE	1999966485 COUNTRY OF REF DOCUMENT : EP
WO0037483 A1	20011025	LSWD	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : 8642
WO0037483 A1	20030701	LSWD	-WWW	WIPO INFORMATION: WITHDRAWN IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1999966485 COUNTRY OF REF DOCUMENT : EP
WO0232286 A2	20020425	LSPB	+	published / reissued	
WO0232286 A3	20030828	LSWD	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : 8642
WO0232286 A3	20031126	LSNE	-122	EP: PCT APPLICATION NON-ENTRY IN EUROPEAN PHASE	REF COUNTRY CODE : WO
WO0232286 A3	20050914	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : JP
WO0233112 A2	20020425	LSPB	+	published / reissued	
WO0233112 A3	20030828	LSWD	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : 8642
WO0233112 A3	20031203	LSNE	-122	EP: PCT APPLICATION NON-ENTRY IN EUROPEAN PHASE	REF COUNTRY CODE : WO
WO0233112 A3	20050914	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : JP
WO0233113 A2	20020425	LSPB	+	published / reissued	
WO0233113 A2	20030828	LSWD	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : 8642
WO0233113 A2	20031203	LSNE	-122	EP: PCT APPLICATION NON-ENTRY IN EUROPEAN PHASE	REF COUNTRY CODE : WO
WO0233113 A2	20050914	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : JP
WO0233114 A2	20020425	LSPB	+	published / reissued	

WO0233114 A3	20030828	LSWD	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : 8642
WO0233114 A3	20031203	LSNE	-122	EP: PCT APPLICATION NON-ENTRY IN EUROPEAN PHASE	REF COUNTRY CODE : WO
WO0233114 A3	20050914	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : JP

Title: Nitrogen-containing heterocyclic compounds and benzamide compounds and drugs containing the same

Abstract: Disclosed are compounds represented



by formula (I) which have triglyceride biosynthesis inhibitory activity in the liver and inhibitory activity against the secretion of apolipoprotein B-containing lipoprotein from the liver and particularly have excellent inhibitory activity against the secretion of apolipoprotein B-containing lipoprotein, are free from side effect of accumulation of lipids in the liver, and are useful for the treatment and prevention of hyperlipidemia and arteriosclerotic diseases. In formula (I), R<1> and R<2> represent alkyl, alkoxy, cycloalkyl, phenyl, alkenyl, alkynyl, or a five- or six-membered saturated or unsaturated heterocyclic ring, or R<1> and R<2>, together with a nitrogen atom to which R<1> and R<2> are attached, may form a ring; R<3> and R<4> represent a hydrogen atom, alkyl, a halogen atom, hydroxyl, nitrile, alkoxycarbonyl, alkoxy, or carboxyl; or R<2> and R<3> may be attached to each other to form -(CH₂)_m-, -N=CH-, -CH=N-, or -(C1-6 alkyl)C=N-; A, D, E, and G each represent a carbon atom, or any one of A, D, E, and G represents a nitrogen atom with the other three each representing a carbon atom; Q represents a nitrogen atom or a carbon atom; Y represents a group represented by formula (II) wherein X represents a hydrogen atom, group -C(=O)N(R<5>)R<6> or group -C(=O)OR<7>, R<8> is absent or represents a bond, an oxygen atom, a sulfur atom, -SO₂-, -SO-, -CH₂-CH₂-, or -CH=CH-, and R<9> and R<10> represent a hydrogen atom, alkyl, alkoxy, a halogen atom, or hydroxyl; and Z represents -(CH₂)_n-, -O-(CH₂)_i-, or -C(=O)NH-(CH₂)_i-.

Classifications:

International (IPC 8-9): [A61K31/495](#) [A61K31/496](#) [A61K31/502](#) [A61P3/06](#) [A61P43/00](#) [A61P9/10](#) [C07D209/46](#) [C07D213/40](#) [C07D213/81](#) [C07D213/82](#) [C07D217/22](#) [C07D237/30](#) [C07D295/14](#) [C07D295/155](#) [C07D307/22](#) [C07D309/04](#) [C07D311/84](#) [C07D333/20](#) [C07D335/14](#) [C07D401/06](#) [C07D401/12](#) [C07D405/04](#) [C07D405/06](#) [C07D405/12](#) [C07D405/14](#) [C07D409/12](#) [C07D471/04](#) (Advanced/Invention);

[A61P43/00](#) [C07D401/06](#) (Advanced/Non-invention)

International (IPC 1-7): [A61K31/4545](#) [A61K31/495](#) [A61K31/496](#) [A61K31/4965](#) [A61K31/502](#) [A61P3/06](#) [A61P43/00](#) [A61P9/10](#) [C0743/04](#) [C07D209/46](#) [C07D211/58](#) [C07D213/81](#) [C07D213/82](#) [C07D217/22](#) [C07D237/30](#) [C07D295/14](#) [C07D295/155](#) [C07D307/22](#) [C07D311/84](#) [C07D333/20](#) [C07D335/14](#) [C07D401/06](#) [C07D401/12](#) [C07D405/06](#) [C07D405/12](#) [C07D405/14](#) [C07D409/12](#) **CPC:** [C07D213/40](#) [C07D209/46](#) [C07D295/155](#) [C07D309/04](#) [C07D405/04](#) [C07D405/12](#) [C07D405/14](#) [C07D471/04](#)

European: [C07D209/46](#) [C07D213/40](#) [C07D295/155](#) [C07D309/04](#) [C07D405/04](#) [C07D405/12](#) [C07D405/14](#) [C07D471/04](#)

US: [514/248](#) [514/252.13](#) [514/253.11](#) [514/253.110P](#) [514/254.11](#) [514/255.03](#) [514/318](#) [514/318S](#) [544/237](#) [544/360](#) [544/360S](#) [544/375](#) [544/392](#) [544/393](#) [546/193](#) [546/193S](#)

Family:

Publication number	Publication date	Application number	Application date
AU200036759 A1	20001114	AU20000036759	20000410
AU200036759 A5	20001114	AU20000036759	20000410
AU779550 B2	20050127	AU20000036759	20000410
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US7030120 BB	20060418	US20040868006	20040616

[WO0061556 A1](#) 20001019 WO2000JP02329 20000410

Priority:

JP19990102559 19990409 JP19990118490 19990426 JP19990119043 19990427
WO2000JP02329 20000410 US20010958296 20011005 US20040868006 20040616

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Assignee(s): (std): HIRAIWA YUKIKO ; KATANO KIYOAKI ; KURODA CHIZUKO ; MATSUSHIMA TETSUYA ; MEIJI SEIKA KAISHA ; NAGASAWA MIEKO ; NAKATANI YUUKO ; OHKURA NAOTO ; SASAKI KAZUE ; YAMAMOTO TAKEHIRO ; SHIOTANI MASAHARU ; SUZUKI SHIGEKI

Assignee(s): MEIJI SEIKA KAISHA LTD

Inventor(s): (std): YAMAMOTO TAKEHIRO ; SUZUKI SHIGEKI ; SHIOTANI MASAHARU ; SASAKI KAZUE ; OHKURA NAOTO ; NAKATANI YUUKO ; NAGASAWA MIEKO ; MATSUSHIMA TETSUYA ; KURODA CHIZUKO ; KATANO KIYOAKI ; HIRAIWA YUKIKO ; SUZUKI SHIGEKI

Inventor(s): SHIGEKI SUZUKI ; CHIZUKO KURODA ; KAZUE SASAKI ; KIYOAKI KATANO ; MASAHARU SHIOTANI ; MIEKO NAGASAWA ; NAOTO OHKURA ; SHIGEKI SUZUKI ; TAKEHIRO YAMAMOTO ; TETSUYA MATSUSHIMA ; YUKIKO HIRAIWA ; YUUKO NAKATANI

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD;
FETHERSTONHAUGH AND CO; WENDEROTH LIND AND PONACK LLP

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Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AU200036759 A1	20001114	LSPB	+	published / reissued	
AU779550 B2	20050127	LSGT	+	granted / extensions (spc, cpc, pte)	
AU779550 B2	20200410	PEXP		Calculated Patent Term Expiry	
BRPI0009650 A	20020102	LSPB	+	published / reissued	
BRPI0009650 A	20080812	LSFE	-B08F	APPLICATION FEES: DISMISSAL - ARTICLE 86 OF INDUSTRIAL PROPERTY LAW	TEXT : REFERENTA A 6A, 7A 8A ANUIDADES.
BRPI0009650 A	20090225	LSLE	-B08K	LAPSE AS NO EVIDENCE OF PAYMENT OF THE ANNUAL FEE HAS BEEN FURNISHED TO INPI (ACC. ART. 87)	TEXT : REFERENTE AO DESPACHO PUBLICADO NA RPI 1962 DE 12/08/2008.
CA2369103 AA	20011002	LSPB	+	published / reissued	

CA2369103 AA	20060410	LSLE	-FZDE	DEAD	
EP1180514 A1	20020220	LSPB	+	published / reissued	
EP1180514 A1	20020220	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20011107
EP1180514 A4	20030226	LSES	+A4	DESPATCH OF SUPPLEMENTARY SEARCH REPORT	EFFECTIVE DATE : 20030115
EP1180514 A4	20030226	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : 7C 07D 209/46 A
EP1180514 A4	20030226	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : 7A 61K 31/4965 B
EP1180514 A4	20030226	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : 7C 07D 295/155 B
EP1180514 A4	20030226	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : 7C 07D 211/58 B
EP1180514 A4	20030226	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : 7C 07D 405/06 B
EP1180514 A4	20030226	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : 7C 07D 213/82 B
EP1180514 A4	20030226	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : 7C 07D 409/12 B
EP1180514 A4	20030226	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : 7A 61P 3/06 B
EP1180514 A4	20030528	LSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 20030409
EP1180514 A4	20070926	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20070328
JP2000061556 A1	20020723	LSPB	+	published / reissued	
JP20020005662 A	20020117	LSPB	+	published /	

reissued					
KR20020005662 A	20050411	LSDW	-WITN	WITHDRAWAL DUE TO NO REQUEST FOR EXAMINATION	
MXPA01010176 A1	20020327	LSPB	+	published / reissued	
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US6777414 BA	20040817	LSGT	+	granted / extensions (spc, cpc, pte)	
US6777414 BA	20011009	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MEIJI SEIKA KAISHA, LTD., JAPAN OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:OHKURA, NAOTO; HIRAIWA, YUKIKO; MATSUSHIMA, TETSUYA; AND OTHERS; REEL/FRAME:012378/0712 EFFECTIVE DATE : 20010925
US6777414 BA	20080817	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US6777414 BA	20080915	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US6777414 BA	20081007	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20080817
US6777414 BA	20211005	PEXP		Calculated Patent Term Expiry	
US7030120 BB	20060418	LSGT	+	granted / extensions (spc, cpc, pte)	
US7030120 BB	20100418	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US7030120 BB	20100517	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US7030120 BB	20100608	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20100418
US7030120 BB	20240616	PEXP		Calculated Patent Term Expiry	

WO0061556 A1	20001019	LSPB	+	published / reissued	
WO0061556 A1	20010920	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2000 610831 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO0061556 A1	20011002	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2369103 COUNTRY OF REF DOCUMENT : CA
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WO0061556 A1	20011003	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 36759/00 COUNTRY OF REF DOCUMENT : AU
WO0061556 A1	20011005	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 09958296 COUNTRY OF REF DOCUMENT : US
WO0061556 A1	20011008	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1020017012842 COUNTRY OF REF DOCUMENT : KR
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WO0061556 A1	20020117	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1020017012842 COUNTRY OF REF DOCUMENT : KR
WO0061556 A1	20020207	LSWD	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : 8642
WO0061556 A1	20020220	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2000915465 COUNTRY OF REF DOCUMENT : EP

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WO0061556 A1	20050526	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 36759/00 COUNTRY OF REF DOCUMENT : AU
WO0061556 A1	20070328	LSWD	-WWW	WIPO INFORMATION: WITHDRAWN IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2000915465 COUNTRY OF REF DOCUMENT : EP

Title: SUBSTITUTED PIPERAZINES AND METHODS OF USE

Abstract: Selected substituted piperazine compounds are effective for prophylaxis and treatment of diseases, such as obesity and the like. The invention encompasses novel compounds, analogs, prodrugs and pharmaceutically acceptable salts thereof, pharmaceutical compositions and methods for prophylaxis and treatment of diseases and other maladies or conditions involving activation of the melanocortin receptor. The subject invention also relates to processes for making such compounds as well as to intermediates useful in such processes.

Classifications:

International (IPC 8-9): [A61K31/49](#) [A61K31/495](#) [A61K31/496](#) [A61K31/4965](#) [A61K31/497](#) [A61K31/53](#) [A61K31/5377](#) [A61K31/55](#) [A61K31/551](#) [A61P3/04](#) [A61P3/10](#) [A61P43/00](#) [C07D205/04](#) [C07D207/08](#) [C07D207/09](#) [C07D209/14](#) [C07D209/18](#) [C07D209/42](#) [C07D211/26](#) [C07D211/60](#) [C07D211/62](#) [C07D213/38](#) [C07D213/81](#) [C07D213/82](#) [C07D215/48](#) [C07D217/06](#) [C07D217/14](#) [C07D217/26](#) [C07D233/54](#) [C07D233/64](#) [C07D241/02](#) [C07D243/08](#) [C07D295/18](#) [C07D295/185](#) [C07D317/60](#) [C07D317/68](#) [C07D319/16](#) [C07D319/18](#) [C07D401/00](#) [C07D401/08](#) [C07D401/12](#) [C07D403/04](#) [C07D403/10](#) [C07D403/12](#) [C07D403/14](#) [C07D405/02](#) [C07D407/00](#) [C07D409/12](#) [C07D409/14](#) [C07D411/02](#) [C07D413/12](#) [C07D417/12](#) [C07D451/02](#) [C07D487/08](#) [C07K5/06](#) [C07K5/062](#) [C07K5/065](#) [C07K5/078](#) (Advanced/Invention);

[A61K38/00](#) (Advanced/Non-invention);

[A61K31/49](#) [A61K31/495](#) [A61K31/496](#) [A61K31/4965](#) [A61K31/53](#) [A61K31/5375](#) [A61K31/55](#) [A61K31/551](#) [A61P3/00](#) [A61P43/00](#) [C07D205/00](#) [C07D207/00](#) [C07D209/00](#) [C07D211/00](#) [C07D213/00](#) [C07D215/00](#) [C07D217/00](#) [C07D233/00](#) [C07D243/00](#) [C07D295/00](#) [C07D317/00](#) [C07D319/00](#) [C07D401/00](#) [C07D403/00](#) [C07D407/00](#) [C07D409/00](#) [C07D413/00](#) [C07D417/00](#) [C07D451/00](#) [C07D487/00](#) [C07K5/00](#) (Core/Invention);

[A61K38/00](#) (Core/Non-invention)

International (IPC 1-7): [A61K31/495](#) [A61K31/496](#) [A61K31/498](#) [A61K31/5377](#) [A61K31/55](#) [A61K31/551](#) [A61P3/04](#) [A61P3/10](#) [A61P43/00](#) [C0743/02](#) [C07D205/04](#) [C07D207/08](#) [C07D207/09](#) [C07D209/14](#) [C07D209/18](#) [C07D211/26](#) [C07D211/60](#) [C07D211/62](#) [C07D213/38](#) [C07D213/81](#) [C07D213/82](#) [C07D215/48](#) [C07D217/06](#) [C07D217/14](#) [C07D217/26](#) [C07D233/64](#) [C07D295/18](#) [C07D317/60](#) [C07D317/68](#) [C07D319/16](#) [C07D319/18](#) [C07D401/12](#) [C07D401/14](#) [C07D403/12](#) [C07D409/12](#) [C07D413/12](#) [C07D417/12](#) [C07D487/08](#) [C07K5/062](#) [C07K5/065](#) [C07K5/078](#)

CPC: [A61K38/00](#) [C07D205/04](#) [C07D207/08](#) [C07D207/09](#) [C07D209/14](#) [C07D209/42](#) [C07D211/26](#) [C07D211/60](#) [C07D211/62](#) [C07D213/38](#) [C07D213/81](#) [C07D213/82](#) [C07D215/48](#) [C07D217/06](#) [C07D217/14](#) [C07D217/26](#) [C07D233/64](#) [C07D295/185](#) [C07D317/60](#) [C07D317/68](#) [C07D319/18](#) [C07D401/12](#) [C07D403/12](#) [C07D409/12](#) [C07D413/12](#) [C07D417/12](#) [C07D451/02](#) [C07K5/06026](#) [C07K5/06139](#) [C07K5/06147](#) [C07K5/06191](#)

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US: [514/218](#) [514/249](#) [514/249S](#) [514/252.11](#) [514/252.13](#) [514/252.130S](#) [514/253.01](#) [514/253.010S](#) [514/253.05](#) [514/253.06](#) [514/253.060S](#) [514/253.13](#) [514/254.01](#) [514/254.010S](#) [514/254.05](#) [514/254.050S](#) [514/254.09](#) [514/254.090S](#) [514/254.11](#) [514/254.110S](#) [514/255.01](#) [514/255.010S](#) [540/575](#) [540/575S](#) [544/353](#) [544/353S](#) [544/359](#) [544/359S](#) [544/36](#) [544/360](#) [544/360S](#) [544/363](#) [544/363S](#) [544/365](#) [544/370](#) [544/370S](#) [544/372](#) [544/372S](#) [544/373](#) [544/373S](#) [544/376](#) [544/377](#) [544/377S](#) [544/379](#) [544/386](#) [544/386S](#)

Family:

Publication number	Publication date	Application number	Application date
AT411985 E	20081115	AT20020761189T	20020725
AU2002326469 AA	20030217	AU20020326469	20020725
AU2002326469 BB	20060330	AU20020326469	20020725
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Priority:

US20010307831P 20010725 US20020202823 20020724 WO2002US23926 20020725
US20050116759 20050427

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Agent(s): SHELSTON IP PTY LTD; SHELSTON IP; GOWLING LAFLEUR HENDERSON LLP; HOFFMANN EITLE; HITOSHIO AKIO; TSUBOKURA MICHIAKI; ONO MAKOTO; OSAKI KATSUMASA; KAWAGUCHI YOSHIO; AMGEN INC; JOSEPH W

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

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT411985 E	20081115	LSGT	+	granted / extensions (spc, cpc, pte)	
AT411985 E	20090415	LSLE	-RER	CEASED AS TO PARAGRAPH 5 LIT. 3 LAW INTRODUCING PATENT TREATIES	
AT411985 E	20220725	PEXP		Calculated Patent Term Expiry	

AU2002326469 AA	20030217	LSPB	+	published / reissued	
AU2002326469 BB	20060330	LSGT	+	granted / extensions (spc, cpc, pte)	
AU2002326469 BB	20060727	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU2002326469 BB	20100218	LSLE	-MK14	PATENT CEASED SECTION 143(A) (ANNUAL FEES NOT PAID) OR EXPIRED	
AU2002326469 BB	20220725	PEXP		Calculated Patent Term Expiry	
CA2454903 AA	20040123	LSPB	+	published / reissued	
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CA2454903 AA	20100726	LSLE	-FZDE	DEAD	
DE60229530 D1	20091112	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
EP1417190 A1	20040512	LSPB	+	published / reissued	
EP1417190 A1	20040512	LSSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20040211
EP1417190 A1	20060726	LSSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 20051110
EP1417190 A1	20070228	LSSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 20051110
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EP1417190 B1	20081022	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1417190 B1	20081022	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP1417190 B1	20081031	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1417190 B1	20081126	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP1417190 B1	20090325	LSRV	-LTIE	LT: INVALIDATION	REF COUNTRY CODE : EP EFFECTIVE DATE : 20091022

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EP1417190 B1	20090430	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 : 20081022
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				EPO	PRESCRIBED TIME-LIMIT LAPSED DATE : 20081022
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EP1417190 B1	20100730	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON- PAYMENT OF DUE FEES LAPSED DATE : 20090725
EP1417190 B1	20101029	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 : 20090123
EP1417190 B1	20110429	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 : 20090725
EP1417190 B1	20110531	LSAS	REG	REFERENCE TO A NATIONAL CODE	PARTYTYPE : OWNER REF COUNTRY CODE : CH OWNER : AMGEN INC. REF LEGAL EVENT CODE : PFA OLDPARTY : AMGEN INC.#ONE AMGEN CENTER DRIVE#THOUSAND OAKS, CA 91320-1799 (US) -TRANSFER TO- AMGEN INC.#ONE AMGEN CENTER DRIVE#THOUSAND OAKS, CA 91320-1799 (US)
EP1417190 B1	20110831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : TR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20081022
EP1417190 B1	20110831	LSLE	-PG25	LAPSED IN A	COUNTRY OF REF DOCUMENT

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EP1417190 B1	20111031	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20110712 YEAR OF FEE PAYMENT : 10
EP1417190 B1	20111031	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20110727 YEAR OF FEE PAYMENT : 10
EP1417190 B1	20111130	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20110817 YEAR OF FEE PAYMENT : 10
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EP1417190 B1	20111130	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20110720 YEAR OF FEE PAYMENT : 10
EP1417190 B1	20111230	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20110721 YEAR OF FEE PAYMENT : 10
EP1417190 B1	20130228	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP1417190 B1	20130327	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON- PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20120725
EP1417190 B1	20130426	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20130329
EP1417190 B1	20130430	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 : 20130201
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EP1417190 B1	20130430	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 : 20120731
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EP1417190 B1	20130926	LSDW	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R119 REF DOCUMENT NUMBER : 60229530 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20130201
EP1417190 B1	20131030	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20131030
EP1417190 B1	20131031	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 : 20120726
EP1417190 B1	20220725	PEXP		Calculated Patent Term Expiry	
ES2315390 T3	20090401	LSGT	+	granted / extensions (spc, cpc, pte)	

ES2315390 T3	20220725	PEXP		Calculated Patent Term Expiry	
JP2005503369 T2	20050203	LSPB	+	published / reissued	
JP2005503369 T2	20050601	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20050531
JP2005503369 T2	20090128	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20090127
JP2005503369 T2	20090624	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20090623
MXPA04000761 A1	20040708	LSPB	+	published / reissued	
MXPA04000761 A1	20070628	LSGT	+FG	GRANT OR REGISTRATION	
PL370381 A1	20050530	LSPB	+	published / reissued	
PL370381 A1	20120531	LSRV	-REFS	DECISIONS ON REFUSAL TO GRANT PATENTS (TAKEN AFTER THE PUBLICATION OF THE PARTICULARS OF THE APPLICATIONS)	
US2003220324 AA	20031127	LSPB	+	published / reissued	
US2003220324 AA	20020724	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMGEN INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:FOTSCH, CHRISTOPHER H.; ARASASINGHAM, PREMILLA; BO, YUNXIN; AND OTHERS; REEL/FRAME:013147/0255; SIGNING DATES FROM 20020711 TO 20020719
US2003220324 AA	20030109	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMGEN INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:KELLY, MICHAEL G.; REEL/FRAME:013659/0927 EFFECTIVE DATE : 20021220
US2003220324 AA	20050502	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AMGEN INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF

ASSIGNORS INTEREST;
 ASSIGNOR:DOHERTY,
 ELIZABETH M.;
 REEL/FRAME:016186/0876
 EFFECTIVE DATE : 20050426

US2007265248 AA	20071115	LSPB	+	published / reissued		
US7115607 BB	20061003	LSGT	+	granted / extensions (spc, cpc, pte)		
US7115607 BB	20060913	LSGT	PAT1	Patented Case		
US7115607 BB	20100318	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4	
US7115607 BB	20100727	LSRE	CC	CERTIFICATE OF CORRECTION		
US7115607 BB	20140305	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8	
US7115607 BB	20230805	PEXP		Calculated Patent Term Expiry (PTA 377 days)		
US7560460 BB	20090714	LSGT	+	granted / extensions (spc, cpc, pte)		
US7560460 BB	20090624	LSGT	PAT1	Patented Case		
US7560460 BB	20121219	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4	
US7560460 BB	20170714	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES		
US7560460 BB	20170814	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362		
US7560460 BB	20170905	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20170714	
US7560460 BB	20251222	PEXP		Calculated Patent Term Expiry (PTA 239 days)		
WO03009850 A1	20030206	LSPB	+	published / reissued		
WO03009850 A1	20040123	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2454903 COUNTRY OF REF DOCUMENT : CA	
WO03009850 A1	20040123	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2003515242 COUNTRY OF REF DOCUMENT : JP	

WO03009850 A1	20040123	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : PA/A/2004/000761 COUNTRY OF REF DOCUMENT : MX
WO03009850 A1	20040129	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2002326469 COUNTRY OF REF DOCUMENT : AU
WO03009850 A1	20040211	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2002761189 COUNTRY OF REF DOCUMENT : EP
WO03009850 A1	20040512	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2002761189 COUNTRY OF REF DOCUMENT : EP
WO03009850 A1	20040603	LSWD	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : 8642

Title: PIPERIDINE DERIVATIVES AS CCR5 INHIBITORS

Abstract: Disclosed are compounds of formula I: wherein R₁, R₂, R₃ and X are as defined herein, in free or salt form, which are useful as CCR5 inhibitors, e.g. in the prevention or treatment of disorders mediated by interactions between chemokine receptors and their ligands.

**Classifications:**

International (IPC 8-9): [A61K31/4427](#) [A61K31/445](#) [A61K31/4545](#) [A61K31/4709](#) [A61K31/506](#) [A61P1/04](#) [A61P11/00](#) [A61P11/02](#) [A61P11/06](#) [A61P13/12](#) [A61P17/06](#) [A61P17/14](#) [A61P19/00](#) [A61P19/02](#) [A61P21/04](#) [A61P25/00](#) [A61P27/00](#) [A61P29/00](#) [A61P3/10](#) [A61P31/00](#) [A61P31/12](#) [A61P31/18](#) [A61P35/00](#) [A61P35/02](#) [A61P35/04](#) [A61P37/00](#) [A61P37/02](#) [A61P37/06](#) [A61P37/08](#) [A61P5/14](#) [A61P7/06](#) [A61P9/10](#) [C07D211/58](#) [C07D401/04](#) [C07D401/14](#) [C07D405/14](#) [C07D409/14](#) [C07D41/14](#) [C07D417/14](#) (Advanced/Invention);

[A61K31/4523](#) [C07D211/00](#) [C07D401/00](#) [C07D405/00](#) [C07D409/00](#) [C07D417/00](#) (Core/Invention)

International (IPC 1-7): [A61K31/4545](#) [C07D211/58](#) [C07D401/14](#)

CPC: [C07D211/58](#) [C07D401/14](#) [C07D405/14](#) [C07D409/14](#) [C07D417/14](#)

European: [C07D211/58](#) [C07D401/14](#) [C07D401/14R](#) [C07D401/14R++213+211+209C](#) [C07D405/14](#) [C07D405/14R](#) [C07D409/14](#) [C07D409/14R](#) [C07D417/14](#) [C07D417/14R](#)

US: [514/256](#) [514/314](#) [514/314S](#) [514/316](#) [514/316P](#) [514/316S](#) [544/333](#) [544/333S](#) [546/165](#) [546/165S](#) [546/186](#) [546/187](#) [546/187S](#) [546/188](#) [546/190](#) [546/190S](#) [546/191](#) [546/191S](#)

Family:

Publication number	Publication date	Application number	Application date
AT450527 E	20091215	AT20030798931T	20031006
AU2003276056 AA	20040423	AU20030276056	20031006
BRPI0315092 A	20050816	BR2003PI15092	20031006
CA2501243 AA	20050404	CA20032501243	20031006
CN100334083 C	20070829	CN200380100950	20031006
CN1703411 A	20051130	CN200380100950	20031006
DE60330373 D1	20100114	DE20036030373	20031006
EP1551827 A1	20050713	EP20030798931	20031006
EP1551827 B1	20091202	EP20030798931	20031006
ES2337354 T3	20100423	ES20030798931T	20031006
GB200223223 A0	20021113	GB20020023223	20021007
JP2006503856 T2	20060202	JP20040540789T	20031006
PT1551827 T	20100129	PT20030798931T	20031006
US2006004047 AA	20060105	US20030529776	20031006
US2008249111 AA	20081009	US20080114297	20080502
US7399771 BB	20080715	US20030529776	20031006
WO04031172 A1	20040415	WO2003EP11035	20031006

Priority:

GB20020023223 20021007 WO2003EP11035 20031006 US20050529776 20050505
US20080114297 20080502

Probable Assignee: NOVARTIS AG

Assignee(s): (std): ALBERT RAINER ; BRUNS CHRISTIAN ; COOKE NIGEL ; COOKE NIGEL G ; NOVARTIS AG ; NOVARTIS PHARMA GMBH ; COOKE NIGEL GRAHAM ; THOMA GEBHARD ; NUNINGER FRANCOIS ; STREIFF MARKUS ; ZERWES HANS GUNTER

Assignee(s): ZERWES HANS GUENTER

Inventor(s): (std): ALBERT RAINER ; COOKE NIGEL GRAHAM ; GEBHARD THOMA ; NIGEL GRAHAM COOKE ; RAINER ALBERT ; THOMA GEBHARD ; ZERWES HANS GUNTER ; GEBHARD ALBERT RAINER COOKE NI ; COOKE NIGEL G ; ZERWES HANS GUENTER ; STREIFF MARKUS ; NUNINGER FRANCOIS ; BRUNS CHRISTIAN ; GRAHAM THOMA GEBHARD ALBERT RA ; COOKE NIGEL

Inventor(s): THOMA GEBHARD ALBERT RAINER COOKE NIGEL GRAHAM ; MARKUS STREIFF ; HANS GUENTER ZERWES ; FRANCOIS NUNINGER ; CHRISTIAN BRUNS ; ALBERT RAINER COOKE NIGEL GRAHAM THOMA GEBHARD

Agent(s): FETHERSTONHAUGH AND CO; PATENT UND RECHTSANWALTSSOZIETAET MAUCHER BOERJES AND KOLLEGEN; NOVARTIS, CORPORATE INTELLECTUAL PROPERTY; NOVARTIS CORPORATE INTELLECTUAL PROPERTY; NOVARTIS INSTITUTES FOR BIOMEDICAL RESEARCH INC; NOVARTIS AG

Designated states: AE AG AL AM AT AU AZ BA BB BE BG BR BY BZ CA CH CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GB GD GE GH GR HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LT LU LV MA MC MD MK MN MX NI NL NO NZ OM PG PH PL PT RO RU SC SE SG SI SK SY TJ TM TN TR TT UA US UZ VC VN YU ZA ZW

Legal status (INPADOC)

[View legal status timeline](#)

Patent	Date recorded	Event group	Code	Event	Details
AT450527 E	20091215	LSGT	+	granted / extensions (spc, cpc, pte)	
AT450527 E	20100515	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	REF DOCUMENT NUMBER : 1551827 COUNTRY OF REF DOCUMENT : EP
AT450527 E	20120115	LSLE	-REN	CEASED DUE TO NON-PAYMENT OF THE ANNUAL FEE	
AT450527 E	20231006	PEXP		Calculated Patent Term Expiry	
AU2003276056 AA	20040423	LSPB	+	published / reissued	
AU2003276056 AA	20050714	LSLE	-MK6	APPLICATION LAPSED SECTION 142(2)(F)/REG. 8.3(3) - PCT APPLIC. NOT ENTERING NATIONAL PHASE	
BRPI0315092 A	20050816	LSPB	+	published / reissued	
BRPI0315092 A	20120529	LSFE	-B08F	APPLICATION FEES: DISMISSAL - ARTICLE 86 OF INDUSTRIAL PROPERTY LAW	TEXT : REFERENTE A 8A ANUIDADE.
BRPI0315092 A	20130115	LSLE	-B08K	LAPSE AS NO EVIDENCE OF PAYMENT OF THE ANNUAL FEE HAS BEEN	TEXT : REFERENTE AO DESPACHO 8.6 PUBLICADO NA RPI 2160 DE 29/05/2012.

					FURNISHED TO INPI (ACC. ART. 87)
CA2501243 AA	20050404	LSPB	+	published / reissued	
CA2501243 AA	20081001	LSES	+EEER	EXAMINATION REQUEST	
CA2501243 AA	20111006	LSLE	-FZDE	DEAD	
CN100334083 C	20070829	LSGT	+	granted / extensions (spc, cpc, pte)	
CN100334083 C	20070829	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN100334083 C	20121205	LSLE	-C17	CESSATION OF PATENT RIGHT	
CN100334083 C	20231006	PEXP		Calculated Patent Term Expiry	
CN1703411 A	20051130	LSPB	+	published / reissued	
CN1703411 A	20051130	LSPB	+C06	PUBLICATION	
DE60330373 D1	20101223	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
EP1551827 A1	20050713	LSPB	+	published / reissued	
EP1551827 A1	20050713	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20050509
EP1551827 A1	20060719	LSAS	RAP1	TRANSFER OF RIGHTS OF AN APPLICATION	PARTYTYPE : OWNER OWNER : NOVARTIS AG
EP1551827 A1	20060719	LSAS	RAP1	TRANSFER OF RIGHTS OF AN APPLICATION	PARTYTYPE : OWNER OWNER : NOVARTIS PHARMA GMBH
EP1551827 A1	20061129	LSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 20061025
EP1551827 A1	20090812	LSAS	RAP1	TRANSFER OF RIGHTS OF AN APPLICATION	PARTYTYPE : OWNER OWNER : NOVARTIS AG
EP1551827 A1	20090812	LSAS	RAP1	TRANSFER OF RIGHTS OF AN APPLICATION	PARTYTYPE : OWNER OWNER : NOVARTIS PHARMA GMBH
EP1551827 A1	20090930	LSAS	RAP1	TRANSFER OF RIGHTS OF AN APPLICATION	PARTYTYPE : OWNER OWNER : NOVARTIS AG
EP1551827 A1	20090930	LSAS	RAP1	TRANSFER OF RIGHTS OF AN APPLICATION	PARTYTYPE : OWNER OWNER : NOVARTIS PHARMA GMBH

EP1551827 B1	20091202	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1551827 B1	20091202	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP1551827 B1	20091215	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1551827 B1	20100106	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP1551827 B1	20100322	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GR REF LEGAL EVENT CODE : EP REF DOCUMENT NUMBER : 20100400462 COUNTRY OF REF DOCUMENT : GR
EP1551827 B1	20100324	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : T3
EP1551827 B1	20100423	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2337354 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP1551827 B1	20100430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : FI 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 : 20091202
EP1551827 B1	20100430	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 : 20091202
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EP1551827 B1	20100730	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : BG NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20100302
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EP1551827 B1	20100831	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 : 20091202
EP1551827 B1	20100831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : SK NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20091202
EP1551827 B1	20101110	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20100903
EP1551827 B1	20110131	LSLE	-PG25	LAPSED IN A CONTRACTING	COUNTRY OF REF DOCUMENT : DK

				STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20091202
EP1551827 B1	20110131	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20101020 YEAR OF FEE PAYMENT : 8
EP1551827 B1	20110228	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20100929 YEAR OF FEE PAYMENT : 8
EP1551827 B1	20110331	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20101018 YEAR OF FEE PAYMENT : 8
EP1551827 B1	20110331	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20101006 YEAR OF FEE PAYMENT : 8
EP1551827 B1	20110430	LSLE	-BERE	BE: LAPSED	PARTYTYPE : OWNER REF COUNTRY CODE : EP OWNER : NOVARTIS A.G. EFFECTIVE DATE : 20101031
EP1551827 B1	20110518	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : V1 EFFECTIVE DATE : 20110501
EP1551827 B1	20110531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON- PAYMENT OF DUE FEES LAPSED DATE : 20101031
EP1551827 B1	20110531	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP1551827 B1	20110630	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20101122 YEAR OF FEE PAYMENT : 8
EP1551827 B1	20110713	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : PT REF LEGAL EVENT CODE : MM4A TEXT : LAPSE DUE TO NON- PAYMENT OF FEES EFFECTIVE DATE : 20110706
EP1551827 B1	20110729	LSLE	-PG25	LAPSED IN A CONTRACTING	COUNTRY OF REF DOCUMENT : GB

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EP1551827 B1	20110729	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 : 20101031
EP1551827 B1	20110729	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 : 20101031
EP1551827 B1	20110831	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 : 20101031
EP1551827 B1	20110831	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 : 20110501
EP1551827 B1	20111031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : PT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON- PAYMENT OF DUE FEES LAPSED DATE : 20110706
EP1551827 B1	20111031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON- PAYMENT OF DUE FEES LAPSED DATE : 20101006
EP1551827 B1	20120115	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MM01 REF DOCUMENT NUMBER : 450527 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20101006

EP1551827 B1	20120229	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 NON-PAYMENT OF DUE FEES LAPSED DATE : 20101006
EP1551827 B1	20120627	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20111006
EP1551827 B1	20120720	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20120629
EP1551827 B1	20120731	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 : 20120501
EP1551827 B1	20120809	LSDW	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R119 REF DOCUMENT NUMBER : 60330373 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20120501
EP1551827 B1	20120831	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 : 20111006
EP1551827 B1	20120831	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 : 20111102
EP1551827 B1	20120831	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 : 20111006
EP1551827 B1	20120928	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20101006

EP1551827 B1	20120928	LSLE	-PG25	EPO LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : HU NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20100603
EP1551827 B1	20130531	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20130531
EP1551827 B1	20130731	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 NON-PAYMENT OF DUE FEES LAPSED DATE : 20111007
EP1551827 B1	20130930	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : TR NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20091202
EP1551827 B1	20231006	PEXP		Calculated Patent Term Expiry	
ES2337354 T3	20100423	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2337354 T3	20231006	PEXP		Calculated Patent Term Expiry	
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JP2006503856 T2	20061005	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20061004
JP2006503856 T2	20061005	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20061004
JP2006503856 T2	20100224	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A132 EFFECTIVE DATE : 20100223

JP2006503856 T2	20100522	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20100521
JP2006503856 T2	20100818	LSER	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20100817
JP2006503856 T2	20110126	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20110125
PT1551827 T	20100129	LSGT	+	granted / extensions (spc, cpc, pte)	
PT1551827 T	20231006	PEXP		Calculated Patent Term Expiry	
US2006004047 AA	20060105	LSPB	+	published / reissued	
US2006004047 AA	20070503	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : NOVARTIS AG, SWITZERLAND OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ALBERT, RAINER; COOKE, NIGEL GRAHAM; THOMA, GEBHARD; AND OTHERS; REEL/FRAME:019277/0409; SIGNING DATES FROM 20050315 TO 20050404
US2006004047 AA	20070503	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : NOVARTIS AG, SWITZERLAND OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ALBERT, RAINER; COOKE, NIGEL GRAHAM; THOMA, GEBHARD; AND OTHERS; REEL/FRAME:019279/0167; SIGNING DATES FROM 20050315 TO 20050404
US2008249111 AA	20081009	LSPB	+	published / reissued	
US2008249111 AA	20111107	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US7399771 BB	20080715	LSGT	+	granted / extensions (spc, cpc, pte)	
US7399771 BB	20120715	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US7399771 BB	20120813	LSLE	-PEX1	Patent Expired Due to Nonpayment of	

				Maintenance Fees Under 37 CFR 1.362	
US7399771 BB	20120904	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20120715
US7399771 BB	20231006	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
WO04031172 A1	20040415	LSPB	+	published / reissued	
WO04031172 A1	20050314	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2003798931 COUNTRY OF REF DOCUMENT : EP
WO04031172 A1	20050404	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 20038A09501 COUNTRY OF REF DOCUMENT : CN
WO04031172 A1	20050404	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2501243 COUNTRY OF REF DOCUMENT : CA
WO04031172 A1	20050406	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2004540789 COUNTRY OF REF DOCUMENT : JP
WO04031172 A1	20050505	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2006004047 COUNTRY OF REF DOCUMENT : US KIND CODE OF REF DOCUMENT : A1 DESIGNATED STATE(S) :
WO04031172 A1	20050505	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 10529776 COUNTRY OF REF DOCUMENT : US
WO04031172 A1	20050713	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2003798931 COUNTRY OF REF DOCUMENT : EP
WO04031172 A1	20060105	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 10529776 COUNTRY OF REF DOCUMENT : US

Title: Substituted N-aryl heterocycles, process for their preparation and their use as medicaments

Abstract: The invention relates to substituted N-aryl heterocycles and to the physiologically tolerated salts and physiologically functional derivatives thereof. Compounds of the formula I in which the radicals have the stated meanings, the N-oxides and the physiologically tolerated salts thereof and process for the preparation thereof are described. The compounds are suitable for example as anorectic agents.



Classifications:

International (IPC 8-9): [A61K31/33](#) [A61K31/395](#) [A61K31/40](#) [A61K31/402](#) [A61K31/4025](#) [A61K31/403](#) [A61K31/4035](#) [A61K31/404](#) [A61K31/407](#) [A61K31/41](#) [A61K31/4155](#) [A61K31/416](#) [A61K31/4162](#) [A61K31/4178](#) [A61K31/4184](#) [A61K31/4192](#) [A61K31/4196](#) [A61K31/42](#) [A61K31/422](#) [A61K31/423](#) [A61K31/4245](#) [A61K31/427](#) [A61K31/428](#) [A61K31/433](#) [A61K31/435](#) [A61K31/438](#) [A61K31/4439](#) [A61K31/445](#) [A61K31/451](#) [A61K31/4523](#) [A61K31/454](#) [A61K31/4545](#) [A61K31/4709](#) [A61K31/4725](#) [A61K31/496](#) [A61K31/497](#) [A61K31/501](#) [A61K31/506](#) [A61K31/513](#) [A61K31/519](#) [A61K31/537](#) [A61K31/5377](#) [A61K31/541](#) [A61K31/5415](#) [A61K31/55](#) [A61K31/551](#) [A61P25/18](#) [A61P25/20](#) [A61P25/22](#) [A61P25/24](#) [A61P25/30](#) [A61P3/00](#) [A61P3/04](#) [A61P3/06](#) [A61P3/10](#) [A61P43/00](#) [A61P9/10](#) [A61P9/12](#) [C07D205/04](#) [C07D207/14](#) [C07D207/16](#) [C07D207/26](#) [C07D207/273](#) [C07D207/34](#) [C07D211/32](#) [C07D211/56](#) [C07D211/58](#) [C07D211/70](#) [C07D213/65](#) [C07D401/04](#) [C07D401/12](#) [C07D401/14](#) [C07D403/12](#) [C07D403/14](#) [C07D405/12](#) [C07D405/14](#) [C07D409/12](#) [C07D409/14](#) [C07D413/12](#) [C07D413/14](#) [C07D417/12](#) [C07D417/14](#) [C07D471/04](#) [C07D471/10](#) [C07D487/04](#) [C07D487/08](#) [C07D491/107](#) [C07D491/113](#) [C07D495/04](#) [C07D498/10](#)

[C07D498/20](#) (Advanced/Invention);

[A61P3/04](#) [C07D207/14](#) [C07D401/14](#) [C07D403/12](#) (Advanced/Non-invention);

[A61K31/33](#) [A61P3/00](#) [C07D205/00](#) [C07D207/00](#) [C07D211/00](#) [C07D401/00](#) [C07D403/00](#) [C07D405/00](#)

[C07D409/00](#) [C07D413/00](#) [C07D417/00](#) (Core/Invention);

[C07D](#) (Subclass/Invention);

[C07D](#) (Subclass/Non-invention)

International (IPC 1-7): [A61K31/40](#) [A61K31/4015](#) [A61K31/402](#) [A61K31/4025](#) [A61K31/405](#) [A61K31/4155](#) [A61K31/4178](#) [A61K31/4184](#) [A61K31/4188](#) [A61K31/4192](#) [A61K31/422](#) [A61K31/423](#) [A61K31/4245](#) [A61K31/427](#) [A61K31/433](#) [A61K31/437](#) [A61K31/439](#) [A61K31/4439](#) [A61K31/444](#) [A61K31/445](#) [A61K31/451](#) [A61K31/4523](#) [A61K31/454](#) [A61K31/4545](#) [A61K31/468](#) [A61K31/4709](#) [A61K31/4747](#) [A61K31/497](#) [A61K31/501](#) [A61K31/506](#) [A61K31/513](#) [A61P25/30](#) [A61P3/00](#) [A61P3/04](#) [A61P3/10](#) [C07D0/00](#) [C07D205/04](#) [C07D207/00](#) [C07D207/14](#) [C07D207/16](#) [C07D207/26](#) [C07D207/28](#) [C07D207/327](#) [C07D207/34](#) [C07D207/404](#) [C07D211/32](#) [C07D211/56](#) [C07D211/58](#) [C07D401/04](#) [C07D401/12](#) [C07D401/14](#) [C07D403/12](#) [C07D405/12](#) [C07D405/14](#) [C07D409/12](#) [C07D409/14](#) [C07D413/12](#) [C07D417/00](#) [C07D417/12](#) [C07D417/14](#) [C07D471/10](#) [C07D487/08](#) [C07D491/113](#) [C07D495/04](#) [C07D498/10](#) [C07D498/20](#)

CPC: [C07D205/04](#) [C07D207/16](#) [C07D207/26](#) [C07D207/34](#) [C07D211/58](#) [C07D401/04](#) [C07D401/12](#) [C07D405/12](#) [C07D405/14](#) [C07D409/12](#) [C07D413/12](#) [C07D417/12](#) [C07D207/14](#) [C07D401/14](#) [C07D403/12](#)

European: [C07D205/04](#) [C07D207/14](#) [C07D207/16](#) [C07D207/26](#) [C07D207/34](#) [C07D211/58](#) [C07D401/04](#) [C07D401/12](#) [C07D401/14](#) [C07D403/12](#) [C07D405/12](#) [C07D405/14](#) [C07D409/12](#) [C07D413/12](#) [C07D417/12](#)

US: [514/183](#) [514/217.04](#) [514/217.040S](#) [514/217.05](#) [514/217.050S](#) [514/217.06](#) [514/217.060S](#) [514/218](#) [514/227.5](#) [514/227.500S](#) [514/235.5](#) [514/235.500S](#) [514/242](#) [514/242S](#) [514/247](#) [514/247S](#) [514/252.03](#) [514/252.030P](#) [514/252.05](#) [514/252.050S](#) [514/252.19](#) [514/255.05](#) [514/255.050S](#) [514/256](#) [514/256S](#) [514/275](#) [514/275S](#) [514/278](#) [514/278S](#) [514/318](#) [514/326](#) [514/329](#) [514/343](#) [514/343S](#) [514/422](#) [514/426](#) [540/480](#) [540/480S](#) [544/120](#) [544/120S](#) [544/122](#) [544/122S](#) [544/230](#) [544/230S](#) [544/238](#) [544/238S](#) [544/331](#) [544/331S](#) [544/372](#) [544/405](#) [544/405S](#) [544/60](#) [544/60S](#) [546/16](#) [546/16S](#) [546/194](#) [546/208](#) [546/276.4](#) [546/276.400S](#) [546/279.1](#) [546/304](#) [548/557](#)

Family:

Publication number	Publication date	Application number	Application date
AR044496 AA	20050914	AR2004P100469	20040216
AU2004212145 AA	20040826	AU20040212145	20040213
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Priority:

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US20040779853 20040217 US20070622028 20070111

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Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AR044496 AA	20050914	LSPB	+	published / reissued	
AR044496 AA	20140521	LSWD	-FB	SUSPENSION OF GRANTING PROCEDURE	
AU2004212145 AA	20040826	LSPB	+	published / reissued	
AU2004212145 AA	20060105	LSAS	TC	CHANGE OF APPLICANT'S NAME (SEC. 104)	PARTYTYPE : OWNER OWNER : SANOFI-AVENTIS DEUTSCHLAND GMBH OLDPARTY : FORMER NAME: AVENTIS PHARMA DEUTSCHLAND GMBH
AU2004212145 BB	20100617	LSGT	+	granted / extensions (spc, cpc, pte)	
AU2004212145 BB	20101014	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU2004212145 BB	20110908	LSLE	-MK14	PATENT CEASED SECTION 143(A) (ANNUAL FEES NOT PAID) OR EXPIRED	
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DE10306250 A1	20110127	LSWD	-8130	WITHDRAWAL	
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US2004220191 AA	20041104	LSPB	+	published / reissued	
US2004220191 AA	20040618	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AVENTIS PHARMA DEUTSCHLAND GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS: SCHWINK, LOTHAR; BOEHME, THOMAS; HESSLER, GERHARD; AND OTHERS.

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US7223788 BB	20141029	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
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ZA200506369 A	20060726	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA200506369 A	20250809	PEXP		Calculated Patent Term Expiry	

Title: QUINOLINE AND QUINOXALINE COMPOUNDS**Abstract:** Quinoline and quinoxaline

compounds, pharmaceutical compositions

containing such compounds and the use of such

compounds to elevate certain plasma lipid levels, including high density lipoprotein-cholesterol and to lower certain other plasma lipid levels, such as LDL-cholesterol and triglycerides and accordingly to treat diseases which are exacerbated by low levels of HDL cholesterol and/or high levels of LDL-cholesterol and triglycerides, such as atherosclerosis and cardiovascular diseases in some mammals, including humans.

Classifications:

International (IPC 8-9): [A61K31/47](#) [A61P9/10](#) [C07D215/12](#) [C07D241/42](#) [C07D401/06](#) [C07D405/06](#) [C07D413/06](#) [C07D417/06](#) [A61K31/4365](#) [A61K31/4375](#) [A61K31/4709](#) [A61K31/498](#) [A61K31/5377](#) [A61P15/10](#) [A61P25/00](#) [A61P25/28](#) [A61P29/00](#) [A61P3/00](#) [A61P3/04](#) [A61P3/06](#) [A61P3/10](#) [A61P31/04](#) [A61P39/06](#) [A61P43/00](#) [A61P9/00](#) [A61P9/12](#) [C07D215/00](#) [C07D215/14](#) [C07D215/18](#) [C07D215/20](#) [C07D215/38](#) [C07D215/50](#) [C07D241/36](#) [C07D401/04](#) [C07D401/12](#) [C07D403/06](#) [C07D403/10](#) [C07D405/12](#) [C07D409/06](#) [C07D409/12](#) [C07D413/10](#) [C07D413/12](#) [C07D417/12](#) [C07D417/14](#) [C07D471/04](#) [C07D495/04](#) (Advanced/Invention);

[A61J7/00](#) [A61J7/04](#) [C07D215/14](#) [C07D215/50](#) [C07D401/04](#) [C07D401/12](#) (Advanced/Non-invention);

[C07D215/00](#) [C07D241/00](#) [C07D401/00](#) [C07D403/00](#) [C07D405/00](#) [C07D409/00](#) [C07D413/00](#)

[C07D417/00](#) [C07D471/00](#) [C07D495/00](#) (Core/Invention);

[C07D](#) (Subclass/Invention)

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Publication number	Publication date	Application number	Application date
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Priority:

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WO2004IB00836 20040315 US20040807838 20040323 WO2004IB00836 20050928
US20050305874 20051215

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Assignee(s): PFIZER INC

Inventor(s): (std): BENJAMIN RUGGERI ROGER ; BRUCE MICHAEL BECHLE ; CHANG GEORGE ; CHANG GEORGE C ; CHANG GEORGE DIDIUK MARY THERE ; BECHLE BRUCE M ; BECHLE BRUCE MICHAEL ; DAVID AUSTEN PERRY ; DIDIUK MARY ; DIDIUK MARY THERESA ; DIDIUK MARY ; FINNEMAN JARI I ; FINNEMAN JARI ILMARI ; FINNEMAN JARI ILINARI ; FINNEMAN JARI ILMARI ; FINNEMAN JARI ILMARI ; FINNEMAN JARI L ; GARIGIPATI RAVI S ; GARIGIPATI RAVI SHANKER ; GARIGIPATI RAVI SHANKLER ; GEORGE CHANG ; GEORGE CHANG MARY THERESA DIDI ; ILMARI FINNEMAN JARI ; JARI IIMARI FINNEMAN ; JARI ILMARI FINNEMAN ; KELLEY RAYN M ; KELLEY RYAN M ; KELLEY RYAN MICHAEL ; MARY THERESA DIDIUK ; MICHAEL BECHLE BRUCE ; MICHAEL KELLEY RYAN ; MICHAEL P POLLASTRI ; PERRY DAVID A ; PERRY DAVID AUSTEN ; PERRY DAVID AUSTIN ; POLLASTRI MICHAEL P ; RAVI SHANKER GARIGIPATI ; RUGGERI ROGER B ; RUGGERI ROGER BANJAMIN ; RUGGERI ROGER BENJAMIN ; RUGGERI RUGER BENJAMIN ; ROGER BENJAMIN RUGGERI ; RYAN MICHAEL KELLEY ; SHANKE GARIGIPATI RAVI ; THERESA DIDIUK MARY

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GARIGIPATI RAVI ; FINNEMAN JARI ; DAVID AUSTIN PERRY ; CHANG GEORGE
 DIDIUK MARY THERESA FINNEMAN JARI ; CHANG GEORGE DIDIUK MARY
 THERESA FINNEMAN JARI ILM ; BECHLE BRUCE

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

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM
 CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN
 GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV
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 VC VN YU ZA ZM ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AR044507 AA	20050914	LSPB	+	published / reissued	
AR044507 AA	20141107	LSWD	-FB	SUSPENSION OF GRANTING PROCEDURE	
AU2004224082 AA	20041007	LSPB	+	published / reissued	
AU2004224082 AA	20080403	LSLE	-MK1	APPLICATION LAPSED SECTION 142(2)(A) - NO REQUEST FOR EXAMINATION IN RELEVANT PERIOD	
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CA2520405 AA	20050927	LSPB	+	published / reissued	
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CN1795177 A	20060628	LSPB	+C06	PUBLICATION	
CN1795177 A	20081001	LSDW	-C02	DEEMED WITHDRAWAL OF PATENT APPLICATION AFTER PUBLICATION (PATENT LAW 2001)	
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KR20050115938 A	20060925	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
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US2004204450 AA	20041014	LSPB	+	published / reissued	
US2004204450 AA	20040428	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PFIZER INC., NEW YORK OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BECHLE, BRUCE M.; CHANG, GEORGE C.; DIDIUK, MARY; AND OTHERS; REEL/FRA:015268/0575; SIGNING DATES FROM 20040413 TO 20040420
US2004204450 AA	20040428	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PFIZER PRODUCTS INC., CONNECTICUT OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BECHLE, BRUCE M.; CHANG, GEORGE C.; DIDIUK, MARY; AND OTHERS.

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US2004204450 AA	20041101	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PFIZER PRODUCTS INC., CONNECTICUT OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:POLIASTRI, MICHAEL P.; REEL/FRAME:015316/0751 EFFECTIVE DATE : 20041028
US2004204450 AA	20060308	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
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WO04085401 A1	20050908	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2004224082 COUNTRY OF REF DOCUMENT : AU
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				NATIONAL PHASE	: JP
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WO04085401 A1	20051012	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2004720668 COUNTRY OF REF DOCUMENT : EP

WO04085401 A1	20051128	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 20048146455 COUNTRY OF REF DOCUMENT : CN
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WO04085401 C1	20060208	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2004720668 COUNTRY OF REF DOCUMENT : EP
WO04085401 C1	20060418	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : PI0408897 COUNTRY OF REF DOCUMENT : BR
ZA200507819 A	20070425	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA200507819 A	20250926	PEXP		Calculated Patent Term Expiry	

Title: PYRIDYL DERIVATIVES AND THEIR USE AS THERAPEUTIC AGENTS

Abstract: Methods of treating an SCD-mediated disease or condition in a mammal, preferably a human, are disclosed, wherein the methods comprise administering to a mammal in need thereof a compound of formula (I): wherein W, V, x, y, R<1>, R<2>, R<3>, R<4>, R<5>, R<6>, R<7>, R<7>a, R<8>, R<8>a, R<9>, R<9a>, R<10> and R<10a> are defined herein. Pharmaceutical compositions comprising the compounds of formula (I) are also disclosed.



Classifications:

International (IPC 8-9): [A61K31/00](#) [A61K31/444](#) [A61K31/496](#) [A61K31/501](#) [A61P1/16](#) [A61P19/06](#) [A61P3/00](#) [A61P3/04](#) [A61P3/06](#) [A61P3/10](#) [A61P35/00](#) [A61P43/00](#) [A61P7/02](#) [A61P9/00](#) [A61P9/10](#) [A61P9/12](#) [A61P9/14](#) [C07D213/71](#) [C07D213/75](#) [C07D213/76](#) [C07D213/81](#) [C07D295/192](#) [C07D401/04](#) [C07D401/14](#) [C07D403/04](#) [C12N9/99](#) (Advanced/Invention); [A61K31/496](#) [C07D213/71](#) [C12N9/02](#) (Advanced/Non-invention); [A61K31/00](#) [A61K31/4427](#) [A61K31/496](#) [A61K31/501](#) [A61P1/00](#) [A61P19/00](#) [A61P3/00](#) [A61P35/00](#) [A61P43/00](#) [A61P7/00](#) [A61P9/00](#) [C07D213/00](#) [C07D295/00](#) [C07D403/00](#) (Core/Invention); [C07D](#) (Subclass/Invention)

International (IPC 1-7): [A61K31/00](#) [A61K31/444](#) [A61P3/06](#) [C07D213/71](#) [C07D213/75](#) [C07D213/76](#)

CPC: [C07D401/14](#) [C07D401/04](#) [A61K31/00](#) [A61K31/444](#) [A61K31/501](#) [C07D213/75](#) [C07D213/76](#) [C07D213/81](#)

European: [A61K31/00](#) [A61K31/444](#) [A61K31/501](#) [C07D213/75](#) [C07D213/76](#) [C07D213/81](#)

Family:

Publication number	Publication date	Application number	Application date
AU2004261250 AA	20050210	AU20040261250	20040729
AU2004261250 BB	20090226	AU20040261250	20040729
BRPI0413059 A	20061031	BR2004PI13059	20040729
CA2533898 AA	20060127	CA20042533898	20040729
ECSP066314 A	20060728	EC2006SP06314	20060125
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WO05011654 A3	20050414	WO2004US24542	20040729

Priority:

US20030491140P 20030729	US20030491080P 20030730	US20030491116P 20030730
US20030491322P 20030730	US20030491141P 20030730	WO2004US24542 20040729

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Assignee(s): DISCOVERY PARTNERS INT INC

Inventor(s): (std): KAMBOJ RAJENDER ; KODUMURU VISHNUMURTHY ; KONDRATENKO MIKHAIL A ; LI WENBAO ; LIU SHIFENG ; ABREO MELWYN ; ABREO MELWYN ; CHAKKA

NAGASREE ; SUN SHAOYI ; SVIRIDOV SERGUEI ; WINTHER MICHAEL D ;
GSCHWEND HEINZ W ; HARVEY DANIEL F

Inventor(s): HEINZ W GSCHWEND ; SHAOYI SUN ; NAGASREE CHAKKA ; MIKHAIL A
KONDRATENKO ; VISHNUMURTHY KODUMURU ; WENBAO LI ; DANIEL F
HARVEY ; MELWYN ABREO ; MICHAEL D WINTHER ; RAJENDER KAMBOJ ;
SERGUEI SVIRIDOV ; SHIFENG LIU

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; SMART AND
BIGGAR; HAMMER JENS

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
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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
AU2004261250 AA	20050210	LSPB	+	published / reissued	
AU2004261250 BB	20090226	LSGT	+	granted / extensions (spc, cpc, pte)	
AU2004261250 BB	20090625	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
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AU2004261250 BB	20240729	PEXP		Calculated Patent Term Expiry	
BRPI0413059 A	20061031	LSPB	+	published / reissued	
BRPI0413059 A	20120207	LSFE	-B08F	APPLICATION FEES: DISMISSAL - ARTICLE 86 OF INDUSTRIAL PROPERTY LAW	TEXT : REFERENTE A 7A ANUIDADE.
BRPI0413059 A	20121002	LSLE	-B08K	LAPSE AS NO EVIDENCE OF PAYMENT OF THE ANNUAL FEE HAS BEEN FURNISHED TO INPI (ACC. ART. 87)	TEXT : REFERENTE AO DESPACHO 8.6 PUBLICADO NA RPI 2144 DE 07/02/2012.
CA2533898 AA	20060127	LSPB	+	published / reissued	
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EP1651605 A2	20121130	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 : 20120803

EP1651605 A2	20121130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : SI NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20120502
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EP1651605 A2	20121130	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 : 20120903
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EP1651605 A2	20121231	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 : 20120502
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EP1651605 A2	20130131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : SK NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20120502
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EP1651605 A2	20130131	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 : 20120502
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EP1651605 A2	20130131	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 : 20120502
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EP1651605 A2	20130131	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 : 20120502
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EP1651605 A2	20130228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : MC NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120731
EP1651605 A2	20130228	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP1651605 A2	20130410	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20130205
EP1651605 A2	20130430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT	COUNTRY OF REF DOCUMENT : LI NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES

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EP1651605 A2	20130430	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 : 20120731
EP1651605 A2	20130508	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP1651605 A2	20130529	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 602004037656 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20130205
EP1651605 A2	20130731	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 : 20120729
EP1651605 A2	20130731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : BG NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20120802
EP1651605 A2	20131031	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20130729 YEAR OF FEE PAYMENT : 10
EP1651605 A2	20131031	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20130726 YEAR OF FEE PAYMENT : 10
EP1651605 A2	20131129	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20130729 YEAR OF FEE PAYMENT : 10
EP1651605 A2	20131129	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20130717 YEAR OF FEE PAYMENT : 10

EP1651605 A2	20131231	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20130723 YEAR OF FEE PAYMENT : 10
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EP1651605 A2	20140530	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 : 20120729
EP1651605 A2	20140731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : HU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20040729
EP1651605 A2	20150203	LSDW	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R119 REF DOCUMENT NUMBER : 602004037656 COUNTRY OF REF DOCUMENT : DE
EP1651605 A2	20150325	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON- PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20140729
EP1651605 A2	20150424	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20150331
EP1651605 A2	20150430	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 : 20150203
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EP1651605 A2	20150430	LSDW	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R119 REF DOCUMENT NUMBER : 602004037656 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20150203
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EP1651605 A2	20150529	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 : 20140731
EP1651605 A2	20160105	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20160105
EP1651605 A2	20160229	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 NON- PAYMENT OF DUE FEES LAPSED DATE : 20140730
EP1651605 B1	20120502	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1651605 B1	20240729	PEXP		Calculated Patent Term Expiry	
JP2007500716 T2	20070118	LSPB	+	published / reissued	
JP2007500716 T2	20070728	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20070727
JP2007500716 T2	20070728	LSSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20070727

JP2007500716 T2	20100811	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20100810
JP2007500716 T2	20101223	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20101222
JP2007500716 T2	20110126	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20110125
JP2007500716 T2	20110625	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20110624
JP2007500716 T2	20110720	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20110719
JP2007500716 T2	20111015	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20111014
JP2007500716 T2	20111101	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2007500716 T2	20111109	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20111108
JP2007500716 T2	20111110	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01
JP2007500716 T2	20111215	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20111206
JP2007500716 T2	20111216	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP2007500716 T2	20111216	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP20060026105 A	20060427	LSRP	+	published /	

				reissued	
KR20060036105 A	20060131	LSES	A201	REQUEST FOR EXAMINATION	
KR20060036105 A	20070131	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR20060036105 A	20080714	LSRV	-E601	DECISION TO REFUSE APPLICATION	
MXPA06001202 A1	20060831	LSPB	+	published / reissued	
MXPA06001202 A1	20090714	LSGT	+FG	GRANT OR REGISTRATION	
NO20060973 A	20060427	LSPB	+	published / reissued	
NO20060973 A	20080225	LSRV	-FC2A	WITHDRAWAL, REJECTION OR DISMISSAL OF LAID OPEN PATENT APPLICATION	
SG145695 A1	20080929	LSPB	+	published / reissued	
WO05011654 A2	20050210	LSPB	+	published / reissued	
WO05011654 A3	20060105	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 200600166 COUNTRY OF REF DOCUMENT : ZA
WO05011654 A3	20060109	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2004261250 COUNTRY OF REF DOCUMENT : AU
WO05011654 A3	20060117	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2004779556 COUNTRY OF REF DOCUMENT : EP
WO05011654 A3	20060127	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2533898 COUNTRY OF REF DOCUMENT : CA
WO05011654 A3	20060127	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2006522073 COUNTRY OF REF DOCUMENT : JP
WO05011654 A3	20060127	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1020067002001 COUNTRY OF REF DOCUMENT : KR
WO05011654 A3	20060127	LSNP	+WWE	WIPO INFORMATION:	REF DOCUMENT NUMBER : 12006500220

				ENTRY INTO NATIONAL PHASE	COUNTRY OF REF DOCUMENT : PH
WO05011654 A3	20060130	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : PA/A/2006/001202 COUNTRY OF REF DOCUMENT : MX
WO05011654 A3	20060130	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 10566857 COUNTRY OF REF DOCUMENT : US
WO05011654 A3	20060130	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2006293308 COUNTRY OF REF DOCUMENT : US
WO05011654 A3	20060202	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2004261250 COUNTRY OF REF DOCUMENT : AU DATE OF REF DOCUMENT : 20040729 KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO05011654 A3	20060202	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2004261250 COUNTRY OF REF DOCUMENT : AU
WO05011654 A3	20060213	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 545262 COUNTRY OF REF DOCUMENT : NZ
WO05011654 A3	20060228	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2006105724 COUNTRY OF REF DOCUMENT : RU
WO05011654 A3	20060427	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1020067002001 COUNTRY OF REF DOCUMENT : KR
WO05011654 A3	20060503	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2004779556 COUNTRY OF REF DOCUMENT : EP
WO05011654 A3	20061031	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : PI0413059 COUNTRY OF REF DOCUMENT : BR
WO05011654 A3	20061228	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 10566857 COUNTRY OF REF DOCUMENT : US

Title: BENZAZEPINE DERIVATIVES AS HISTAMINE H3 ANTAGONISTS

Abstract: The present invention relates to novel benzazepine derivatives of structure (I) having pharmacological activity, processes for their preparation, to compositions containing them and to their use in the treatment of neurological and psychiatric disorders. These compounds act as histamine H3 antagonists.



Classifications:

International (IPC 8-9): [A61K31/55](#) [A61P25/00](#) [A61P25/06](#) [A61P25/08](#) [A61P25/14](#) [A61P25/20](#) [A61P25/28](#) [C07D223/16](#) [C07D223/18](#) [C07D401/04](#) [C07D401/12](#) [C07D401/14](#) [C07D403/02](#) [C07D403/12](#) [C07D403/14](#) [C07D405/12](#) [C07D405/14](#) [C07D409/12](#) [C07D413/12](#) [C07D417/12](#) [C07D471/04](#) [C07D487/04](#) (Advanced/Invention);

[A61K31/55](#) [A61P25/00](#) [C07D223/00](#) [C07D401/00](#) [C07D403/00](#) [C07D405/00](#) [C07D409/00](#) [C07D413/00](#) [C07D417/00](#) [C07D471/00](#) [C07D487/00](#) (Core/Invention)

International (IPC 1-7): [A61K31/55](#) [A61P25/28](#) [C07D223/16](#) [C07D401/04](#) [C07D401/12](#) [C07D401/14](#) [C07D403/12](#) [C07D403/14](#) [C07D405/12](#) [C07D405/14](#) [C07D409/12](#) [C07D413/12](#) [C07D417/12](#) [C07D471/04](#)

CPC: [C07D223/16](#) [C07D401/04](#) [C07D401/12](#) [C07D401/14](#) [C07D403/12](#) [C07D403/14](#) [C07D405/12](#) [C07D405/14](#) [C07D409/12](#) [C07D413/12](#) [C07D417/12](#) [C07D471/04](#)

European: [C07D223/16](#) [C07D401/04](#) [C07D401/12](#) [C07D401/14](#) [C07D403/12](#) [C07D403/14](#) [C07D405/12](#) [C07D405/14](#) [C07D409/12](#) [C07D413/12](#) [C07D417/12](#) [C07D471/04](#)

US: [514/217.01](#) [514/217.01P](#) [540/592](#) [540/592S](#)

Family:

Publication number	Publication date	Application number	Application date
AT384050 E	20080215	AT20040803989T	20041215
DE602004011401 D1	20080306	DE200460011401T	20041215
DE602004011401 T2	20081224	DE200460011401T	20041215
EP1713778 A1	20061025	EP20040803989	20041215
EP1713778 B1	20080116	EP20040803989	20041215
ES2299896 T3	20080601	ES20040803989T	20041215
GB200329214 A0	20040121	GB20030029214	20031217
JP2007514690 T2	20070607	JP20060544347T	20041215
US2007060566 AA	20070315	US20040596503	20041215
WO05058837 A1	20050630	WO2004EP14380	20041215

Priority:

GB20030029214 20031217 WO2004EP14380 20041215

Probable Assignee: GLAXO GROUP LTD

Assignee(s): (std): BAILEY NICHOLAS ; BAMFORD MARK J ; BAMFORD MARK JAMES ; DEAN DAVID K ; DEAN DAVID KENNETH ; GLAXO GROUP LTD ; PICKERING PAULA L ; PICKERING PAULA LOUISE ; WILSON DAVID MATTHEW ; WITHERINGTON JASON ; WILSON DAVID M

Assignee(s): GLAXO GROUP LIMITED

Inventor(s): (std): BAILEY NICHOLAS ; BAMFORD MARK ; BAMFORD MARK J ; BAMFORD MARK JAMES ; DEAN DAVID ; DEAN DAVID K ; DEAN DAVID KENNETH ; PICKERING PAULA ; PICKERING PAULA L ; PICKERING PAULA LOUISE ; WILSON DAVID ; WILSON DAVID M ; WILSON DAVID MATTHEW ; WITHERINGTON JASON

Agent(s): GODDARD CAROLYN JANICE; GLAXOSMITHKLINE, CORPORATE INTELLECTUAL PROPERTY MAI B475; GLAXOSMITHKLINE CORPORATE INTELLECTUAL PROPERTY MAI B475

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
AT384050 E	20080215	LSGT	+	granted / extensions (spc, cpc, pte)	
AT384050 E	20080715	LSLE	-RER	CEASED AS TO PARAGRAPH 5 LIT. 3 LAW INTRODUCING PATENT TREATIES	
AT384050 E	20241215	PEXP		Calculated Patent Term Expiry	
DE602004011401 T2	20081224	LSGT	+	granted / extensions (spc, cpc, pte)	
DE602004011401 T2	20090205	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE602004011401 T2	20241215	PEXP		Calculated Patent Term Expiry	
EP1713778 A1	20061025	LSPB	+	published / reissued	
EP1713778 A1	20061025	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20060614
EP1713778 B1	20080116	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1713778 B1	20080116	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP1713778 B1	20080215	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1713778 B1	20080220	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP1713778 B1	20080530	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORMATION FROM	COUNTRY OF REF DOCUMENT : NL NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE

				NAT. OFFICE TO EPO	DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20080116
EP1713778 B1	20080601	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2299896 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP1713778 B1	20080701	LSLE	-NLV1	NL: LAPSED OR ANNULLED DUE TO FAILURE TO FULFILL THE REQUIREMENTS OF ART. 29P AND 29M OF THE PATENTS ACT	REF COUNTRY CODE : EP
EP1713778 B1	20080731	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 FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20080116
EP1713778 B1	20080731	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 : 20080116
EP1713778 B1	20080731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : IS NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20080516
EP1713778 B1	20080731	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 FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT

LAPSED DATE : 20080116					
EP1713778 B1	20080731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : LT 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 : 20080116
EP1713778 B1	20080815	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP1713778 B1	20080829	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : BG NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20080416
EP1713778 B1	20080829	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 : 20080116
EP1713778 B1	20080930	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : PL NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20080116
EP1713778 B1	20080930	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : SI NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20080116
EP1713778 B1	20080930	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

				INFORM. FROM NAT. OFFICE TO EPO	TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20080616
EP1713778 B1	20081031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : CZ NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20080116
EP1713778 B1	20081031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : DK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20080116
EP1713778 B1	20081031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : SE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20080416
EP1713778 B1	20081031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : SK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20080116
EP1713778 B1	20081128	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : RO NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20080116
EP1713778 B1	20081224	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20081017
EP1713778 B1	20090430	LSLE	-PG25	LAPSED IN A CONTRACTING	COUNTRY OF REF DOCUMENT : EE

				STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	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 : 20080116
EP1713778 B1	20090731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : MC NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON- PAYMENT OF DUE FEES LAPSED DATE : 20081231
EP1713778 B1	20090731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : CY NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20080116
EP1713778 B1	20091030	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 : 20081215
EP1713778 B1	20100129	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20091221 YEAR OF FEE PAYMENT : 6
EP1713778 B1	20100430	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20091215 YEAR OF FEE PAYMENT : 6
EP1713778 B1	20100430	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20091106 YEAR OF FEE PAYMENT : 6
EP1713778 B1	20100430	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20091219 YEAR OF FEE PAYMENT : 6
EP1713778 B1	20100630	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20091208 YEAR OF FEE PAYMENT : 6
EP1713778 B1	20100630	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20091220

				NATIONAL OFFICE	YEAR OF FEE PAYMENT : 6
EP1713778 B1	20100730	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 : 20081215
EP1713778 B1	20100730	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : HU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20080717
EP1713778 B1	20100831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : TR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20080116
EP1713778 B1	20101029	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 : 20080417
EP1713778 B1	20110630	LSLE	-BERE	BE: LAPSED	PARTYTYPE : OWNER REF COUNTRY CODE : EP OWNER : GLAXO GROUP LTD EFFECTIVE DATE : 20101231
EP1713778 B1	20110824	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20101215
EP1713778 B1	20110909	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20110831
EP1713778 B1	20110930	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-

				POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	PAYMENT OF DUE FEES LAPSED DATE : 20101231
EP1713778 B1	20111031	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 : 20110103
EP1713778 B1	20111117	LSDW	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R119 REF DOCUMENT NUMBER : 602004011401 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20110701
EP1713778 B1	20111130	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 : 20101215
EP1713778 B1	20111130	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 : 20110701
EP1713778 B1	20111230	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 : 20101215
EP1713778 B1	20120206	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20120206
EP1713778 B1	20120430	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 : 20101216
EP1713778 B1	20241215	PEXP		Calculated Patent Term Expiry	
EP2200806 T2	20080501	LSCT		granted /	

				extensions (spc, cpc, pte)	
ES2299896 T3	20241215	PEXP		Calculated Patent Term Expiry	
GB200329214 A0	20050316	LSWD	-AT	APPLICATIONS TERMINATED BEFORE PUBLICATION UNDER SECTION 16(1)	
JP2007514690 T2	20070607	LSPB	+	published / reissued	
JP2007514690 T2	20071215	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20071214
JP2007514690 T2	20080207	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20080206
JP2007514690 T2	20110209	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20110208
JP2007514690 T2	20110629	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20110628
US2007060566 AA	20070315	LSPB	+	published / reissued	
US2007060566 AA	20071009	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GLAXO GROUP LIMITED, UNITED KINGDOM OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BAILEY, NICHOLAS; BAMFORD, MARK JAMES; DEAN, DAVID KENNETH; AND OTHERS; REEL/FRAME:019933/0218 EFFECTIVE DATE : 20050420
US2007060566 AA	20091006	LSWD	-ABD2	Abandoned -- Failure to Pay Issue Fee	
WO05058837 A1	20050630	LSPB	+	published / reissued	
WO05058837 A1	20060614	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2004803989 COUNTRY OF REF DOCUMENT : EP
WO05058837 A1	20060615	LSNP	+WWE	WIPO INFORMATION:	REF DOCUMENT NUMBER : 10506502

				ENTRY INTO NATIONAL PHASE	COUNTRY OF REF DOCUMENT : US
WO05058837 A1	20060615	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2007060566 COUNTRY OF REF DOCUMENT : US
WO05058837 A1	20060619	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2006544347 COUNTRY OF REF DOCUMENT : JP
WO05058837 A1	20060620	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO05058837 A1	20060620	LSWD	-WWW	WIPO INFORMATION: WITHDRAWN IN NATIONAL OFFICE	TEXT : DE
WO05058837 A1	20061025	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2004803989 COUNTRY OF REF DOCUMENT : EP
WO05058837 A1	20070315	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 10596503 COUNTRY OF REF DOCUMENT : US
WO05058837 A1	20080116	LSGT	+WWG	WIPO INFORMATION: GRANT IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2004803989 COUNTRY OF REF DOCUMENT : EP

Title: BENZAZEPINE DERIVATIVES FOR THE TREATMENT OF NEUROLOGICAL AND PSYCHIATRIC DISORDERS

Abstract: The present invention relates to novel benzazepine derivatives of formula (I); wherein:



R¹ represents -C₃₋₇ cycloalkyl optionally

substituted by C₁₋₃ alkyl; R² represents -aryl, -heterocyclyl, heteroaryl, -aryl-X-C₃₋₈ cycloalkyl, cycloalkyl, -aryl-X-aryl, -aryl-X-heteroaryl, -aryl-X-heterocyclyl, -heteroaryl-X-C₃₋₈ cycloalkyl, -heteroaryl-X-aryl, -heteroaryl-X-heteroaryl, -heteroaryl-X-heterocyclyl, -heterocyclyl-X-C₃₋₈ cycloalkyl, -heterocyclyl-X-aryl, -heterocyclyl-X-heteroaryl or -heterocyclyl-X-heterocyclyl; X represents a bond, O, CO, -CH₂O-, -COCH₂-, -COCH₂O-, -CONR^{2b}-, -COCH₂NR^{2b}CO-, -CSNH-, SO₂-, -SO₂C₁₋₃ alkyl-, -SO₂C₂₋₃ alkenyl-, -COC₂₋₃ alkenyl-, -CO-C(R^{2a})(R^{2b})- or -CO-C(R^{2a})(R^{2b})CH₂-; having pharmacological activity, processes for their preparation, to compositions containing them and to their use in the treatment of neurological and psychiatric disorders.

Classifications:

International (IPC 8-9): [A61K31/55](#) [A61P25/00](#) [C07D223/16](#) [C07D401/04](#) [C07D401/12](#) [C07D401/14](#) [C07D403/12](#) [C07D405/04](#) [C07D405/12](#) [C07D405/14](#) [C07D409/12](#) [C07D409/14](#) [C07D413/04](#) [C07D413/12](#) [C07D413/14](#) [C07D417/04](#) [C07D417/12](#) [C07D417/14](#) [C07D471/04](#) [C07D487/04](#) [C07D495/04](#) [C07D513/04](#) (Advanced/Invention);

[A61K31/55](#) [A61P25/00](#) [C07D223/00](#) [C07D401/00](#) [C07D403/00](#) [C07D405/00](#) [C07D409/00](#) [C07D413/00](#) [C07D417/00](#) [C07D471/00](#) [C07D487/00](#) [C07D495/00](#) [C07D513/00](#) (Core/Invention)

International (IPC 1-7): [C07D223/16](#) [C07D401/04](#) [C07D401/12](#) [C07D401/14](#) [C07D403/12](#) [C07D405/04](#) [C07D405/12](#) [C07D409/12](#) [C07D409/14](#) [C07D413/04](#) [C07D413/12](#) [C07D417/04](#) [C07D417/12](#) [C07D471/04](#) [C07D495/04](#) [C07D513/04](#)

CPC: [C07D223/16](#) [C07D401/04](#) [C07D401/12](#) [C07D401/14](#) [C07D403/12](#) [C07D405/04](#) [C07D405/12](#) [C07D405/14](#) [C07D409/12](#) [C07D409/14](#) [C07D413/04](#) [C07D413/12](#) [C07D417/04](#) [C07D417/12](#) [C07D417/14](#) [C07D471/04](#) [C07D487/04](#) [C07D495/04](#) [C07D513/04](#) [C07D413/14](#)

European: [C07D223/16](#) [C07D401/04](#) [C07D401/12](#) [C07D401/14](#) [C07D403/12](#) [C07D405/04](#) [C07D405/12](#) [C07D405/14](#) [C07D409/12](#) [C07D409/14](#) [C07D413/04](#) [C07D413/12](#) [C07D413/14](#) [C07D417/04](#) [C07D417/12](#) [C07D417/14](#) [C07D471/04](#) [C07D487/04](#) [C07D495/04](#) [C07D513/04](#)

US: [514/217.02](#) [514/217.020P](#) [540/595](#) [540/595S](#)

Family:

Publication number	Publication date	Application number	Application date
EP1730114 A1	20061213	EP20050718000	20050310
GB2004005628 A0	20040421	GB20040005628	20040312
JP2007528887 T2	20071018	JP20070502403T	20050310
US2007185089 AA	20070809	US20050598759	20050310
WO05087746 A1	20050922	WO2005GB00939	20050310

Priority:

GB20040005628 20040312 WO2005GB00939 20050310

Probable Assignee: GLAXO GROUP LTD

Assignee(s): (std): GLAXO GROUP LTD ; HEIGHTMAN THOMAS DANIEL ; WILSON DAVID MATTHEW ; WITHERINGTON JASON ; BAMFORD MARK JAMES

Assignee(s): GLAXO GROUP LIMITED

Inventor(s): (std): HEIGHTMAN THOMAS D ; WILSON DAVID M ; WITHERINGTON JASON ; WILSON DAVID MATTHEW ; HEIGHTMAN THOMAS DANIEL ; BAMFORD MARK JAMES ; BAMFORD MARK J

Inventor(s): WILSON DAVID ; BAMFORD MARK ; HEIGHTMAN THOMAS

Agent(s): GLAXOSMITHKLINE, CORPORATE INTELLECTUAL PROPERTY MAI B475;
GLAXOSMITHKLINE CORPORATE INTELLECTUAL PROPERTY MAI B475

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM

CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN
GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV
MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT
RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG
US UZ VC VN YU ZA ZM ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
EP1730114 A1	20061213	LSPB	+	published / reissued	
EP1730114 A1	20061213	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20060831
EP1730114 A1	20100616	LSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 20100512
EP1730114 A1	20110323	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20100923
GB200405628 A0	20050713	LSWD	-AT	APPLICATIONS TERMINATED BEFORE PUBLICATION UNDER SECTION 16(1)	
JP2007528887 T2	20071018	LSPB	+	published / reissued	
JP2007528887 T2	20080308	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20080307
JP2007528887 T2	20080313	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20080312
JP2007528887 T2	20110323	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20110322
JP2007528887 T2	20110817	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20110816
US2007185089 AA	20070809	LSPB	+	published / reissued	
US2007185089 AA	20061006	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : GLAXO GROUP LIMITED, UNITED KINGDOM OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BAMFORD, MARK JAMES; HEIGHTMAN, THOMAS DANIEL; WILSON, DAVID MATTHEW; REEL/FRAME:018358/0970; SIGNING DATES FROM

US2007185089 AA	20091006	LSWD	-ABD2	Abandoned -- Failure to Pay Issue Fee	
WO05087746 A1	20050922	LSPB	+	published / reissued	
WO05087746 A1	20060831	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2005718000 COUNTRY OF REF DOCUMENT : EP
WO05087746 A1	20060911	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 10598759 COUNTRY OF REF DOCUMENT : US
WO05087746 A1	20060911	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2007185089 COUNTRY OF REF DOCUMENT : US
WO05087746 A1	20060912	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2007502403 COUNTRY OF REF DOCUMENT : JP
WO05087746 A1	20060913	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO05087746 A1	20060913	LSWD	-WWW	WIPO INFORMATION: WITHDRAWN IN NATIONAL OFFICE	TEXT : DE
WO05087746 A1	20061213	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2005718000 COUNTRY OF REF DOCUMENT : EP
WO05087746 A1	20070809	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 10598759 COUNTRY OF REF DOCUMENT : US

Title: PYRIDYL DERIVATIVES AND THEIR USE AS THERAPEUTIC AGENTS

Abstract: Methods of treating an SCD-mediated disease or condition in a mammal, preferably a human, are disclosed, wherein the methods comprise administering to a mammal in need thereof a compound of formula (I): wherein W, V, x, y, R1, R2, R3, R4, R5, R6, R7, R7a, R8, R8a, R9, R9a, R10 and R10a are defined herein. Pharmaceutical compositions comprising the compounds of formula (I) are also disclosed.

Classifications:

International (IPC 8-9): [A61K31/00](#) [A61K31/501](#) [A61P3/06](#) [C07D213/71](#) [C07D213/75](#) [C07D213/76](#) [C07D213/81](#) (Advanced/Invention);

[A61K31/496](#) [A61P1/16](#) [A61P19/06](#) [A61P3/04](#) [A61P3/10](#) [A61P35/00](#) [A61P43/00](#) [A61P7/02](#) [A61P9/00](#) [A61P9/10](#) [A61P9/12](#) [A61P9/14](#) (Advanced/Non-invention)

International (IPC 1-7): [A61K31/00](#) [A61K31/501](#) [C07D213/75](#) [C07D213/76](#) [C07D213/81](#)

CPC: [C07D401/14](#) [C07D401/04](#) [A61K31/00](#) [A61K31/444](#) [A61K31/501](#) [C07D213/75](#) [C07D213/76](#) [C07D213/81](#)

European: [A61K31/00](#) [A61K31/444](#) [A61K31/501](#) [C07D213/75](#) [C07D213/76](#) [C07D213/81](#)

Family:

Publication number	Publication date	Application number	Application date
AT556056 E	20120515	AT20040779556T	20040729
ES2386354 T3	20120817	ES20040779556T	20040729
HK1097254 A3	20070622	HK20070101155	20070201
IN00356CN2006 A	20070706	IN2006CN00356	20060127
IN234746 B	20090717	IN2006CN00356	20060127
JP4884219 B2	20120229	JP20060522073T	20040729
MA28012 A1	20060703	MA20060028840	20060227
TNSN06035 A1	20071003	TN2006SN00035	20060127

Priority:

US20030491140P 20030729	US20030491080P 20030730	US20030491116P 20030730
US20030491322P 20030730	US20030491141P 20030730	WO2004US24542 20040729

Probable Assignee: XENON PHARMACEUTICALS INC

Assignee(s): (std): XENON PHARMACEUTICALS INC

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Inventor(s): KODUMURU VISHUMURTHY

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT556056 E	20120515	LSGT	+	granted / extensions (spc, cpc, pte)	
AT556056 E	20240729	PEXP		Calculated Patent Term Expiry	
ES2386354 T3	20120817	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2386354 T3	20240729	PEXP		Calculated Patent Term Expiry	

HK1097254 A3	20070622	LSPB	+	published / reissued
IN00356CN2006 A	20070706	LSPB	+	published / reissued
IN234746 B	20090717	LSGT	+	granted / extensions (spc, cpc, pte)
IN234746 B	20260127	PEXP		Calculated Patent Term Expiry
JP4884219 B2	20120229	LSGT	+	granted / extensions (spc, cpc, pte)
JP4884219 B2	20141216	LSLE	- LAPS	CANCELLATION BECAUSE OF NO PAYMENT OF ANNUAL FEES
JP4884219 B2	20240729	PEXP		Calculated Patent Term Expiry
MA28012 A1	20060703	LSPB	+	published / reissued
MA28012 A1	20260227	PEXP		Calculated Patent Term Expiry
TNSN06035 A1	20071003	LSPB	+	published / reissued

Title: COMBINATION THERAPY

Abstract: This invention is directed to the use of

SCD-1 inhibitors of the formula (I): where x, y, V, W, G, J, L, M, R₂, R₃, R₅, R_{5a}, R₆, R_{6a}, R₇, R_{7a}, R₈ and R_{8a} are defined herein, in combination with other drug therapies to treat adverse weight gain.



Classifications:

International (IPC 8-9): [A61P3/04](#) [A61K31/195](#) [A61K31/4436](#) [A61K31/4439](#) [A61K31/496](#) [A61K31/501](#) [A61K31/506](#) [A61K31/64](#) [A61K38/28](#) [A61K45/00](#) [A61K45/06](#) [A61P15/00](#) [A61P15/18](#) [A61P17/14](#) [A61P19/10](#) [A61P25/06](#) [A61P25/08](#) [A61P25/18](#) [A61P25/24](#) [A61P29/00](#) [A61P3/10](#) [A61P31/18](#) [A61P43/00](#) [A61P5/00](#) [A61P5/30](#) [A61P5/34](#) [C07D211/34](#) [C07D295/04](#) [C07D403/04](#) (Advanced/Invention);

[A61K31/185](#) [A61K31/4427](#) [A61K31/496](#) [A61K31/501](#) [A61K31/506](#) [A61K31/64](#) [A61K38/28](#) [A61K45/00](#) [A61P15/00](#) [A61P17/00](#) [A61P19/00](#) [A61P25/00](#) [A61P29/00](#) [A61P3/00](#) [A61P31/00](#) [A61P43/00](#) [A61P5/00](#) (Core/Invention)

International (IPC 1-7): [A61K31/00](#) [A61K31/00](#) [A61K31/4439](#) [A61K31/4439](#) [A61K31/495](#) [A61K31/495](#) [A61K31/496](#) [A61K31/64](#) [A61K31/64](#) [A61K38/28](#) [A61K38/28](#) [A61K45/00](#) [A61K45/06](#) [A61K45/06](#) [A61P3/00](#) [A61P3/00](#) [A61P3/04](#) [A61P3/04](#)

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US: [514/183](#) [514/252.02](#) [514/252.020P](#) [514/253.13](#) [514/253.130S](#) [514/342](#) [514/342S](#) [544/238](#) [544/252.02](#)

Family:

Publication number	Publication date	Application number	Application date
AR053331 AA	20070502	AR2006P100465	20060209
AT525088 E	20111015	AT20060734555T	20060208
AU2006212761 AA	20060817	AU20060212761	20060208
AU2006212761 BB	20090702	AU20060212761	20060208
BRPI0606143 A2	20090602	BR2006PI06143	20060208
CA2597067 AA	20070807	CA20062597067	20060208
CL2006000281 A1	20070706	CL20060000281	20060208
CN101163504 A	20080416	CN200680009724	20060208
DE602006024545 D1	20111124	DE200660024545T	20060208
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GT200600046 A	20060925	GT20060000046	20060207
IN03940CN2007 A	20071123	IN2007CN03940	20070910
JP2008530097 T2	20080807	JP20070555181T	20060208
MX2007009592 A1	20071016	MX20070009592	20060208
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US2009131447 AA	20090521	US20060815739	20060208
US7919484 BB	20110405	US20060815739	20060208
WO06086445 A2	20060817	WO2006US04383	20060208
WO06086445 A3	20060914	WO2006US04383	20060208
WO06086445 C1	20061207	WO2006US04383	20060208

Priority:

US20050651584 20050209
US20060815739 20060208

US20050651584P 20050209
WO2006US04383 20060208

EP20060734555 20060208

Probable Assignee: XENON PHARMACEUTICALS INC

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Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; SMART AND BIGGAR; VILLASECA; GIOVANNINI FRANCESCA; OSHA LIANG LLP; OSHA • LIANG LLP

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

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AR053331 AA	20070502	LSPB	+	published / reissued	
AR053331 AA	20141107	LSWD	-FB	SUSPENSION OF GRANTING	

PROCEDURE					
AT525088 E	20111015	LSGT	+	granted / extensions (spc, cpc, pte)	
AT525088 E	20120315	LSLE	-RER	CEASED AS TO PARAGRAPH 5 LIT. 3 LAW INTRODUCING PATENT TREATIES	
AT525088 E	20260208	PEXP		Calculated Patent Term Expiry	
AU2006212761 AA	20060817	LSPB	+	published / reissued	
AU2006212761 BB	20090702	LSGT	+	granted / extensions (spc, cpc, pte)	
AU2006212761 BB	20091029	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU2006212761 BB	20110901	LSLE	-MK14	PATENT CEASED SECTION 143(A) (ANNUAL FEES NOT PAID) OR EXPIRED	
AU2006212761 BB	20260208	PEXP		Calculated Patent Term Expiry	
BRPI0606143 A2	20120605	LSFE	-B08F	APPLICATION FEES: DISMISSAL - ARTICLE 86 OF INDUSTRIAL PROPERTY LAW	TEXT : REFERENTE AS 5A E 6A ANUIDADES.
BRPI0606143 A2	20121023	LSLE	-B08K	LAPSE AS NO EVIDENCE OF PAYMENT OF THE ANNUAL FEE HAS BEEN FURNISHED TO INPI (ACC. ART. 87)	TEXT : REFERENTE AO DESPACHO 8.6 PUBLICADO NA RPI 2161 DE 05/06/2012.
CA2597067 AA	20070807	LSPB	+	published / reissued	
CA2597067 AA	20070807	LSES	+EEER	EXAMINATION REQUEST	
CA2597067 AA	20110208	LSLE	-FZDE	DEAD	
CL2006000281 A1	20070706	LSPB	+	published / reissued	
CN101163504 A	20080416	LSPB	+	published / reissued	
CN101163504 A	20080416	LSPB	+C06	PUBLICATION	
CN101163504 A	20110914	LSLE	-C12	DEFECTION OF A	

				PATENT APPLICATION AFTER ITS PUBLICATION	
EP1846035 A2	20071024	LSPB	+	published / reissued	
EP1846035 A2	20071024	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20070830
EP1846035 A2	20080220	LSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 20080121
EP1846035 A2	20110921	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP1846035 A2	20110930	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1846035 A2	20111012	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP1846035 A2	20111124	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602006024545 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20111124
EP1846035 A2	20120118	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : VDEP EFFECTIVE DATE : 20110921
EP1846035 A2	20120131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : FI 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 : 20110921
EP1846035 A2	20120131	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 : 20110921
EP1846035 A2	20120131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT	COUNTRY OF REF DOCUMENT : LT NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION

				INFORM. FROM NAT. OFFICE TO EPO	OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20110921
EP1846035 A2	20120227	LSRV	-LTIE	LT: INVALIDATION OF EUROPEAN PATENT OR PATENT EXTENSION	REF COUNTRY CODE : EP EFFECTIVE DATE : 20110921
EP1846035 A2	20120229	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 : 20110921
EP1846035 A2	20120229	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 : 20110921
EP1846035 A2	20120229	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : CY NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20110921
EP1846035 A2	20120229	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 : 20110921
EP1846035 A2	20120229	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 : 20111222
EP1846035 A2	20120315	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MK05 REF DOCUMENT NUMBER : 535000

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EP1846035 A2	20120928	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : MC NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20120229
EP1846035 A2	20120928	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP1846035 A2	20121018	LSRE	REG	REFERENCE TO A NATIONAL	REF COUNTRY CODE : DE REF LEGAL EVENT CODE :

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EP1846035 A2	20121024	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON- PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20120208
EP1846035 A2	20121031	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 : 20120229
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EP1846035 A2	20121123	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20121031
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EP1846035 A2	20130131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE	COUNTRY OF REF DOCUMENT : GB NOTIFICATIONOFLAPSE :

				ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	LAPSE BECAUSE OF NON- PAYMENT OF DUE FEES LAPSED DATE : 20120208
EP1846035 A2	20130430	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 FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20120101
EP1846035 A2	20130628	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 : 20120901
EP1846035 A2	20130628	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : BG NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20111221
EP1846035 A2	20140430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : TR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20110921
EP1846035 A2	20140530	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 : 20120208
EP1846035 A2	20140731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : HU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20060208
EP1846035 B1	20110921	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1846035 B1	20260208	REVD		Calculated	

					Patent Term Expiry
GT200600046 A	20060925	LSPB	+	published / reissued	
IN03940CN2007 A	20071123	LSPB	+	published / reissued	
JP2008530097 T2	20080807	LSPB	+	published / reissued	
JP2008530097 T2	20100915	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20100914
JP2008530097 T2	20110129	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20110128
JP2008530097 T2	20110217	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A821 EFFECTIVE DATE : 20110128
JP2008530097 T2	20110608	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20110607
MX2007009592 A1	20071016	LSPB	+	published / reissued	
MX2007009592 A1	20150430	LSWD	-FA	ABANDONMENT OR WITHDRAWAL	
TW200638945 A	20061116	LSPB	+	published / reissued	
US2009131447 AA	20090521	LSPB	+	published / reissued	
US2009131447 AA	20090126	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : DISCOVERY PARTNERS INTERNATIONAL, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ABREO, MELWYN; KONDRATENKO, MIKHAIL A.; HARVEY, DANIEL F.; AND OTHERS; REEL/FRAME:022157/0372; SIGNING DATES FROM 20050718 TO 20050809
US2009131447 AA	20090126	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : XENON PHARMACEUTICALS INC., CANADA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:KAMBOJ, RAJENDER; WINTHER, MICHAEL D.; FRASER, ROBERT; AND OTHERS; REEL/FRAME:022157/0404; SIGNING DATES FROM 20050816 TO 20050830

US2009131447 AA	20090126	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : DISCOVERY PARTNERS INTERNATIONAL, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ABREO, MELWYN; KONDRATENKO, MIKHAIL A.; HARVEY, DANIEL F.; AND OTHERS; SIGNING DATES FROM 20050718 TO 20050809; REEL/FRAME:022157/0372
US2009131447 AA	20090126	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : XENON PHARMACEUTICALS INC., CANADA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:KAMBOJ, RAJENDER; WINTHER, MICHAEL D.; FRASER, ROBERT; AND OTHERS; SIGNING DATES FROM 20050816 TO 20050920; REEL/FRAME:022157/0404
US2009131447 AA	20090126	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : XENON PHARMACEUTICALS INC., CANADA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:DISCOVERY PARTNERS INTERNATIONAL, INC.; REEL/FRAME:022157/0394 EFFECTIVE DATE : 20050726
US7919484 BB	20110405	LSGT	+	granted / extensions (spc, cpc, pte)	
US7919484 BB	20150405	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US7919484 BB	20150504	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US7919484 BB	20150526	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20150405
US7919484 BB	20261114	PEXP		Calculated Patent Term Expiry (PTA 279 days and a terminal disclaimer has been filed)	

WO06086445 A2	20060817	LSPB	+	published / reissued	
WO06086445 C1	20070806	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2006212761 COUNTRY OF REF DOCUMENT : AU
WO06086445 C1	20070807	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2597067 COUNTRY OF REF DOCUMENT : CA
WO06086445 C1	20070808	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2007555181 COUNTRY OF REF DOCUMENT : JP
WO06086445 C1	20070808	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : MX/A/2007/009592 COUNTRY OF REF DOCUMENT : MX
WO06086445 C1	20070810	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO06086445 C1	20070830	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2006212761 COUNTRY OF REF DOCUMENT : AU DATE OF REF DOCUMENT : 20060208 KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO06086445 C1	20090126	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 11815739 COUNTRY OF REF DOCUMENT : US
WO06086445 C1	20090602	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : PI0606143 COUNTRY OF REF DOCUMENT : BR KIND CODE OF REF DOCUMENT : A2 DESIGNATED STATE(S) :

Title: ANTI-CYTOKINE HETEROCYCLIC COMPOUNDS

Abstract: Heterocyclic compounds and analogues thereof and their use as inhibitors of Mitogen-Activated Protein Kinase-Activated Protein kinase-2 (MAPKAP-k2), and also to a method for preventing or treating a disease or disorder that can be treated or prevented by modulating the activity of MAPKAP-K2 in a subject and to pharmaceutical compositions and kits that include these MAPKAP-K2 inhibitors.

Classifications:

International (IPC 8-9): [A61K31/403](#) [A61K31/437](#) [A61K31/4439](#) [A61K31/4745](#) [A61K31/55](#) [A61P1/00](#) [A61P11/06](#) [A61P19/02](#) [A61P25/28](#) [A61P3/10](#) [A61P9/04](#) [C07D401/12](#) [C07D471/02](#) [C07D471/04](#) [C07D487/04](#) (Advanced/Invention);

[A61K31/403](#) [A61K31/4738](#) [C07D471/00](#) (Core/Invention)

CPC: [C07D471/02](#)

European: [C07D471/02](#)

US: [514/212.06](#) [514/212.060P](#) [514/291](#) [514/292](#) [514/292S](#) [514/339](#) [514/339S](#) [514/411](#) [514/411S](#) [540/521](#) [540/521S](#) [546/276.7](#) [546/276.700S](#) [546/85](#) [546/85S](#) [546/86](#) [546/86S](#) [548/444](#) [548/444S](#)

Family:

Publication number	Publication date	Application number	Application date
US2006276496 AA	20061207	US20060276933	20060317
US2010190773 AA	20100729	US20100727570	20100319

Priority:

US20050662936P 20050317 US20050719164P 20050921 US20060276933 20060317
US20100727570 20100319

Probable Assignee: BOEHRINGER INGELHEIM INT GMBH

Assignee(s): (std): BOEHRINGER INGELHEIM INT ; BOEHRINGER INGELHEIM PHARMA

Assignee(s): BOEHRINGER INGELHEIM PHARMACEUTICALS INC ; BOEHRINGER INGELHEIM INT GMBH ; BOEHRINGER INGELHEIM INTERNATIONAL GMBH

Inventor(s): (std): ABEYWARDANE ASITHA ; GOLDBERG DANIEL ; MILLER CRAIG ; MORWICK TINA ; NETHERTON MATTHEW ; SNOW ROGER ; WANG JI ; WU JIANG PING ; XIONG ZHAOMING ; SNOW ROGER JOHN ; NETHERTON MATTHEW RUSSELL ; MOSS NEIL ; MORWICK TINA MARIE ; MILLER CRAIG ANDREW

Agent(s): MICHAEL P MORRIS BOEHRINGER INGELHEIM CORP; MICHAEL P MORRIS BOEHRINGER INGELHEIM USA CORP

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US2006276496 AA	20061207	LSPB	+	published / reissued	
US2006276496 AA	20060810	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BOEHRINGER INGELHEIM PHARMACEUTICALS, INC., CONNEC OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:GOLDBERG, DANIEL; ABEYWARDANE, ASITHA; MILLER, CRAIG; AND OTHERS; REF / FRAME:010006/0567.

					SIGNING DATES FROM 20060614 TO 20060728
US2006276496 AA	20080919	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BOEHRINGER INGELHEIM INTERNATIONAL GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ABEYWARDANE, ASITHA; MILLER, CRAIG ANDREW; MORWICK, TINA MARIE; AND OTHERS; REEL/FRAME:021558/0169; SIGNING DATES FROM 20080827 TO 20080916
US2006276496 AA	20100524	LSWD	- ABD3	Abandoned -- Failure to Respond to an Office Action	
US2010190773 AA	20100729	LSPB	+	published / reissued	
US2010190773 AA	20121116	LSWD	- ABD3	Abandoned -- Failure to Respond to an Office Action	

Title: PYRIDYL DERIVATIVES AND THEIR USE AS THERAPEUTIC AGENTS**Abstract:** Methods of treating an SCD-mediated disease or condition in a mammal, preferably a human, are disclosed, wherein the methodscomprise administering to a mammal in need thereof a compound of formula (I): wherein W, V, x, y, R¹, R², R³, R⁴, R⁵, R⁶, R⁷, R^{7a}, R⁸, R^{8a}, R⁹, R^{9a}, R¹⁰ and R^{10a} are defined herein. Pharmaceutical compositions comprising the compounds of formula (I) are also disclosed.**Classifications:****International (IPC 8-9):** [A01N43/62](#) [A61K31/00](#) [A61K31/497](#) [A61K31/501](#) [A61P3/06](#) [C07D213/75](#) [C07D213/76](#) [C07D213/81](#) [C07D241/04](#) [C07D295/00](#) (Advanced/Invention);[A01N43/48](#) [A61K31/00](#) [A61K31/501](#) [A61P3/00](#) [C07D213/00](#) (Core/Invention)**CPC:** [C07D401/14](#) [C07D401/04](#) [A61K31/00](#) [A61K31/444](#) [A61K31/501](#) [C07D213/75](#) [C07D213/76](#) [C07D213/81](#)**European:** [A61K31/00](#) [A61K31/444](#) [A61K31/501](#) [C07D213/75](#) [C07D213/76](#) [C07D213/81](#)**US:** [514/218](#) [514/252.12](#) [544/358](#)**Family:**

Publication number	Publication date	Application number	Application date
US2006293308 AA	20061228	US20040566857	20040729
US7763618 BB	20100727	US20040566857	20040729

Priority:

US20030491140P 20030729	US20030491080P 20030730	US20030491116P 20030730
US20030491322P 20030730	US20030491141P 20030730	US20040566857 20040729
WO2004US24542 20040729		

Probable Assignee: XENON PHARMACEUTICALS INC**Assignee(s):** (std): XENON PHARMACEUTICALS INC**Assignee(s):** DISCOVERY PARTNERS INT ; DISCOVERY PARTNERS INT INC**Inventor(s):** (std): ABREO MELWYN ; CHAKKA NAGASREE ; CHAKKA NAGASRES ; HARVEY DANIEL F ; KAMBOJ RAJENDER ; KODUMURU VISHNUMURTHY ; KONDRATENKO MIKHAIL A ; LI WENBAO ; LIU SHIFENG ; RODUMURU VISHNUMURTHY ; SUN SHAOYI ; SVIRIDOV SERGUEI ; GSCHWEND HEINZ W ; WINTHER MICHAEL D**Inventor(s):** HARVEY DANIEL ; WINTHER MICHAEL ; KONDRATENKO MIKHAIL ; GSCHWEND HEINZ**Agent(s):** OSHA LIANG LLP; OSHA • LIANG LLP**Legal status (INPADOC)**[View legal status timeline](#)

Patent	Date recorded	Event group	Code	Event	Details
US2006293308 AA	20061228	LSPB	+	published / reissued	
US2006293308 AA	20100412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : XENON PHARMACEUTICALS INC.,CANADA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:KAMBOJ, RAJENDER; KODUMURU, VISHNUMURTHY; WINTHER MICHAEL D ; AND

					OTHERS; SIGNING DATES FROM 20030729 TO 20041005; REEL/FRAME:024219/0863
US2006293308 AA	20100412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : DISCOVERY PARTNERS INTERNATIONAL, INC.,CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNNORS INTEREST; ASSIGNNORS:ABREO, MELWYN; HARVEY, DANIEL F.; KONDRATENKO, MIKHAIL A.; AND OTHERS; SIGNING DATES FROM 20040903 TO 20040914; REEL/FRAME:024219/0885
US2006293308 AA	20100412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : XENON PHARMACEUTICALS INC., CANADA OLDPARTY : ASSIGNMENT OF ASSIGNNORS INTEREST; ASSIGNNORS:KAMBOJ, RAJENDER; KODUMURU, VISHNUMURTHY; WINTHER, MICHAEL D.; AND OTHERS; SIGNING DATES FROM 20030729 TO 20041005; REEL/FRAME:024219/0863
US2006293308 AA	20100412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : DISCOVERY PARTNERS INTERNATIONAL, INC., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNNORS INTEREST; ASSIGNNORS:ABREO, MELWYN; HARVEY, DANIEL F.; KONDRATENKO, MIKHAIL A.; AND OTHERS; SIGNING DATES FROM 20040903 TO 20040914; REEL/FRAME:024219/0885
US2006293308 AA	20100412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : XENON PHARMACEUTICALS INC.,CANADA OLDPARTY : ASSIGNMENT OF ASSIGNNORS INTEREST; ASSIGNNOR:DISCOVERY PARTNERS INTERNATIONAL, INC.; REEL/FRAME:024219/0895 EFFECTIVE DATE : 20040914
US2006293308 AA	20100412	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : XENON PHARMACEUTICALS INC., CANADA OLDPARTY : ASSIGNMENT OF ASSIGNNORS INTEREST; ASSIGNNOR:DISCOVERY PARTNERS INTERNATIONAL, INC.; REEL/FRAME:024219/0895 EFFECTIVE DATE : 20040914
US7763618 BB	20100727	LSGT	+	granted / extensions (spc, cpc, pte)	

US7763618 BB	20101004	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : XENON PHARMACEUTICALS INC., CANADA OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE EXECUTION DATE OF THE FIRST ASSIGNOR, PREVIOUSLY RECORDED ON REEL 024219 FRAME 0363; ASSIGNORS:KAMBOJ, RAJENDER; KODUMURU, VISHNUMURTHY; WINTHER, MICHAEL D.; AND OTHERS; SIGNING DATES FROM 20040924 TO 20041005; REEL/FRAME:025310/0168
US7763618 BB	20101130	LSRE	CC	CERTIFICATE OF CORRECTION	
US7763618 BB	20101206	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : XENON PHARMACEUTICALS INC., CANADA OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE FIRST ASSIGNOR'S (RAJENDER KAMBOJ) EXECUTION DATE FROM 07/29/2003 PREVIOUSLY RECORDED ON REEL 024219 FRAME 0863. ASSIGNOR(S) HEREBY CONFIRMS THE EXECUTION DATE OF RAJENDER KAMBOJ IS 9/24/2004; ASSIGNORS:KAMBOJ, RAJENDER; KODUMURU, VISHNUMURTHY; WINTHER, MICHAEL D.; AND OTHERS; SIGNING DATES FROM 20040924 TO 20041005; REEL/FRAME:025445/0614
US7763618 BB	20140727	LSLE	- LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US7763618 BB	20140825	LSLE	- PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US7763618 BB	20140916	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20140727
US7763618 BB	20260415	PEXP		Calculated Patent Term Expiry (PTA 625 days and a terminal disclaimer has been filed)	

Title: MAO-B INHIBITORS USEFUL FOR TREATING OBESITY

Abstract: The invention provides novel compounds of formula I: that are monoamine oxidase-B inhibitors, which can be useful in treating obesity, diabetes, and/or cardiometabolic disorders (e.g., hypertension, dyslipidemias, high blood pressure, and insulin resistance).



Classifications:

International (IPC 8-9): [A61K31/13](#) [A61K31/44](#) [A61K31/455](#) [A61K31/4965](#) [A61K31/53](#) [A61K31/675](#) [C07C233/00](#) [C07D211/70](#) [C07D239/28](#) [C07D241/04](#) [C07D241/34](#) [C07F9/06](#) [C07F9/6512](#) (Advanced/Invention);
[A61K31/455](#) [A61K31/4965](#) [A61K31/53](#) [A61K31/675](#) [C07D239/00](#) [C07D241/00](#) [C07F9/00](#) (Core/Invention)

CPC: [C07C233/78](#) [C07C233/83](#) [C07C235/50](#) [C07C235/60](#) [C07C237/34](#) [C07C255/13](#) [C07C255/58](#) [C07C309/59](#) [C07C309/77](#) [C07C311/08](#) [C07C311/16](#) [C07C311/18](#) [C07C311/21](#) [C07C311/29](#) [C07C311/42](#) [C07D213/63](#) [C07D213/71](#) [C07D213/74](#) [C07D213/81](#) [C07D213/82](#) [C07D213/83](#) [C07D239/28](#) [C07D239/40](#) [C07D241/26](#) [C07F9/3808](#) [C07F9/3834](#) [C07F9/4006](#) [C07F9/4021](#) [C07F9/582](#) [C07F9/587](#) [C07F9/65122](#) [C07F9/65126](#) [C07F9/650964](#) [C07F9/650982](#)

European: [C07C233/78](#) [C07C233/83](#) [C07C235/50](#) [C07C235/60](#) [C07C237/34](#) [C07C255/13](#) [C07C255/58](#) [C07C309/59](#) [C07C309/77](#) [C07C311/08](#) [C07C311/16](#) [C07C311/18](#) [C07C311/21](#) [C07C311/29](#) [C07C311/42](#) [C07D213/63](#) [C07D213/71](#) [C07D213/74](#) [C07D213/81](#) [C07D213/82](#) [C07D213/83](#) [C07D239/28](#) [C07D239/40](#) [C07D241/26](#) [C07F9/38A1](#) [C07F9/38A4](#) [C07F9/40A1](#) [C07F9/40A4](#) [C07F9/58G](#) [C07F9/58K4](#) [C07F9/6509B4G](#) [C07F9/6509B4K4](#) [C07F9/6512G](#) [C07F9/6512K4](#)

US: [514/242](#) [514/242S](#) [514/255.06](#) [514/255.060S](#) [514/256](#) [514/256S](#) [514/354](#) [514/356](#) [514/356S](#) [514/89](#) [514/89P](#) [544/183](#) [544/183S](#) [544/334](#) [544/334S](#) [544/406](#) [544/406S](#) [546/22](#) [546/22S](#) [546/315](#) [546/315S](#) [546/323](#)

Family:

Publication number	Publication date	Application number	Application date
US2007015734 AA	20070118	US20060456912	20060712
US8138209 BB	20120320	US20060456912	20060712
WO07008963 A1	20070118	WO2006US27019	20060712

Priority:

US20050698867P 20050713 US20060456912 20060712

Probable Assignee: JENRIN DISCOVERY INC

Assignee(s): (std): JENRIN DISCOVERY INC ; MCELROY JOHN F ; RAJAGOPALAN PARTHASARATHI ; MCELROY JOHN FRANCIS ; PARTHASARATHI RAJAGOPALAN ; CHORVAT ROBERT J ; JENRIN DISCOVERY

Inventor(s): (std): MCELROY JOHN F ; RAJAGOPALAN PARTHASARATHI ; PARTHASARATHI RAJAGOPALAN ; MCELROY JOHN FRANCIS ; CHORVAT ROBERT J

Inventor(s): MCELROY JOHN ; CHORVAT ROBERT

Agent(s): VANCE INTELLECTUAL PROPERTY 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 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 MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US2007015734 AA	20070118	LSPB	+	published / reissued	
US2007015734 AA	20090508	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : JENRIN DISCOVERY, INC., PENNSYLVANIA OLDPARTY : ASSIGNMENT OF ASSIGNNORS INTEREST; ASSIGNNORS:MCELROY, JOHN F; CHORVAT, ROBERT J; REEL/FRAME:022656/0605; SIGNING DATES FROM 20090326 TO 20090502
US2007015734 AA	20090508	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : JENRIN DISCOVERY, INC., PENNSYLVANIA OLDPARTY : ASSIGNMENT OF ASSIGNNORS INTEREST; ASSIGNNORS:MCELROY, JOHN F; CHORVAT, ROBERT J; SIGNING DATES FROM 20090326 TO 20090502; REEL/FRAME:022656/0605
US2007015734 AA	20090508	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : JENRIN DISCOVERY, INC., PENNSYLVANIA OLDPARTY : ASSIGNMENT OF ASSIGNNORS INTEREST; ASSIGNNORS:MCELROY, JOHN F; CHORVAT, ROBERT J; SIGNING DATES FROM 20090326 TO 20090502; REEL/FRAME:022656/0605
US8138209 BB	20120320	LSGT	+	granted / extensions (spc, cpc, pte)	
US8138209 BB	20120229	LSGT	PAT1	Patented Case	
US8138209 BB	20160320	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US8138209 BB	20160418	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US8138209 BB	20160510	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20160320
US8138209 BB	20301010	PEXP		Calculated Patent Term Expiry (PTA 1551 days)	

WO07008963 A1	20070118	LSPB	+	published / reissued	
WO07008963 A1	20080115	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO07008963 A1	20080827	LSNE	-122	EP: PCT APPLICATION NON-ENTRY IN EUROPEAN PHASE	REF DOCUMENT NUMBER : 06786991 COUNTRY OF REF DOCUMENT : EP KIND CODE OF REF DOCUMENT : A1 DESIGNATED STATE(S) :

Title: PIM KINASE INHIBITORS AND METHODS OF THEIR USE

Abstract: New compounds, compositions and methods of inhibition of kinase activity associated with tumorigenesis in a human or animal subject are provided. In certain embodiments, the compounds and compositions are effective to inhibit the activity of at least one serine/threonine kinase or receptor tyrosine kinase. The new compounds and compositions may be used either alone or in combination with at least one additional agent for the treatment of a serine/threonine kinase- or receptor tyrosine kinase-mediated disorder, such as cancer.



In certain embodiments, the compounds and compositions are effective to inhibit the activity of at least one serine/threonine kinase or receptor tyrosine kinase. The new compounds and compositions may be used either alone or in combination with at least one additional agent for the treatment of a serine/threonine kinase- or receptor tyrosine kinase-mediated disorder, such as cancer.

Classifications:

International (IPC 8-9): [A61K31/44](#) [A61K31/444](#) [A61K31/4545](#) [A61K31/455](#) [A61K31/472](#) [A61K31/496](#) [A61K31/497](#) [A61K31/505](#) [A61K31/506](#) [A61K31/5377](#) [A61K31/55](#) [A61K31/553](#) [A61K45/00](#) [A61P35/00](#) [A61P43/00](#) [C07D213/78](#) [C07D213/81](#) [C07D239/28](#) [C07D239/42](#) [C07D239/48](#) [C07D241/28](#) [C07D401/12](#) [C07D401/14](#) [C07D403/12](#) [C07D403/14](#) [C07D405/14](#) [C07D409/14](#) [C07D413/14](#) [C07D417/14](#) [C07D491/113](#) [C07D495/04](#) [C07D497/04](#) [C07D498/04](#)

[C12N5/071](#) (Advanced/Invention);

[A61K31/44](#) [A61K31/4523](#) [A61K31/4965](#) [A61K31/505](#) [A61K31/506](#) [A61K31/5375](#) [A61P35/00](#) [A61P43/00](#) [C07D213/00](#) [C07D239/00](#) [C07D401/00](#) [C07D403/00](#) [C07D405/00](#) [C07D409/00](#)

[C07D417/00](#) [C07D491/00](#) (Core/Invention)

International (IPC 1-7): [C07D213/78](#)

CPC: [C07D239/28](#) [A61K31/553](#) [A61K31/55](#) [A61K31/497](#) [A61K31/4545](#) [A61K31/444](#) [C07D491/113](#) [C07D403/12](#) [A61K31/506](#) [C07D241/28](#) [C07D401/14](#) [C07D405/14](#) [C07D409/14](#) [C07D417/14](#) [C07D497/04](#) [C07D403/14](#) [C07D401/12](#) [C07D213/78](#)

European: [C07D213/78](#) [C07D239/28](#) [C07D401/12](#)

US: [435/375](#) [435/375S](#) [514/211.15](#) [514/217.04](#) [514/235.5](#) [514/235.500P](#) [514/252.11](#) [514/252.110S](#) [514/253.01](#) [514/253.010S](#) [514/255.05](#) [514/255.050S](#) [514/274](#) [514/275](#) [514/275S](#) [514/318](#) [514/318S](#) [514/332](#) [514/333](#) [514/334](#) [540/481](#) [540/544](#) [540/597](#) [544/129](#) [544/130](#) [544/130S](#) [544/230](#) [544/295](#) [544/317](#) [544/324](#) [544/324S](#) [544/364](#) [544/364S](#) [544/405](#) [544/405S](#) [546/187](#) [546/187S](#) [546/193](#) [546/193S](#) [546/194](#) [546/194S](#) [546/262](#)

Family:

Publication number	Publication date	Application number	Application date
AU2008221263 AA	20080904	AU20080221263	20080303
AU2008221263 BB	20120223	AU20080221263	20080303
AU2012202993 AA	20120614	AU20120202993	20120522
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BRPI0808523 A2	20140819	BR2008PI08523	20080303
CA2679659 AA	20090826	CA20082679659	20080303
CA2679659 C	20160119	CA20082679659	20080303
CN101679266 A	20100324	CN200880011679	20080303
CN101679266 B	20150506	CN200880011679	20080303
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EP2132177 A1	20091216	EP20080731299	20080303
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WO08106692 A1	20080904	WO2008US55724	20080303
WO08106692 B1	20081030	WO2008US55724	20080303

Priority:

US20070892444P 20070301	US20080023777P 20080125	US20080023777 20080125
AU20080221263 20080303	EP20080731299 20080303	US20080449701 20080303
WO2008US55724 20080303	US20090449701 20091222	AU20120202993 20120522
US20140273595 20140509		

Probable Assignee: NOVARTIS AG

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Assignee(s): NOVARTIS VACCINES AND DIAGNOSTICS INC

Inventor(s): (std): ANNETTE WALTER ; ANTONIOS MCCREA JR WILLIAM ; ANTONIOS MCCREA WILLIAM ; ANTONIOS MCCREA WILLIAM JR ; ATALLAH GORDANA ; BELLAMACINA COMELIA ; BELLAMACINA CORNELIA ; CHRISTOPHER MCBRIDE ; CORNELIA BELLAMACINA ; CYNTHIA SHAFER ; GARCIA PABLO ; GARCIA PABLO DOMINGUEZ ; GISELE NISHIGUCHI ; GORDANA ATALLAH ; HAN WOO SEOK ; HAN WOOSCOK ; HAN WOOSEOK ; BURGER MATTHEW ; HUH KAY ; JIONG LAN ; KAY HUH ; LAN JIONG ; LINDVALL MIKA ; MATTHEW BURGER ; MCBRIDE CHRISTOPHER ; MIKA LINDVALL ; NISHIGUCHI GISELE ; PABLO GARCIA ; SHAFER CYNTHIA ; TATIANA ZAVOROTINSKAYA ; WALTER ANNETTE ; WILLIAM ANTONIOS MCCREA JR ; WOOSEOK HAN ; ZAVOROTINSKAYA TATIANA

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Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; FETHERSTONHAUGH AND CO; DYER JAMES; CARVAJAL Y ISABEL; STEPHEN; MICHAEL; SHELTON DENNIS K

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

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AU2008221263 AA	20080904	LSPB	+	published / reissued	

AU2008221263 BB	20120223	LSGT	+	granted / extensions (spc, cpc, pte)	
AU2008221263 BB	20120621	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU2008221263 BB	20280303	PEXP		Calculated Patent Term Expiry	
AU2012202993 AA	20120614	LSPB	+	published / reissued	
AU2012202993 BB	20150625	LSGT	+	granted / extensions (spc, cpc, pte)	
AU2012202993 BB	20151022	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU2012202993 BB	20320522	PEXP		Calculated Patent Term Expiry	
BRPI0808523 A2	20171024	LSES	B07D	TECHNICAL EXAMINATION (OPINION) RELATED TO ARTICLE 229 OF INDUSTRIAL PROPERTY LAW	
CA2679659 AA	20090826	LSPB	+	published / reissued	
CA2679659 AA	20130213	LSES	+EEER	EXAMINATION REQUEST	EFFECTIVE DATE : 20130116
CA2679659 C	20160119	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2679659 C	20280303	PEXP		Calculated Patent Term Expiry	
CN101679266 A	20100324	LSPB	+	published / reissued	
CN101679266 A	20100324	LSPB	+C06	PUBLICATION	
CN101679266 A	20140108	LSRE	C53	CORRECTION OF PATENT FOR INVENTION OR PATENT APPLICATION	
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CN101679266 B	20150506	LSGT	+	granted / extensions (spc, cpc, pte)	
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UTILITY MODEL					
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EP2132177 A1	20110907	LSSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 20110804
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EP2132177 B1	20150130	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 : 20140331
EP2132177 B1	20160208	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 9
EP2132177 B1	20160229	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : MT 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 : 20130717
EP2132177 B1	20160531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : BG NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20130717
EP2132177 B1	20160531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT	COUNTRY OF REF DOCUMENT : MC NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION

				INFORM. FROM NAT. OFFICE TO EPO	OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20130717
EP2132177 B1	20160729	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : TR NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20130717
EP2132177 B1	20160729	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : HU NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT; INVALID AB INITIO LAPSED DATE : 20080303
EP2132177 B1	20170227	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 10
EP2132177 B1	20170428	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170228 YEAR OF FEE PAYMENT : 10
EP2132177 B1	20170428	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170227 YEAR OF FEE PAYMENT : 10
EP2132177 B1	20170531	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20170301 YEAR OF FEE PAYMENT : 10
EP2132177 B1	20170630	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20170320 YEAR OF FEE PAYMENT : 10
EP2132177 B1	20170630	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20170301 YEAR OF FEE PAYMENT : 10
EP2132177 B1	20180227	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 11

EP2132177 B1	20180430	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180220 YEAR OF FEE PAYMENT : 11
EP2132177 B1	20180430	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20180228 YEAR OF FEE PAYMENT : 11
EP2132177 B1	20280303	PEXP		Calculated Patent Term Expiry	
ES2431163 T3	20131125	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2431163 T3	20280303	PEXP		Calculated Patent Term Expiry	
IN05960DN2009 A	20100611	LSPB	+	published / reissued	
IN270980 B	20160129	LSGT	+	granted / extensions (spc, cpc, pte)	
IN270980 B	20290916	PEXP		Calculated Patent Term Expiry	
JP2010520228 T2	20100610	LSPB	+	published / reissued	
JP2010520228 T2	20110129	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20110128
JP2010520228 T2	20110129	LSSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20110128
JP2010520228 T2	20130220	LSSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20130219
JP2010520228 T2	20130614	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20130613
JP2010520228 T2	20130702	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2010520228 T2	20130710	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20130709
JP2010520228 T2	20130801	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20130725

JP2010520228 T2	20130802	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP5330274 B2	20131030	LSGT	+	granted / extensions (spc, cpc, pte)	
JP5330274 B2	20130711	LSGT	+A01	特許査定書 Decision of patent grant	
JP5330274 B2	20130730	LSFE	R100	特許料納付書 Patent fee payment form	
JP5330274 B2	20160728	LSFE	R20	特許料納付書 Patent fee payment form	
JP5330274 B2	20160802	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5330274 B2	20170803	LSFE	R20	特許料納付書 Patent fee payment form	
JP5330274 B2	20170808	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5330274 B2	20280303	PEXP		Calculated Patent Term Expiry	
KR101514853 B1	20150424	LSGT	+	granted / extensions (spc, cpc, pte)	
KR101514853 B1	20280303	PEXP		Calculated Patent Term Expiry	
KR20100015331 A	20100212	LSPB	+	published / reissued	
KR20100015331 A	20130225	LSSES	A201	REQUEST FOR EXAMINATION	
KR20100015331 A	20140801	LSSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR20100015331 A	20150202	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
KR20100015331 A	20150417	LSGT	+GRNT	WRITTEN DECISION TO GRANT	
KR20100015331 A	20180328	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20180328 YEAR OF FEE PAYMENT : 4
MX2009009304 A1	20091118	LSPB	+	published / reissued	
MX2009009304 A1	20100821	LSFE	LL	CORRECTION OF	

					CHANGE IN GENERAL
MX2009009304 A1	20121130	LSGT	+FG	GRANT OR REGISTRATION	
US2012208815 AA	20120816	LSPB	+	published / reissued	
US2014249135 AA	20140904	LSPB	+	published / reissued	
US2014249135 AA	20151022	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US8822497 BB	20140902	LSGT	+	granted / extensions (spc, cpc, pte)	
US8822497 BB	20110322	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : NOVARTIS VACCINES AND DIAGNOSTICS, INC., CALIFORNI OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:MCBRIDE, CHRISTOPHER; BURGER, MATTHEW; LINDVALL, MIKA; AND OTHERS; SIGNING DATES FROM 20090804 TO 20090919; REEL/FRAME:026001/0048
US8822497 BB	20110322	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : NOVARTIS AG, SWITZERLAND OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:NOVARTIS VACCINES AND DIAGNOSTICS, INC.; REEL/FRAME:025999/0828 EFFECTIVE DATE : 20090924
US8822497 BB	20140813	LSGT	PAT1	Patented Case	
US8822497 BB	20180222	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8822497 BB	20301203	PEXP		Calculated Patent Term Expiry (PTA 1005 days and a terminal disclaimer has been filed)	
WO08106692 A1	20080904	LSPB	+	published / reissued	
WO08106692 B1	20090826	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2679659 COUNTRY OF REF DOCUMENT : CA
WO08106692 B1	20090831	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO	REF DOCUMENT NUMBER : 2009551895 COUNTRY OF REF DOCUMENT

				NATIONAL PHASE	: JP
WO08106692 B1	20090902	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO08106692 B1	20090908	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2008221263 COUNTRY OF REF DOCUMENT : AU
WO08106692 B1	20091001	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2008221263 COUNTRY OF REF DOCUMENT : AU DATE OF REF DOCUMENT : 20080303 KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO08106692 B1	20091222	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 12449701 COUNTRY OF REF DOCUMENT : US
WO08106692 B1	20140819	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : PI0808523 COUNTRY OF REF DOCUMENT : BR KIND CODE OF REF DOCUMENT : A2 DESIGNATED STATE(S) : EFFECTIVE DATE : 20090831

Title: INTRAOCULAR PRESSURE LOWERING AGENTS CONTAINING PHENYLENEDIAMINE DERIVATIVES AS THE ACTIVE INGREDIENT

Abstract: The invention aims at finding new pharmacological effects of phenylenediamine derivatives and at synthesizing novel phenylenediamine derivatives and finding pharmacological effects of the derivatives. The invention provides intraocular pressure lowering agents which each contain as the active ingredient at least one member selected from the group consisting of compounds represented by the general formula (1) and salts thereof: [Chemical formula 1] (1) wherein A is thiophene, pyridine, or the like; R¹ and R² are each hydrogen, lower alkyl, lower alkenyl, lower alkynyl, lower cycloalkyl, aryl, hydroxy, lower alkoxy, or the like, or R¹ and R² may be united to form a nitrogenous heterocycle which may be substituted; R³ is halogeno, lower alkyl, hydroxy, or the like; and m is 0, 1 or 2.



Classifications:

International (IPC 8-9): [A61K31/167](#) [A61K31/27](#) [A61K31/40](#) [A61K31/4015](#) [A61K31/44](#) [A61K31/4439](#) [A61K31/4453](#) [A61K31/472](#) [A61K31/496](#) [A61K31/497](#) [A61K31/5375](#) [A61K31/5377](#) [A61P27/02](#) [A61P43/00](#) [C07C235/84](#) [C07D207/09](#) [C07D207/27](#) [C07D211/06](#) [C07D213/81](#) [C07D217/04](#) [C07D295/12](#) [C07D295/14](#) [C07D401/06](#) [C07D401/12](#) (Advanced/Invention); [C07C271/28](#) (Advanced/Non-invention); [A61K31/167](#) [A61K31/21](#) [A61K31/40](#) [A61K31/4015](#) [A61K31/44](#) [A61K31/4427](#) [A61K31/4453](#) [A61K31/472](#) [A61K31/496](#) [A61K31/4965](#) [A61K31/5375](#) [A61P27/00](#) [A61P43/00](#) [C07C235/00](#) [C07D207/00](#) [C07D211/00](#) [C07D213/00](#) [C07D217/00](#) [C07D295/00](#) [C07D401/00](#) (Core/Invention); [C07C271/00](#) (Core/Non-invention)

CPC: [C07D207/09](#) [C07D207/27](#) [C07D211/06](#) [C07D213/81](#) [C07D217/04](#) [C07D295/12](#) [C07D401/06](#) [C07D401/12](#)

European: [C07D207/09](#) [C07D207/27](#) [C07D211/06](#) [C07D213/81](#) [C07D217/04](#) [C07D295/12](#) [C07D401/06](#) [C07D401/12](#)

Family:

Publication number	Publication date	Application number	Application date
JP2008266321 A2	20081106	JP20080085273	20080328
WO08117861 A1	20081002	WO2008JP56010	20080328

Priority:

JP20070084311 20070328 JP20080085273 20080328

Probable Assignee: SANTEN PHARMA CO LTD

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Assignee(s): SANTEN PHARMACEUT CO LTD ; SANTEN PHARMACEUTICAL CO LTD ; SANTEN PHARMACEUTICAL CO

Inventor(s): (std): FUJIKAWA JUNKO ; MISHINA NORIKO ; MOGI HIROYUKI ; TAJIMA HISASHI ; TAJIMA HISATSUGU ; WATANABE KATSUHIKO ; YAMAMOTO MINORU ; YAMAZAKI HIROSUKE ; YAMAZAKI YUSUKE ; YONEDA SHINJI

Agent(s): HIBI NORIHIKO 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 SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
JP2008266321 A2	20081106	LSPB	+	published / reissued	
WO08117861 A1	20081002	LSPB	+	published / reissued	
WO08117861 A1	20090929	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO08117861 A1	20100428	LSNE	-122	EP: PCT APPLICATION NON-ENTRY IN EUROPEAN PHASE	REF DOCUMENT NUMBER : 08739134 COUNTRY OF REF DOCUMENT : EP KIND CODE OF REF DOCUMENT : A1 DESIGNATED STATE(S) :
WO08117861 A1	20100608	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : JP

Title: HETEROCYCLIC AMIDE COMPOUNDS AS PROTEIN KINASE INHIBITORS

Abstract: The present invention relates to novel heterocyclic amide compounds of Formula I: as disclosed herein or a pharmaceutically

acceptable salt, solvate, ester, prodrug or stereoisomer thereof. Also disclosed are compositions comprising said compounds, and methods for using said compounds for treating or preventing a proliferative disease, an anti-proliferative disorder, inflammation, arthritis, a neurological or neurodegenerative disease, a cardiovascular disease, alopecia, a neuronal disease, an ischemic

injury, a viral disease or a fungal disease.

Classifications:

International (IPC 8-9): [A61K31/337](#) [A61K31/444](#) [A61K31/445](#) [A61K31/496](#) [A61K31/497](#) [A61K31/506](#) [A61K31/5377](#) [A61K31/5383](#) [A61K31/704](#) [A61K33/24](#) [A61K43/00](#) [A61K45/00](#) [A61P35/00](#) [A61P43/00](#) [C07D209/32](#) [C07D209/34](#) [C07D213/73](#) [C07D213/81](#) [C07D401/14](#) [C07D405/14](#) [C07D409/14](#) [C07D411/14](#) [C07D413/14](#) [C07D417/14](#) [C07D471/04](#) [C07D487/04](#)

[C07D491/056](#) (Advanced/Invention);

[A61K31/337](#) [A61K31/444](#) [A61K31/496](#) [A61K31/497](#) [A61K31/519](#) [A61K31/704](#) [A61K33/24](#) [A61K45/00](#) [A61P35/00](#) [A61P43/00](#) [C07D401/14](#) [C07D405/14](#) [C07D409/14](#) [C07D413/14](#) [C07D417/14](#) [C07D471/04](#) [C07D487/04](#) [C07D491/04](#) (Advanced/Non-invention);

[A61K31/4427](#) [A61K31/444](#) [A61K31/4965](#) [A61P43/00](#) [C07D401/00](#) [C07D413/00](#) [C07D417/00](#) [C07D471/00](#) [C07D487/00](#) (Core/Invention);

[A61K](#) [A61P](#) [C07D](#) (Subclass/Invention)

International (IPC 1-7): [A61K31/4427](#) [A61K31/4436](#) [A61K31/4439](#) [A61K31/444](#) [A61P35/00](#) [C07D213/75](#) [C07D401/12](#) [C07D401/14](#) [C07D405/12](#) [C07D405/14](#) [C07D409/12](#) [C07D409/14](#) [C07D413/12](#) [C07D413/14](#) [C07D417/12](#) [C07D417/14](#) [C07D471/04](#) [C07D487/04](#)

CPC: [C07D417/14](#) [C07D471/04](#) [C07D487/04](#) [C07D401/14](#) [C07D413/14](#)

European: [C07D401/14](#) [C07D413/14](#) [C07D417/14](#) [C07D471/04](#) [C07D487/04](#)

US: [514/230.5](#) [514/230.500P](#) [514/235.8](#) [514/235.800S](#) [514/252.18](#) [514/252.180S](#) [514/253.09](#) [514/253.090S](#) [514/253.1](#) [514/253.100S](#) [514/318](#) [514/318S](#) [544/105](#) [544/105S](#) [544/121](#) [544/121S](#) [544/263](#) [544/280](#) [544/295](#) [544/295S](#) [544/357](#) [544/362](#) [544/363](#) [544/364](#) [544/364S](#) [546/193](#) [546/193S](#) [546/194](#)

Family:

Publication number	Publication date	Application number	Application date
AR067585 AA	20091014	AR2008P103083	20080717
AU2008279776 AA	20090129	AU20080279776	20080717
AU2008279776 AB	20100218	AU20080279776	20080717
AU2008279776 BB	20130523	AU20080279776	20080717
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CO6290765 A2	20110620	CO20100004841	20100119
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US8293747 BB	20121023	US20080669334	20080717
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WO09014637 A3	20090319	WO2008US08749	20080717
ZA201000366 A	20101027	ZA20100000366	20100118

Priority:

US20070950709P 20070719 EP20080794560 20080717 WO2008US08749 20080717
US20080669334 20080717

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Inventor(s): TZU TSHIN WONG ; TIMOTHY J GUZI ; PRAVEEN K TADIKONDA ; M ARSHAD SIDDIQUI ; DAVID F CAUBLE JR ; PANDURANGA ADULLA P REDDY ; LUIS E TORRES ; TORRES L'JUIS I. ; ZHAO LIANYUN BURLINGTON ; CAUBLE ; CAUBLE DAVID ; WONG TZU TSHIN BELMONT ; ZHAO ; TORRES LUIS E MEDFORD ; TZU TSHIN ; WONG ; WONG TZU ; TANG SHUYI BELMONT ; TIMOTHY GUZI ; TORRES ; TORRES LUIS ; TADIKONDA PRAVEEN K NORWOOD ; TANG ; SIDDIQUI M ARSHAD NEWTON ; TADIKONDA ; TADIKONDA PRAVEEN ; REDDY PANDURANGA ADULLA P WALPOLE ; SHUYI ; LIANYUN ; LUIS E ; PANDURANGA ADULLA P ; PANDURANGA REDDY ; PRAVEEN K ; REDDY ; GUZI TIMOTHY J SUDBURY ; CAUBLE DAVID F JR CAMBRIDGE ; DAVID F CAUBLE

Agent(s): GRIFFITH HACK; SARGENT; CARLOS R OLARTE GARCIA; ABITZ AND PARTNER PATENTANWAELE MBB; BROEKKAMP CHRIS L E; BUCHAN GAVIN MACNICOL; DR SHLOMO COHEN AND CO; MERCK PATENT DEPARTMENT K 6 1 1990; PETER; DAVID A; BANERJEE KRISHNA G

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

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AR067585 AA	20091014	LSPB	+	published / reissued	
AR067585 AA	20141203	LSWD	-FA	ABANDONMENT OR WITHDRAWAL	
AU2008279776 AA	20090129	LSPB	+	published / reissued	
AU2008279776 AA	20100218	LSRE	DA3	AMENDMENTS MADE SECTION 104	TEXT : THE NATURE OF THE AMENDMENT IS AS SHOWN IN THE STATEMENT(S) FILED 18 JAN 2010
AU2008279776 AA	20130919	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU2008279776 AA	20170209	LSLE	-MK14	PATENT CEASED SECTION 143(A) (ANNUAL FEES NOT PAID) OR EXPIRED	
AU2008279776 BB	20130523	LSGT	+	granted / extensions (spc, cpc, pte)	
AU2008279776 BB	20280717	PEXP		Calculated Patent Term Expiry	
BRPI0814441 A2	20160210	LSAS	B25D	REQUESTED CHANGE OF NAME OF APPLICANT APPROVED	PARTYTYPE : OWNER OWNER : MERCK SHARP AND DOHME CORP. (US)
BRPI0814441 A2	20160223	LSAS	B25G	REQUESTED CHANGE OF HEADQUARTER APPROVED	PARTYTYPE : OWNER OWNER : MERCK SHARP AND DOHME CORP. (US)
BRPI0814441 A2	20170523	LSFE	-B08F	APPLICATION FEES: DISMISSAL - ARTICLE 86 OF INDUSTRIAL PROPERTY LAW	
BRPI0814441 A2	20170905	LSLE	-B08K	LAPSE AS NO EVIDENCE OF PAYMENT OF THE ANNUAL FEE HAS BEEN FURNISHED TO INPI (ACC. ART. 87)	
CA2693967 AA	20090129	LSPB	+	published / reissued	
CA2693967 AA	20130731	LSSES	+EEER	EXAMINATION REQUEST	EFFECTIVE DATE : 20130712

CA2693967 AA	20160824	LSLE	-FZDE	DEAD	EFFECTIVE DATE : 20160713
CL2008002131 A1	20090123	LSPB	+	published / reissued	
CN101801958 A	20100811	LSPB	+	published / reissued	
CN101801958 A	20100811	LSPB	+C06	PUBLICATION	
CN101801958 A	20121205	LSRE	C53	CORRECTION OF PATENT FOR INVENTION OR PATENT APPLICATION	
CN101801958 A	20121205	LSRE	COR	CHANGE OF BIBLIOGRAPHIC DATA	TEXT : CORRECT: APPLICANT; FROM: SCHERING CORP (US) TO: MSD CORP.
CN101801958 A	20140129	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN101801958 A	20170901	LSLE	-CF01	TERMINATION OF PATENT RIGHT DUE TO NON-PAYMENT OF ANNUAL FEE	
CN101801958 B	20140129	LSGT	+	granted / extensions (spc, cpc, pte)	
CN101801958 B	20280717	PEXP		Calculated Patent Term Expiry	
CO6290765 A2	20110620	LSPB	+	published / reissued	
CO6290765 A2	20130429	LSGT	+FG	APPLICATION GRANTED	
ECSP109886 A	20100226	LSPB	+	published / reissued	
EP2178861 A2	20100428	LSPB	+	published / reissued	
EP2178861 A2	20100428	LSSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20100219
EP2178861 A2	20120815	LSAS	RAP1	TRANSFER OF RIGHTS OF AN APPLICATION	PARTYTYPE : OWNER OWNER : MERCK SHARP & DOHME CORP.
EP2178861 A2	20121128	LSSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 20121029
EP2178861 A2	20140312	LSGT	+INTG	ANNOUNCEMENT OF INTENTION TO GRANT	EFFECTIVE DATE : 20140213
EP2178861 A2	20160729	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20160624 YEAR OF FEE PAYMENT : 0

				OFFICE	
EP2178861 A2	20160831	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20160621 YEAR OF FEE PAYMENT : 9
EP2178861 A2	20161031	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20160801 YEAR OF FEE PAYMENT : 9
EP2178861 B1	20140820	LSGT	+	granted / extensions (spc, cpc, pte)	
EP2178861 B1	20140820	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP2178861 B1	20140829	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP2178861 B1	20140915	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 683394 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20140915
EP2178861 B1	20140924	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP2178861 B1	20141002	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602008033999 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20141002
EP2178861 B1	20150115	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MK05 REF DOCUMENT NUMBER : 683394 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20140820
EP2178861 B1	20150121	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : VDEP EFFECTIVE DATE : 20140820

EP2178861 B1	20150126	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : LT REF LEGAL EVENT CODE : MG4D
EP2178861 B1	20150130	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 : 20141222
EP2178861 B1	20150130	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 : 20140820
EP2178861 B1	20150130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : NO 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 : 20141120
EP2178861 B1	20150130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : LT 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 : 20140820
EP2178861 B1	20150130	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 : 20140820
EP2178861 B1	20150130	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 : 20141121
EP2178861 B1	20150130	LSLE	-PG25	LAPSED IN A CONTRACTING	COUNTRY OF REF DOCUMENT : ET

				STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20140820
EP2178861 B1	20150130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : BG NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20141120
EP2178861 B1	20150227	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 : 20140820
EP2178861 B1	20150227	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 : 20140820
EP2178861 B1	20150227	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : IS NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20141220
EP2178861 B1	20150227	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 : 20140820
EP2178861 B1	20150331	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 : 20140820

EP2178861 B1	20150430	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 : 20140820
EP2178861 B1	20150430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : IT 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 : 20140820
EP2178861 B1	20150430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : SK NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20140820
EP2178861 B1	20150430	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 : 20140820
EP2178861 B1	20150430	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 : 20140820
EP2178861 B1	20150430	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 : 20140820
EP2178861 B1	20150521	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 602000022000

					COUNTRY OF REF DOCUMENT : DE
EP2178861 B1	20150529	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : PL NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20140820
EP2178861 B1	20150729	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20150521
EP2178861 B1	20151130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : SI NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20140820
EP2178861 B1	20160229	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : MC NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20140820
EP2178861 B1	20160229	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP2178861 B1	20160331	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 FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20150717
EP2178861 B1	20160420	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP2178861 B1	20160429	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 : 20150731
EP2178861 B1	20160429	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA	COUNTRY OF REF DOCUMENT : LI NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-

				POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	PAYMENT OF DUE FEES LAPSED DATE : 20150731
EP2178861 B1	20160621	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 9
EP2178861 B1	20160729	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 FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20140820
EP2178861 B1	20160729	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON- PAYMENT OF DUE FEES LAPSED DATE : 20150717
EP2178861 B1	20170210	LSWD	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HK REF LEGAL EVENT CODE : WD REF DOCUMENT NUMBER : 1141794 COUNTRY OF REF DOCUMENT : HK
EP2178861 B1	20170331	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : MT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20140820
EP2178861 B1	20170531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : HU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT; INVALID AB INITIO LAPSED DATE : 20080717
EP2178861 B1	20170621	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 10
EP2178861 B1	20170630	LSLE	-PG25	LAPSED IN A CONTRACTING	COUNTRY OF REF DOCUMENT : CY

				STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	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 : 20140820
EP2178861 B1	20170731	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20170626 YEAR OF FEE PAYMENT : 10
EP2178861 B1	20170731	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170621 YEAR OF FEE PAYMENT : 10
EP2178861 B1	20170831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : TR NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20140820
EP2178861 B1	20171031	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170726 YEAR OF FEE PAYMENT : 10
EP2178861 B1	20280717	PEXP		Calculated Patent Term Expiry	
IL203354 A1	20131231	LSPB	+	published / reissued	
IL203354 A1	20140430	LSGT	+FF	PATENT GRANTED	
IL203354 A1	20140630	LSFE	+KB	PATENT RENEWED	
IN00341CN2010 A	20100709	LSPB	+	published / reissued	
JP2010533716 T2	20101028	LSPB	+	published / reissued	
JP2010533716 T2	20110222	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20110221
JP2010533716 T2	20120911	LSSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20120910
JP2010533716 T2	20121206	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20121205
JP2010533716 T2	20130111	LSSES	-A131	NOTIFICATION OF REASONS FOR	TEXT : JAPANESE INTERMEDIATE CODE: A131

				REFUSAL	EFFECTIVE DATE : 20130110
JP2010533716 T2	20130206	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20130205
JP2010533716 T2	20130321	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2010533716 T2	20130326	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20130325
JP2010533716 T2	20130411	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20130402
JP2010533716 T2	20130412	LSFE	+FPAY	RENEWAL FEE PAYMENT (EVENT DATE IS RENEWAL DATE OF DATABASE)	YEAR OF FEE PAYMENT : 3
JP2010533716 T2	20130412	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP5241834 B2	20130717	LSGT	+	granted / extensions (spc, cpc, pte)	
JP5241834 B2	20130328	LSGT	+A01	特許査定書 Decision of patent grant	
JP5241834 B2	20130409	LSFE	R100	特許料納付書 Patent fee payment form	
JP5241834 B2	20160414	LSFE	R20	特許料納付書 Patent fee payment form	
JP5241834 B2	20160419	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5241834 B2	20170406	LSFE	R20	特許料納付書 Patent fee payment form	
JP5241834 B2	20170411	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250
JP5241834 B2	20180405	LSFE	R20	特許料納付書 Patent fee payment form	
JP5241834 B2	20180410	LSFE	+R250	RECEIPT OF ANNUAL FEES	TEXT : JAPANESE INTERMEDIATE CODE: R250

JP5241834 B2	20280717	PEXP		Calculated Patent Term Expiry	
KR101552742 B1	20150911	LSGT	+	granted / extensions (spc, cpc, pte)	
KR101552742 B1	20280717	PEXP		Calculated Patent Term Expiry	
KR20100045481 A	20100503	LSPB	+	published / reissued	
KR20100045481 A	20130716	LSSES	A201	REQUEST FOR EXAMINATION	
KR20100045481 A	20141230	LSSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR20100045481 A	20150629	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
KR20100045481 A	20150907	LSGT	+GRNT	WRITTEN DECISION TO GRANT	
MY150032 A	20131129	LSGT	+	granted / extensions (spc, cpc, pte)	
MY150032 A	20280717	PEXP		Calculated Patent Term Expiry	
NZ582708 A	20120427	LSPB	+	published / reissued	
NZ582708 A	20120330	LSAS	ASS	CHANGE OF OWNERSHIP	PARTYTYPE : OWNER OWNER : SCHERING CORPORATION, US OLDPARTY : OLD OWNER(S): PANDURANGA ADULLA REDDY; LIANYUN ZHAO; PRAVEEN K. TADIKONDA; TZU TSHIN WONG; SHUYI TANG; LUIS E. TORRES; DAVID F. JR. CAUBLE; TIMOTHY J. GUZI; M. ARSHAD SIDDIQUI; SCHERING CORPORATION
NZ582708 A	20121221	LSFE	+RENEW	RENEWAL (RENEWAL FEES ACCEPTED)	
NZ582708 A	20160129	LSLE	-LAPS	PATENT LAPSED	
PE09052009 A1	20090713	LSPB	+	published / reissued	
PE09052009 A1	20120221	LSWD	-FD	APPLICATION DECLARED VOID OR LAPSED	
RU2010105678 A	20110827	LSPB	+	published / reissued	

RU2474580 C2	20130210	LSGT	+	granted / extensions (spc, cpc, pte)	
RU2474580 C2	20130520	LSAS	PD4A	CORRECTION OF NAME OF PATENT OWNER	
RU2474580 C2	20280717	PEXP		Calculated Patent Term Expiry	
TH132949 A	20140428	LSPB	+	published / reissued	
TW200920370 A	20090516	LSPB	+	published / reissued	
TWI371275 B	20120901	LSGT	+	granted / extensions (spc, cpc, pte)	
TWI371275 B	20160601	LSLE	-MM4A	ANNULMENT OR LAPSE OF PATENT DUE TO NON-PAYMENT OF FEES	
TWI371275 B	20280718	PEXP		Calculated Patent Term Expiry	
US2010286135 AA	20101111	LSPB	+	published / reissued	
US2010286135 AA	20090423	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SCHERING CORPORATION, NEW JERSEY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:REDDY, PANDURANGA ADULLA P.; ZHAO, LIANYUN; TADIKONDA, PRAVEEN K.; AND OTHERS; SIGNING DATES FROM 20081113 TO 20081119; REEL/FRAME:022587/0621
US2010286135 AA	20100608	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SCHERING CORPORATION, NEW JERSEY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:REDDY, PANDURANGA ADULLA P.; ZHAO, LIANYUN; TADIKONDA, PRAVEEN K.; AND OTHERS; SIGNING DATES FROM 20081113 TO 20081119; REEL/FRAME:024501/0455
US2010286135 AA	20120830	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MERCK SHARP & DOHME CORP., NEW JERSEY OLDPARTY : CHANGE OF NAME; ASSIGNOR:SCHERING CORPORATION; REEL/FRAME:028884/0151 EFFECTIVE DATE : 20120502

US8293747 BB	20121023	LSGT	+	granted / extensions (spc, cpc, pte)	
US8293747 BB	20121003	LSGT	PAT1	Patented Case	
US8293747 BB	20160325	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8293747 BB	20290326	PEXP		Calculated Patent Term Expiry (PTA 252 days)	
WO09014637 A2	20090129	LSPB	+	published / reissued	
WO09014637 A3	20100117	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 203354 COUNTRY OF REF DOCUMENT : IL
WO09014637 A3	20100118	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2008279776 COUNTRY OF REF DOCUMENT : AU
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WO09014637 A3	20100118	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2693967 COUNTRY OF REF DOCUMENT : CA
WO09014637 A3	20100119	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 582708 COUNTRY OF REF DOCUMENT : NZ
WO09014637 A3	20100120	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
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WO09014637 A3	20100218	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 20107003574 COUNTRY OF REF DOCUMENT : KR KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
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WO09014637 A3	20100317	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : PI 2010000195 COUNTRY OF REF DOCUMENT : MY
WO09014637 A3	20100715	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 12669334 COUNTRY OF REF DOCUMENT : US
WO09014637 A3	20150714	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : PI0814441 COUNTRY OF REF DOCUMENT : BR KIND CODE OF REF DOCUMENT : A2 DESIGNATED STATE(S) : EFFECTIVE DATE : 20100119
ZA201000366 A	20101027	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA201000366 A	20300117	PEXP		Calculated Patent Term Expiry	

Title: HETEROCYCLIC NF-KB INHIBITORS**Abstract:** The present invention relates to compounds of the general formula (Ihb) or pharmaceutically acceptable salts thereof with an

acid or a base or a stereoisomer thereof for the prevention and/or treatment of a disease associated with increased cytokine release, wherein Y' is O or NR^{2'}; Z is N or CR^{2'}; X is NR^{2'}, O or S; R^{2'} is H, alkyl, -C(O)NR⁷, -C(O)Re, cycloalkyl, haloalkyl, hydroxyalkyl, hydroxyalkylamino, alkylamino, heteroaryl, or aryl; R³ is H, methyl, ethyl, methoxy, amine, alkylamine, morpholino, N-methylpiperazine, CF₃, or OCF₃; R_{2a} is substituted or unsubstituted aryl, benzyl or heteroaryl.

Classifications:

International (IPC 8-9): [A61K](#) [A61K31/429](#) [A61K31/4353](#) [A61K31/4355](#) [A61K31/4365](#) [A61K31/437](#) [A61K31/4436](#) [A61K31/444](#) [A61K31/4535](#) [A61K31/454](#) [A61K31/4545](#) [A61K31/4709](#) [A61K31/4725](#) [A61K31/496](#) [A61K31/497](#) [A61K31/506](#) [A61K31/517](#) [A61K31/519](#) [A61K31/52](#) [A61K31/53](#) [A61K31/5377](#) [A61K38/21](#) [A61K45/00](#) [A61P](#) [A61P1/04](#) [A61P1/16](#) [A61P1/18](#) [A61P11/00](#) [A61P11/06](#) [A61P13/08](#) [A61P13/12](#) [A61P15/00](#) [A61P17/00](#) [A61P17/06](#) [A61P19/02](#) [A61P19/06](#) [A61P21/04](#) [A61P25/00](#) [A61P25/14](#) [A61P25/16](#) [A61P25/28](#) [A61P27/16](#) [A61P29/00](#) [A61P3/04](#) [A61P3/10](#) [A61P31/04](#) [A61P31/12](#) [A61P31/16](#) [A61P31/18](#) [A61P35/00](#) [A61P35/02](#) [A61P35/04](#) [A61P37/00](#) [A61P37/02](#) [A61P37/06](#) [A61P43/00](#) [A61P9/00](#) [A61P9/04](#) [A61P9/10](#) [C07D](#) [C07D401/14](#) [C07D417/14](#) [C07D471/04](#) [C07D473/34](#) [C07D487/04](#) [C07D491/048](#) [C07D495/02](#) [C07D495/04](#) [C07D498/04](#) [C07D513/04](#) (Advanced/Invention);

[A61K31/429](#) [A61K31/4353](#) [A61K31/4427](#) [A61K31/4523](#) [A61K31/519](#) [A61K31/53](#) [A61K38/21](#) [A61P31/00](#) [A61P35/00](#) [A61P9/00](#) [C07D401/00](#) [C07D417/00](#) [C07D471/00](#) [C07D473/00](#) [C07D487/00](#) [C07D491/00](#) [C07D495/00](#) [C07D513/00](#) (Core/Invention);

[A61K](#) [A61P](#) [C07D](#) (Subclass/Invention)

International (IPC 1-7): [A61K31/429](#) [A61K31/4355](#) [A61P35/00](#)

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European: [C07D417/14](#) [C07D471/04](#) [C07D473/34](#) [C07D487/04](#) [C07D491/04](#) [C07D495/04](#) [C07D513/04](#)

US: [424/85.7](#) [514/210.21](#) [514/210.210P](#) [514/234.2](#) [514/234.200S](#) [514/253.04](#) [514/253.040S](#) [514/260.1](#) [514/300](#) [514/300S](#) [514/301](#) [514/301S](#) [514/302](#) [514/302S](#) [514/322](#) [544/127](#) [544/127S](#) [544/278](#) [544/362](#) [544/362S](#) [546/113](#) [546/113S](#) [546/114](#) [546/114S](#) [546/115](#) [546/115S](#) [546/199](#)

Family:

Publication number	Publication date	Application number	Application date
AU2008300497 AA	20090326	AU20080300497	20080922
AU2008300827 AA	20090326	AU20080300827	20080919
AU2008300827 AH	20100603	AU20080300827	20080919
AU2008300827 BB	20130404	AU20080300827	20080919
CA2699817 AA	20090326	CA20082699817	20080922
CA2700058 AA	20090326	CA20082700058	20080919
DE602008020307 D1	20130117	DE200860020307T	20080919
EP2190843 A1	20100602	EP20080804537	20080922
EP2197552 A2	20100623	EP20080802659	20080919
EP2197552 B1	20121121	EP20080802659	20080919
IL204578 A0	20101130	IL20080204578	20080919
IN00566MN2010 A	20100813	IN2010MN00566	20100319
IN00616MU2008 A	20091023	IN2008MU00616	20080324
JP2010539206 T2	20101216	JP20100525274T	20080919
JP2012502881 T2	20120202	JP20100525369T	20080922
JP5469604 B2	20140416	JP20100525274T	20080919
NZ584279 A	20111125	NZ20080584279	20080919
US2009304632 AA	20091210	US20090234108	20090806
US2011021494 AA	20110127	US20080678806	20080919

US8440830 BB	20130514	US20080678806	20080919
WO09037001 A2	20090326	WO2008EP08208	20080919
WO09037001 A3	20090507	WO2008EP08208	20080919
WO09037001 A4	20090702	WO2008EP08208	20080919
WO09037357 A1	20090326	WO2008EP62611	20080922
WO09037357 A4	20090514	WO2008EP62611	20080922
ZA201001972 A	20120627	ZA20100001972	20100318

Priority:

EP20070116791 20070919 IN2007MU01819 20070919 IN2008MU00616 20080324
EP20080802659 20080919 WO2008EP08208 20080919 EP20080804537 20080922
WO2008EP62611 20080922

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Assignee(s): NYCOMED GMBH

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

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AU2008300497 AA	20090326	LSPB	+	published / reissued	
AU2008300497 AA	20120301	LSLE	-MK1	APPLICATION LAPSED SECTION 142(2)(A) - NO REQUEST FOR EXAMINATION	THE RELEVANT

PERIOD					
AU2008300827 AA	20090326	LSPB	+	published / reissued	
AU2008300827 BB	20130404	LSGT	+	granted / extensions (spc, cpc, pte)	
AU2008300827 BB	20130725	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU2008300827 BB	20150416	LSLE	-MK14	PATENT CEASED SECTION 143(A) (ANNUAL FEES NOT PAID) OR EXPIRED	
AU2008300827 BB	20280919	PEXP		Calculated Patent Term Expiry	
CA2699817 AA	20090326	LSPB	+	published / reissued	
CA2699817 AA	20120924	LSLE	-FZDE	DEAD	
CA2700058 AA	20090326	LSPB	+	published / reissued	
CA2700058 AA	20130918	LSES	+EEER	EXAMINATION REQUEST	EFFECTIVE DATE : 20130904
CA2700058 AA	20151116	LSLE	-FZDE	DEAD	EFFECTIVE DATE : 20150921
EP2190843 A1	20100602	LSPB	+	published / reissued	
EP2190843 A1	20100602	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20100310
EP2190843 A1	20101103	LSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 20101004
EP2190843 A1	20120411	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20110917
EP2197552 A2	20100623	LSPB	+	published / reissued	
EP2197552 A2	20100623	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20100409
EP2197552 A2	20100929	LSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 20100830
EP2197552 A2	20121121	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP2197552 A2	20121130	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP

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EP2197552 A2	20150527	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20140919
EP2197552 A2	20150625	LSDW	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R119 REF DOCUMENT NUMBER : 602008020307 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20150401
EP2197552 A2	20150626	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20150529
EP2197552 A2	20150630	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : MT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20121121
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				ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	LAPSE BECAUSE OF NON- PAYMENT OF DUE FEES LAPSED DATE : 20140919
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EP2197552 B1	20121121	LSGT	+	granted / extensions (spc, cpc, pte)	
EP2197552 B1	20280919	PEXP		Calculated Patent Term Expiry	
IN00566MN2010 A	20100813	LSPB	+	published / reissued	
IN00616MU2008 A	20091023	LSPB	+	published / reissued	
JP2010539206 T2	20101216	LSPB	+	published / reissued	
JP2010539206 T2	20110401	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20110331
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JP2010539206 T2	20131008	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A521

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JP2010539206 T2	20131213	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20131212
JP2010539206 T2	20140108	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2010539206 T2	20140115	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20140114
JP2010539206 T2	20140206	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20140131
JP2010539206 T2	20140207	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150
JP2012502881 T2	20120202	LSPB	+	published / reissued	
JP2012502881 T2	20130410	LSSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20130409
JP2012502881 T2	20131002	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20131001
JP5469604 B2	20140416	LSGT	+	granted / extensions (spc, cpc, pte)	
JP5469604 B2	20140116	LSGT	+A01	特許査定書 Decision of patent grant	
JP5469604 B2	20140204	LSFE	R100	特許料納付書 Patent fee payment form	
JP5469604 B2	20140207	LSGT	+R150	特許証 Patent certificate	
JP5469604 B2	20170207	LSLE	-LAPS	CANCELLATION BECAUSE OF NO PAYMENT OF ANNUAL FEES	

JP5469604 B2	20280919	PEXP		Calculated Patent Term Expiry	
NZ584279 A	20111125	LSPB	+	published / reissued	
NZ584279 A	20120330	LSGT	+PSEA	PATENT SEALED	
NZ584279 A	20121026	LSFE	+RENEW	RENEWAL (RENEWAL FEES ACCEPTED)	
NZ584279 A	20160331	LSLE	-LAPS	PATENT LAPSED	
US2009304632 AA	20091210	LSPB	+	published / reissued	
US2009304632 AA	20090302	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : 4SC AG, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:LEBAN, JOHANN; SEIFERT, MARKUS HANS- JURGEN; LEMSTRA, SYLVIA; REEL/FRAME:022330/0022; SIGNING DATES FROM 20081125 TO 20081208
US2009304632 AA	20120322	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2011021494 AA	20110127	LSPB	+	published / reissued	
US8440830 BB	20130514	LSGT	+	granted / extensions (spc, cpc, pte)	
US8440830 BB	20100823	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : NYCOMED GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:MAIER, THOMAS; BECKERS, THOMAS; BAER, THOMAS; AND OTHERS; SIGNING DATES FROM 20100616 TO 20100721; REEL/FRAME:024870/0562
US8440830 BB	20100823	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : 4SC AG, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:NYCOMED GMBH; REEL/FRAME:024870/0755 EFFECTIVE DATE : 20100628
US8440830 BB	20130424	LSGT	PAT1	Patented Case	
US8440830 BB	20131001	LSRE	CC	CERTIFICATE OF CORRECTION	
US8440830 BB	20170514	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY	

US8440830 BB	20170612	LSLE	-PEX1	MAINTENANCE FEES Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
	20170704	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20170514
US8440830 BB	20290523	PEXP		Calculated Patent Term Expiry (PTA 246 days)	
WO09037001 A2	20090326	LSPB	+	published / reissued	
WO09037001 A4	20100318	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2700058 COUNTRY OF REF DOCUMENT : CA
WO09037001 A4	20100318	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 204578 COUNTRY OF REF DOCUMENT : IL
WO09037001 A4	20100319	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2008300827 COUNTRY OF REF DOCUMENT : AU
WO09037001 A4	20100319	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2010525274 COUNTRY OF REF DOCUMENT : JP
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WO09037001 A4	20100326	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 584279 COUNTRY OF REF DOCUMENT : NZ
WO09037001 A4	20100415	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2008300827 COUNTRY OF REF DOCUMENT : AU DATE OF REF DOCUMENT : 20080919 KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
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				NATIONAL PHASE	: US
WO09037357 A1	20090326	LSPB	+	published / reissued	
WO09037357 A4	20100312	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2008300497 COUNTRY OF REF DOCUMENT : AU
WO09037357 A4	20100317	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2699817 COUNTRY OF REF DOCUMENT : CA
WO09037357 A4	20100318	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2010525369 COUNTRY OF REF DOCUMENT : JP
WO09037357 A4	20100320	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO09037357 A4	20100408	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2008300497 COUNTRY OF REF DOCUMENT : AU DATE OF REF DOCUMENT : 20080922 KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
ZA201001972 A	20120627	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA201001972 A	20300317	PEXP		Calculated Patent Term Expiry	

Title: AZETIDINES AND CYCLOBUTANES AS HISTAMINE H3 RECEPTOR ANTAGONISTS

Abstract: The invention relates to compounds of formula (I) wherein R, R0, R1, m, n and X1 to X4 have the meaning as cited in the description



and the claims. Said compounds are useful as Histamine H3 receptor antagonists. The invention also relates to pharmaceutical compositions, the preparation of such compounds as well as the production and use as medicament.

Classifications:

International (IPC 8-9): [A01N31/00](#) [A61K31/397](#) [A61K31/4427](#) [A61K31/496](#) [A61K31/5377](#)

[A61K31/55](#) [A61K31/551](#) [A61P1/00](#) [A61P1/04](#) [A61P11/00](#) [A61P11/02](#) [A61P11/06](#) [A61P25/00](#)

[A61P25/04](#) [A61P25/16](#) [A61P25/18](#) [A61P25/28](#) [A61P29/00](#) [A61P3/00](#) [A61P3/04](#) [A61P37/08](#)

[A61P43/00](#) [A61P9/00](#) [C07D](#) [C07D205/04](#) [C07D243/08](#) [C07D401/06](#) [C07D401/12](#) [C07D401/14](#)

[C07D403/00](#) [C07D403/06](#) [C07D403/12](#) [C07D403/14](#) [C07D413/14](#) [C07D471/04](#)

[C07D487/04](#) (Advanced/Invention);

[A61P1/00](#) [A61P11/06](#) [A61P25/00](#) [A61P29/00](#) [A61P37/08](#) [A61P9/00](#) (Advanced/Non-invention);

[A61K31/397](#) [A61K31/496](#) [A61P1/00](#) [A61P11/00](#) [A61P25/00](#) [A61P9/00](#) [C07D205/00](#) [C07D401/00](#)

[C07D403/00](#) [C07D471/00](#) [C07D487/00](#) (Core/Invention);

[C07D401/14](#) (Core/Non-invention);

[A61K](#) [A61P](#) [C07D](#) (Subclass/Invention)

International (IPC 1-7): [C07D205/04](#) [C07D401/12](#) [C07D403/12](#)

CPC: [C07D401/12](#) [C07D401/14](#) [C07D403/06](#) [C07D403/14](#) [C07D471/04](#)

European: [C07D401/12](#) [C07D401/14](#) [C07D403/06](#) [C07D403/14](#) [C07D471/04](#)

US: [514/210.18](#) [514/210.180P](#) [540/575](#) [540/575S](#) [544/359](#) [544/359S](#) [544/364](#) [544/364S](#)

Family:

Publication number	Publication date	Application number	Application date
BRPI0913057 A2	20151013	BR2009PI13057	20090505
CA2721303 AA	20091112	CA20092721303	20090505
CA2721303 C	20160628	CA20092721303	20090505
CN102015636 A	20110413	CN200980117615	20090505
CN102015636 B	20140813	CN200980117615	20090505
DE602009027577 D1	20141218	DE200960027577T	20090505
EP2300422 A1	20110330	EP20090742060	20090505
EP2300422 B1	20141105	EP20090742060	20090505
HK1155749 A1	20150206	HK20110110177	20110927
HK1155749 A3	20120525	HK20110110177	20110927
IL208613 A0	20101230	IL20090208613	20090505
IL208613 A1	20150730	IL20090208613	20090505
IN07193CN2010 A	20110729	IN2010CN07193	20101108
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JP2011519891 T2	20110714	JP20110507892T	20090505
JP5780954 B2	20150916	JP20110507892T	20090505
TW201006820 A	20100216	TW20090115068	20090507
TWI454468 B	20141001	TW20090115068	20090507
US2011105459 AA	20110505	US20090991225	20090505
US8691804 BB	20140408	US20090991225	20090505
WO09135842 A1	20091112	WO2009EP55418	20090505

Priority:

EP20080155915 20080508
WO2009EP55418 20090505

US20080139461P 20081219
US20090991225 20090505

EP20090742060 20090505

Probable Assignee: EVOTEC AG

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Inventor(s): (std): DAVENPORT ADAM JAMES ; CORSI MASSIMO ; HALLETT DAVID JAMES ; JAMES DAVENPORT ADAM ; JAMES HALLETT DAVID ; MASSIMO CORSI

Inventor(s): ADAM JAMES DAVENPORT ; DAVENPORT ADAM JAMES SOUTHMOOR ABINGDONOXFORDSHIRE ; DAVID JAMES HALLETT

Agent(s): BERESKIN AND PARR LLP SENCRL SRL; PATENTANWAELTE ISENBRUCK BOESL HOERSCHLER LLP; BUECHEL EDWIN; REINHOLD COHN AND PARTNERS; BIRCH STEWART KOLASCH AND BIRCH LLP

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

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
BRPI0913057 A2	20171010	LSES	B07D	TECHNICAL EXAMINATION (OPINION) RELATED TO ARTICLE 229 OF INDUSTRIAL PROPERTY LAW	
CA2721303 AA	20091112	LSPB	+	published / reissued	
CA2721303 AA	20140407	LSES	+EEER	EXAMINATION REQUEST	EFFECTIVE DATE : 20140327
CA2721303 C	20160628	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2721303 C	20290505	PEXP		Calculated Patent Term Expiry	
CN102015636 A	20110413	LSPB	+	published / reissued	
CN102015636 A	20110413	LSPB	+C06	PUBLICATION	
CN102015636 B	20140813	LSGT	+	granted / extensions (spc, cpc, pte)	
CN102015636 B	20140813	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN102015636 B	20150206	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HK REF LEGAL EVENT CODE : GR REF DOCUMENT NUMBER : 1155749 COUNTRY OF REF DOCUMENT : HK
CN102015636 B	20290505	PEXP		Calculated Patent Term Expiry	

EP2300422 A1	20110330	LSPB	+	published / reissued	
EP2300422 A1	20110330	LSSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20101117
EP2300422 A1	20111130	LSSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 20111027
EP2300422 A1	20140611	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : C07D 471/04 20060101ALI20140506BHEP
EP2300422 A1	20140611	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : A61P 25/00 20060101ALI20140506BHEP
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EP2300422 A1	20140611	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : C07D 401/12 20060101ALI20140506BHEP
EP2300422 A1	20140709	LSGT	+INTG	ANNOUNCEMENT OF INTENTION TO GRANT	EFFECTIVE DATE : 20140611
EP2300422 A1	20141008	LSAS	RAP1	TRANSFER OF RIGHTS OF AN APPLICATION	PARTYTYPE : OWNER OWNER : EVOTEC AG
EP2300422 A1	20160729	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20160526 YEAR OF FEE PAYMENT : 8
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EP2300422 B1	20141115	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 694233 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20141115
EP2300422 B1	20141203	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
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EP2300422 B1	20150430	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 : 20141105
EP2300422 B1	20150430	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 : 20150305
EP2300422 B1	20150430	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 : 20141105
EP2300422 B1	20150430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : NO 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 : 20150205
EP2300422 B1	20150430	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 : 20150305
EP2300422 B1	20150519	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE :

					PLFP YEAR OF FEE PAYMENT : 7
EP2300422 B1	20150529	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : CY NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20141105
EP2300422 B1	20150529	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : HR NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20141105
EP2300422 B1	20150529	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 : 20150206
EP2300422 B1	20150529	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 : 20141105
EP2300422 B1	20150529	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : PL NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20141105
EP2300422 B1	20150529	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : LV NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20141105
EP2300422 B1	20150529	LSLE	-PG25	LAPSED IN A CONTRACTING STATE	COUNTRY OF REF DOCUMENT : AT NOTIFICATION OF LAPSE :

				ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20141105
EP2300422 B1	20150731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : SK NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20141105
EP2300422 B1	20150731	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 : 20141105
EP2300422 B1	20150731	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 : 20141105
EP2300422 B1	20150731	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 : 20141105
EP2300422 B1	20150731	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 : 20141105
EP2300422 B1	20150806	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 602009027577 COUNTRY OF REF DOCUMENT : DE
EP2300422 B1	20151014	LSCT	IP26N	NO OPPOSITION	EFFECTIVE DATE : 20150806

FILED					
EP2300422 B1	20151231	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : IT 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 : 20141105
EP2300422 B1	20160129	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : MC NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20141105
EP2300422 B1	20160129	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 FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20150505
EP2300422 B1	20160224	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP2300422 B1	20160229	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : SI NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20141105
EP2300422 B1	20160429	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 : 20150505
EP2300422 B1	20160523	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 8
EP2300422 B1	20161230	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT	COUNTRY OF REF DOCUMENT : MT NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION

				INFORM. FROM NAT. OFFICE TO EPO	OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20141105
EP2300422 B1	20170522	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 9
EP2300422 B1	20170531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : HU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT; INVALID AB INITIO LAPSED DATE : 20090505
EP2300422 B1	20170531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : BG NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20141105
EP2300422 B1	20170731	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170522 YEAR OF FEE PAYMENT : 9
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EP2300422 B1	20170731	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20170524 YEAR OF FEE PAYMENT : 9
EP2300422 B1	20170831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : TR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20141105
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EP2300422 B1	20171031	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170731 YEAR OF FEE PAYMENT : 9
EP2300422 B1	20290505	PEXP		Calculated Patent Term Expiry	
HK1155749 A1	20150206	LSGT	+	granted / extensions (spc, cpc, pte)	
HK1155749 A1	20310927	PEXP		Calculated Patent Term Expiry	
HK1155749 A3	20120525	LSPB	+	published / reissued	
IL208613 A0	20151130	LSGT	+FF	PATENT GRANTED	
IL208613 A0	20151231	LSFE	+KB	PATENT RENEWED	
IL208613 A1	20150730	LSPB	+	published / reissued	
IL208613 A1	20151130	LSGT	+FF	PATENT GRANTED	
IL208613 A1	20151231	LSFE	+KB	PATENT RENEWED	
IN07193CN2010 A	20110729	LSPB	+	published / reissued	
IN285274 B	20170721	LSGT	+	granted / extensions (spc, cpc, pte)	
IN285274 B	20301108	PEXP		Calculated Patent Term Expiry	
JP2011519891 T2	20110714	LSPB	+	published / reissued	
JP2011519891 T2	20120316	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20120315
JP2011519891 T2	20120316	LSSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20120315
JP2011519891 T2	20140220	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20140219
JP2011519891 T2	20140910	LSSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20140909
JP2011519891 T2	20141209	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20141208

JP2011519891 T2	20150625	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2011519891 T2	20150701	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20150630
JP2011519891 T2	20150723	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20150714
JP2011519891 T2	20150724	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 5780954 COUNTRY OF REF DOCUMENT : JP
JP5780954 B2	20150916	LSGT	+	granted / extensions (spc, cpc, pte)	
JP5780954 B2	20151020	LSAS	R350	WRITTEN NOTIFICATION OF REGISTRATION OF TRANSFER	TEXT : JAPANESE INTERMEDIATE CODE: R350
JP5780954 B2	20290505	PEXP		Calculated Patent Term Expiry	
TW201006820 A	20100216	LSPB	+	published / reissued	
TWI454468 B	20141001	LSGT	+	granted / extensions (spc, cpc, pte)	
TWI454468 B	20290507	PEXP		Calculated Patent Term Expiry	
US2011105459 AA	20110505	LSPB	+	published / reissued	
US8691804 BB	20140408	LSGT	+	granted / extensions (spc, cpc, pte)	
US8691804 BB	20101206	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : EVOTEC AG, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:DAVENPORT, ADAM JAMES; HALLETT, DAVID JAMES; CORSI, MASSIMO; SIGNING DATES FROM 20101021 TO 20101101; REEL/FRAME:025451/0034
US8691804 BB	20140319	LSGT	PAT1	Patented Case	
US8691804 BB	20171001	LSFE	UMA61	MAINTENANCE	YEAR OF FEE PAYMENT : 4

FEE PAYMENT					
US8691804 BB	20291001	PEXP		Calculated Patent Term Expiry (PTA 149 days)	
WO09135842 A1	20091112	LSPB	+	published / reissued	
WO09135842 A1	20101013	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2721303 COUNTRY OF REF DOCUMENT : CA
WO09135842 A1	20101105	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2011507892 COUNTRY OF REF DOCUMENT : JP
WO09135842 A1	20101109	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO09135842 A1	20101206	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 12991225 COUNTRY OF REF DOCUMENT : US
WO09135842 A1	20151013	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : PI0913057 COUNTRY OF REF DOCUMENT : BR KIND CODE OF REF DOCUMENT : A2 DESIGNATED STATE(S) : EFFECTIVE DATE : 20101108

Title: PHTHALIMIDE DERIVATIVE METABOTROPIC GLUTAMATE R4 LIGANDS

Abstract: Disclosed are mGluR4 positive allosteric modulator ligands of general formula (I) and radiolabeled derivatives, their use as therapeutic agents for the treatment of central nervous system disorders modulated by mGluR4 and

as ligands for the labeling and diagnostic imaging of mGluR4 in mammals.

Classifications:

International (IPC 8-9): [A01N43/42](#) [A61K31/4439](#) [A61K49/00](#) [A61K51/00](#) [A61K51/04](#) [A61P1/00](#) [A61P25/08](#) [A61P25/14](#) [A61P25/16](#) [A61P25/18](#) [A61P25/22](#) [A61P25/24](#) [A61P25/28](#) [A61P27/02](#) [A61P3/10](#) [C07D401/12](#) [C07D401/14](#) [C07D417/12](#) [C07D471/04](#) [C07F7/02](#) [G01N33/567](#) (Advanced/Invention)

CPC: [C07D401/14](#) [C07D471/04](#) [C07D401/12](#) [C07D417/12](#)

European: [C07D401/12](#) [C07D401/14](#) [C07D417/12](#) [C07D471/04](#)

US: [424/1.65](#) [424/1.650P](#) [424/9.1](#) [424/9.100S](#) [435/7.21](#) [435/7.210S](#) [546/113](#) [546/113S](#) [546/14](#) [546/142](#) [546/142S](#) [546/14S](#) [546/271.1](#) [546/271.100S](#) [546/276.7](#) [546/276.700S](#) [546/277.1](#) [546/277.100S](#)

Family:

Publication number	Publication date	Application number	Application date
CA2737699 AA	20100325	CA20092737699	20090824
EP2334181 A1	20110622	EP20090814974	20090824
EP2334181 A4	20120314	EP20090814974	20090824
US2011318266 AA	20111229	US20090737943	20090824
WO10033349 A1	20100325	WO2009US54759	20090824

Priority:

US20080192139P 20080916 US20090737943 20090824 WO2009US54759 20090824

Probable Assignee: MERCK SHARP AND DOHME CORP

Assignee(s): (std): HESS JOHN W ; LIVERTON NIGEL J ; MCCAULEY JOHN A ; MCINTYRE CHARLES J ; MERCK AND CO INC ; ROMANO JOSEPH J ; RUDD MICHAEL T ; MERCK SHARP AND DOHME

Assignee(s): MERCK SHARP AND DOHME CORP ; MERCK AND CO

Inventor(s): (std): HESS JOHN W ; LIVERTON NIGEL J ; MCCAULEY JOHN A ; MCINTYRE CHARLES J ; ROMANO JOSEPH J ; RUDD MICHAEL T

Agent(s): SMART AND BIGGAR; MACLEAN MARTIN ROBERT; BILOTTO GERARD

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

Legal status (INPADOC)

[View legal status timeline](#)

Patent	Date recorded	Event group	Code	Event	Details
CA2737699 AA	20100325	ICNP	1	published /	

reissued					
CA2737699 AA	20151020	LSLE	-FZDE	DEAD	EFFECTIVE DATE : 20150825
EP2334181 A1	20110622	LSPB	+	published / reissued	
EP2334181 A1	20110622	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20110316
EP2334181 A4	20120314	LSES	+A4	DESPATCH OF SUPPLEMENTARY SEARCH REPORT	EFFECTIVE DATE : 20120215
EP2334181 A4	20120314	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : A01N 43/42 20060101AFI20120207BHEP
EP2334181 A4	20120314	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : C07D 401/12 20060101ALI20120207BHEP
EP2334181 A4	20120314	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : C07D 401/14 20060101ALI20120207BHEP
EP2334181 A4	20120314	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : C07D 417/12 20060101ALI20120207BHEP
EP2334181 A4	20120314	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : A61K 31/4439 20060101ALI20120207BHEP
EP2334181 A4	20120314	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : A61P 25/16 20060101ALI20120207BHEP
EP2334181 A4	20120314	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : A61P 25/18 20060101ALI20120207BHEP
EP2334181 A4	20120314	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : A61P 25/22 20060101ALI20120207BHEP
EP2334181 A4	20120314	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME :

				(CORRECTION)	IPC CLASSIFICATIONSYMBOL : A61P 25/24 20060101ALI20120207BHEP
EP2334181 A4	20120314	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : A61P 25/08 20060101ALI20120207BHEP
EP2334181 A4	20120314	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : A61P 25/14 20060101ALI20120207BHEP
EP2334181 A4	20120314	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : A61P 25/28 20060101ALI20120207BHEP
EP2334181 A4	20120314	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : A61P 3/10 20060101ALI20120207BHEP
EP2334181 A4	20120314	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : A61P 27/02 20060101ALI20120207BHEP
EP2334181 A4	20120314	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : A61P 1/00 20060101ALI20120207BHEP
EP2334181 A4	20120314	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : A61K 51/04 20060101ALI20120207BHEP
EP2334181 A4	20121121	LSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 20121023
EP2334181 A4	20150805	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20150303
US2011318266 AA	20111229	LSPB	+	published / reissued	
US2011318266 AA	20110223	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MERCK SHARP & DOHME CORP., NEW JERSEY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:MCCAULEY, JOHN A : LUMBERTON, MICHEL L.

HESS, JOHN W.; AND
OTHERS; SIGNING DATES
FROM 20110210 TO
20110218;
REEL/FRA:025848/0351

US2011318266 AA	20140204	LSWD	-ABD2	Abandoned -- Failure to Pay Issue Fee	
WO10033349 A1	20100325	LSPB	+	published / reissued	
WO10033349 A1	20110315	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2737699 COUNTRY OF REF DOCUMENT : CA
WO10033349 A1	20110317	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO10033349 A1	20110513	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 12737943 COUNTRY OF REF DOCUMENT : US

Title: PYRIDYL DERIVATIVES AND THEIR USE AS THERAPEUTIC AGENTS

Abstract: Methods of treating an SCD-mediated disease or condition in a mammal, preferably a human, are disclosed, wherein the methods comprise administering to a mammal in need thereof a compound of formula (I): wherein W, V, x, y, R1, R2, R3, R4, R5, R6, R7, R7a, R8, R8a, R9, R9a, R10 and R10a are defined herein. Pharmaceutical compositions comprising the compounds of formula (I) are also disclosed.

Classifications:

International (IPC 8-9): [A61K31/00](#) [A61K31/496](#) [A61K31/497](#) [A61K31/501](#) [A61P17/10](#) [A61P3/00](#) [A61P3/04](#) [A61P3/06](#) [A61P3/10](#) [C07D213/75](#) [C07D213/76](#) [C07D213/81](#) [C07D401/00](#) [C07D401/04](#) (Advanced/Invention)

CPC: [C07D401/14](#) [C07D401/04](#) [A61K31/00](#) [A61K31/444](#) [A61K31/501](#) [C07D213/75](#) [C07D213/76](#) [C07D213/81](#)

European: [A61K31/00](#) [A61K31/444](#) [A61K31/501](#) [C07D213/75](#) [C07D213/76](#) [C07D213/81](#)

US: [514/253.01](#) [514/253.010S](#) [514/253.13](#) [514/253.130P](#) [544/360](#) [544/360S](#) [544/365](#) [544/365S](#)

Family:

Publication number	Publication date	Application number	Application date
US2010305138 AA	20101202	US20100816076	20100615
US8383628 BB	20130226	US20100816076	20100615

Priority:

US20030491140P 20030729	US20030491080P 20030730	US20030491116P 20030730
US20030491141P 20030730	US20030491322P 20030730	US20040566857 20040729
WO2004US24542 20040729	US20060566857 20060130	US20100816076 20100615

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Inventor(s): (std): ABREO MELWYN ; CHAKKA NAGASREE ; GSCHWEND HEINZ W ; HARVEY DANIEL F ; KAMBOJ RAJENDER ; KODUMURU VISHNUMURTHY ; KONDRATENKO MIKHAIL A ; LI WENBAO ; LIU SHIFENG ; SUN SHAOYI ; SVIRIDOV SERGUEI ; WINTHER MICHAEL D

Agent(s): OSHA LIANG LLP; SEED IP LAW GROUP PLLC

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US2010305138 AA	20101202	LSPB	+	published / reissued	
US8383628 BB	20130226	LSGT	+	granted / extensions (spc, cpc, pte)	
US8383628 BB	20130206	LSGT	PAT1	Patented Case	
US8383628 BB	20140128	LSRE	CC	CERTIFICATE OF CORRECTION	
US8383628 BB	20170226	LSLE	- LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US8383628 BB	20170327	LSLE	- REV1	Patent Expired Due to Non-Payment of Maintenance	

Fees Under 37 CFR 1.362					
US8383628 BB	20170418	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20170226
US8383628 BB	20300923	PEXP		Calculated Patent Term Expiry (PTA 100 days)	

Title: CXCR4 RECEPTOR ANTAGONISTS**Abstract:** Disclosed are compounds that are antagonists of the CXCR4 receptor.**Classifications:**

International (IPC 8-9): [A61K31/439](#) [A61K31/4439](#) [A61K31/444](#) [A61K31/4545](#) [A61K31/55](#) [A61K31/551](#) [A61K41/00](#) [A61K45/06](#) [A61P11/00](#) [A61P15/00](#) [A61P25/00](#) [A61P25/04](#) [A61P25/28](#) [A61P27/02](#) [A61P29/00](#) [A61P31/12](#) [A61P31/18](#) [A61P35/00](#) [A61P35/04](#) [A61P37/08](#) [A61P43/00](#) [A61P7/00](#) [A61P9/00](#) [C07B59/00](#) [C07D](#) [C07D401/04](#) [C07D401/12](#) [C07D401/14](#) [C07D405/14](#) [C07D413/12](#) [C07D413/14](#) [C07D417/12](#) [C07D417/14](#) [C07D471/04](#) [C07D471/08](#) [C07D471/12](#) (Advanced/Invention);

[A61K](#) [A61P](#) [C07D](#) (Subclass/Invention)

CPC: [C07D401/12](#) [C07D471/04](#) [C07D405/14](#) [C07D413/14](#) [C07D417/14](#) [A61K45/06](#) [C07D417/12](#) [C07B59/002](#) [C07D401/04](#) [C07D413/12](#) [C07B2200/05](#) [C07D471/08](#) [C07D401/14](#)

European: [A61K45/06](#) [C07D401/14](#) [C07D405/14](#) [C07D413/14](#) [C07D417/14](#)

US: [1/1](#) [514/216](#) [514/217.04](#) [514/217.05](#) [514/217.11](#) [514/218](#) [514/316](#) [514/318](#) [514/333](#) [514/341](#) [540/575](#) [540/582](#) [540/597](#) [540/598](#) [540/605](#) [546/187](#) [546/193](#) [546/256](#) [546/274.1](#)

Family:

Publication number	Publication date	Application number	Application date
AU2011315498 AA	20120419	AU20110315498	20111013
AU2011315498 BB	20141106	AU20110315498	20111013
AU2011315498 CA	20150402	AU20110315498	20111013
CA2814419 AA	20130411	CA20112814419	20111013
CN103282360 A	20130904	CN201180049854	20111013
CN103282360 B	20160330	CN201180049854	20111013
DE602011015528 D1	20150521	DE201160015528T	20111013
DK2627649 T3	20150511	DK20110773227T	20111013
EP2627649 A1	20130821	EP20110773227	20111013
EP2627649 B1	20150408	EP20110773227	20111013
EP2927224 A1	20151007	EP20150158267	20111013
ES2536281 T3	20150522	ES20110773227T	20111013
GB201017345 A0	20101124	GB20100017345	20101014
HK1188211 A1	20170421	HK20140101177	20140210
IL225550 A0	20130627	IL20110225550	20111013
IL225550 A1	20160929	IL20110225550	20111013
IN02934DN2013 A	20160401	IN2013DN02934	20130403
JP2013539777 T2	20131028	JP20130533225T	20111013
JP2016029069 A2	20160303	JP20150189271	20150928
JP5881718 B2	20160309	JP20130533225T	20111013
PT2627649 T	20150525	PT20110773227T	20111013
SG189387 A1	20130531	SG20130027800	20111013
TR201505454 T4	20150521	TR20150005454T	20111013
US2013289020 AA	20131031	US20110878968	20111013
US2016046606 AA	20160218	US20150852835	20150914
US2017226106 AA	20170810	US20170497324	20170426
US9353086 BB	20160531	US20110878968	20111013
WO12049277 A1	20120419	WO2011EP67946	20111013

Priority:

GB20100017345 20101014

EP20110773227 20111013

JP20130533225T 20111013

WO2011EP67946 20111013 US20130878968 20130611 US20150852835 20150914
JP20150189271 20150928 US20170497324 20170426

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Inventor(s): COLE ANDREW GRAHAM CRANBURY

Agent(s): MADDERNS PATENT AND TRADE MARK ATTORNEYS; SIM AND MCBURNEY; AIRD AND MCBURNEY LP; CLARKE LIONEL PAUL; WALLS STEVEN BRODIE; DE ELZABURU ALBERTO; REINHOLD COHN AND PARTNERS; UGUR GUERSAD YALCINER; SEAN B; KATHERINE A; CLARKE LIONEL PAUL ET AL

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

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AU2011315498 AA	20120419	LSPB	+	published / reissued	
AU2011315498 BB	20141106	LSGT	+	granted / extensions (spc, cpc, pte)	
AU2011315498 BB	20150115	LSRE	DA2	APPLICATIONS FOR AMENDMENT SECTION 104	TEXT : THE NATURE OF THE AMENDMENT IS AS SHOWN IN THE STATEMENT(S) FILED 02 DEC 2014 .
AU2011315498 BB	20311013	PEXP		Calculated Patent Term Expiry	
AU2011315498 CA	20150402	LSRE	DA3	AMENDMENTS MADE SECTION 104	TEXT : THE NATURE OF THE AMENDMENT IS AS SHOWN IN THE STATEMENT(S) FILED 02 DEC 2014
AU2011315498 CA	20150409	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
CA2814419 AA	20130411	LSPB	+	published / reissued	

CA2814419 AA	20160902	LSSES	+EEER	EXAMINATION REQUEST	EFFECTIVE DATE : 20160825
CN103282360 A	20130904	LSPB	+	published / reissued	
CN103282360 A	20130904	LSPB	+C06	PUBLICATION	
CN103282360 A	20160330	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN103282360 A	20170421	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HK REF LEGAL EVENT CODE : GR REF DOCUMENT NUMBER : 1188211 COUNTRY OF REF DOCUMENT : HK
CN103282360 B	20160330	LSGT	+	granted / extensions (spc, cpc, pte)	
CN103282360 B	20311013	PEXP		Calculated Patent Term Expiry	
DK2627649 T3	20150511	LSGT	+	granted / extensions (spc, cpc, pte)	
DK2627649 T3	20311013	PEXP		Calculated Patent Term Expiry	
EP2627649 A1	20130821	LSPB	+	published / reissued	
EP2627649 A1	20130821	LSSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20130404
EP2627649 A1	20140416	LSSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 20140317
EP2627649 A1	20140806	LSGT	+INTG	ANNOUNCEMENT OF INTENTION TO GRANT	EFFECTIVE DATE : 20140708
EP2627649 A1	20141231	LSGT	+INTG	ANNOUNCEMENT OF INTENTION TO GRANT	EFFECTIVE DATE : 20141202
EP2627649 A1	20151231	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20151026 YEAR OF FEE PAYMENT : 5
EP2627649 A1	20160129	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20151028 YEAR OF FEE PAYMENT : 5
EP2627649 A1	20160129	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20151027 YEAR OF FEE PAYMENT : 5
EP2627649 A1	20160129	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20151027 YEAR OF FEE PAYMENT : 5

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EP2627649 A1	20160129	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20151026 YEAR OF FEE PAYMENT : 5
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EP2627649 A1	20160229	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20151027 YEAR OF FEE PAYMENT : 5
EP2627649 A1	20160229	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20151019 YEAR OF FEE PAYMENT : 5
EP2627649 A1	20160229	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20151026 YEAR OF FEE PAYMENT : 5
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EP2627649 A1	20161130	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20160922 YEAR OF FEE PAYMENT : 6
EP2627649 A1	20161130	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : CZ

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EP2627649 B1	20150408	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP2627649 B1	20150415	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
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EP2627649 B1	20150506	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
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EP2627649 B1	20150515	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 720469 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20150515
EP2627649 B1	20150521	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602011015528 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20150521
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EP2627649 B1	20151030	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : HR NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20150408
EP2627649 B1	20151030	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : LT 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 : 20150408
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EP2627649 B1	20160111	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 602011015528 COUNTRY OF REF DOCUMENT : DE
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EP2627649 B1	20160531	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 FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20151013
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				TO NATIONAL OFFICE	PAYMENT DATE : 20160923 YEAR OF FEE PAYMENT : 6
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EP2627649 B1	20170131	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20161027 YEAR OF FEE PAYMENT : 6
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EP2627649 B1	20170228	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20161027 YEAR OF FEE PAYMENT : 6
EP2627649 B1	20170228	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20161024 YEAR OF FEE PAYMENT : 6
EP2627649 B1	20170228	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20161026

				OFFICE	YEAR OF FEE PAYMENT : 6
EP2627649 B1	20170228	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20160921 YEAR OF FEE PAYMENT : 6
EP2627649 B1	20170228	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20161027 YEAR OF FEE PAYMENT : 6
EP2627649 B1	20170531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : BG NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20150408
EP2627649 B1	20170531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : SM NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20150408
EP2627649 B1	20170630	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : CY NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20150408
EP2627649 B1	20170831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : MT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20150408
EP2627649 B1	20170918	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 7
EP2627649 B1	20171031	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20170918 YEAR OF FEE PAYMENT : 7

EP2627649 B1	20171031	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : RO PAYMENT DATE : 20170915 YEAR OF FEE PAYMENT : 7
EP2627649 B1	20171031	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : GR PAYMENT DATE : 20170926 YEAR OF FEE PAYMENT : 7
EP2627649 B1	20171031	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : CZ PAYMENT DATE : 20170913 YEAR OF FEE PAYMENT : 7
EP2627649 B1	20171130	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20170913 YEAR OF FEE PAYMENT : 7
EP2627649 B1	20171130	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : PL PAYMENT DATE : 20170914 YEAR OF FEE PAYMENT : 7
EP2627649 B1	20180131	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : HU PAYMENT DATE : 20170921 YEAR OF FEE PAYMENT : 7
EP2627649 B1	20180131	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : FI PAYMENT DATE : 20171011 YEAR OF FEE PAYMENT : 7
EP2627649 B1	20180131	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : TR PAYMENT DATE : 20171013 YEAR OF FEE PAYMENT : 7
EP2627649 B1	20180131	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : DK PAYMENT DATE : 20171011 YEAR OF FEE PAYMENT : 7
EP2627649 B1	20180131	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20171011 YEAR OF FEE PAYMENT : 7
EP2627649 B1	20180228	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20171013 YEAR OF FEE PAYMENT : 7
EP2627649 B1	20180228	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20170926 YEAR OF FEE PAYMENT : 7

EP2627649 B1	20180228	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20171024 YEAR OF FEE PAYMENT : 7
EP2627649 B1	20180228	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20171011 YEAR OF FEE PAYMENT : 7
EP2627649 B1	20180228	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20171102 YEAR OF FEE PAYMENT : 7
EP2627649 B1	20180228	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : PT PAYMENT DATE : 20171012 YEAR OF FEE PAYMENT : 7
EP2627649 B1	20180228	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20171011 YEAR OF FEE PAYMENT : 7
EP2627649 B1	20180228	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20171016 YEAR OF FEE PAYMENT : 7
EP2627649 B1	20180228	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : IE PAYMENT DATE : 20171010 YEAR OF FEE PAYMENT : 7
EP2627649 B1	20311013	PEXP		Calculated Patent Term Expiry	
EP2927224 A1	20151007	LSPB	+	published / reissued	
EP2927224 A1	20160330	LSAS	RAP1	TRANSFER OF RIGHTS OF AN APPLICATION	PARTYTYPE : OWNER OWNER : PROXIMAGEN LIMITED
EP2927224 A1	20160518	LSSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20160407
EP2927224 A1	20160831	LSSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 20160802
ES2536281 T3	20150522	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2536281 T3	20311013	PEXP		Calculated Patent Term Expiry	
GB201017345 A0	20120606	LSWD	-AT	APPLICATIONS TERMINATED BEFORE PUBLICATION UNDER SECTION	

16(1)					
HK1188211 A1	20170421	LSGT	+	granted / extensions (spc, cpc, pte)	
HK1188211 A1	20340210	PEXP		Calculated Patent Term Expiry	
IL225550 A1	20160929	LSPB	+	published / reissued	
IL225550 A1	20170131	LSGT	+FF	PATENT GRANTED	
IL225550 A1	20170131	LSFE	+KB	PATENT RENEWED	
IL225550 A1	20170928	LSFE	+KB	PATENT RENEWED	
IN02934DN2013 A	20160401	LSPB	+	published / reissued	
JP2013539777 T2	20131028	LSPB	+	published / reissued	
JP2013539777 T2	20130729	LSRE	A524	WRITTEN SUBMISSION OF COPY OF AMENDMENT UNDER SECTION 19 (PCT)	TEXT : JAPANESE INTERMEDIATE CODE: A525 EFFECTIVE DATE : 20130613
JP2013539777 T2	20130729	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20130613
JP2013539777 T2	20130814	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20130812
JP2013539777 T2	20140709	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20140708
JP2013539777 T2	20141128	LSRE	A524	WRITTEN SUBMISSION OF COPY OF AMENDMENT UNDER SECTION 19 (PCT)	TEXT : JAPANESE INTERMEDIATE CODE: A524 EFFECTIVE DATE : 20141127
JP2013539777 T2	20150527	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20150526
JP2013539777 T2	20150928	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20150928
JP2013539777 T2	20151112	LSRE	A011	TRANSFER OF	TEXT : JAPANESE

				RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	INTERMEDIATE CODE: A911 EFFECTIVE DATE : 20151112
JP2013539777 T2	20160108	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2013539777 T2	20160120	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20160119
JP2013539777 T2	20160212	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20160202
JP2013539777 T2	20160212	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 5881718 COUNTRY OF REF DOCUMENT : JP
JP2016029069 A2	20160303	LSPB	+	published / reissued	
JP2016029069 A2	20161122	LSSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20161122
JP2016029069 A2	20170519	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20170519
JP2016029069 A2	20170912	LSSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20170912
JP2016029069 A2	20171206	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20171206
JP5881718 B2	20160309	LSGT	+	granted / extensions (spc, cpc, pte)	
JP5881718 B2	20311013	PEXP		Calculated Patent Term Expiry	
PT2627649 T	20150525	LSGT	+	granted / extensions (spc, cpc, pte)	

				cpc, pte)	
PT2627649 T	20311013	PEXP		Calculated Patent Term Expiry	
SG189387 A1	20130531	LSPB	+	published / reissued	
TR201505454 T4	20150521	LSGT	+	granted / extensions (spc, cpc, pte)	
TR201505454 T4	20311013	PEXP		Calculated Patent Term Expiry	
US2013289020 AA	20131031	LSPB	+	published / reissued	
US2016046606 AA	20160218	LSPB	+	published / reissued	
US2016046606 AA	20150914	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROXIMAGEN LIMITED, UNITED KINGDOM OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:SAVORY, EDWARD DANIEL; STEWART, ALISON; CARLEY, ALLISON; AND OTHERS; SIGNING DATES FROM 20130425 TO 20130528; REEL/FRAME:036555/0032
US2016046606 AA	20170901	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2017226106 AA	20170810	LSPB	+	published / reissued	
US2017226106 AA	20170426	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROXIMAGEN LIMITED, UNITED KINGDOM OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:SAVORY, EDWARD DANIEL; STEWART, ALISON; CARLEY, ALLISON; AND OTHERS; SIGNING DATES FROM 20130425 TO 20130528; REEL/FRAME:042146/0661
US2017226106 AA	20170802	LSSES	NFA1	Non Final Action Mailed	
US2017226106 AA	20171205	LSSES	-NFA2	Non Final Action Counted, Not Yet Mailed	
US2017226106 AA	20171206	LSSES	NFA1	Non Final Action Mailed	
US9353086 BB	20160531	LSGT	+	granted / extensions (spc, cpc, pte)	

US9353086 BB	20130617	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PROXIMAGEN LIMITED, UNITED KINGDOM OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:SAVORY, EDWARD DANIEL; STEWART, ALISON; CARLEY, ALLISON; AND OTHERS; SIGNING DATES FROM 20130425 TO 20130528; REEL/FRAME:030625/0136	
US9353086 BB	20150915	LSFE	+PPV1	Publications -- Issue Fee Payment Verified		
US9353086 BB	20160511	LSGT	PAT1	Patented Case		
US9353086 BB	20170328	LSRE	CC	CERTIFICATE OF CORRECTION		
US9353086 BB	20311013	PEXP		Calculated Patent Term Expiry		
WO12049277 A1	20120419	LSPB	+	published / reissued		
WO12049277 A1	20130404	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 225550 COUNTRY OF REF DOCUMENT : IL	
WO12049277 A1	20130411	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2814419 COUNTRY OF REF DOCUMENT : CA	
WO12049277 A1	20130415	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2013533225 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :	
WO12049277 A1	20130415	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE	
WO12049277 A1	20130502	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2011315498 COUNTRY OF REF DOCUMENT : AU DATE OF REF DOCUMENT : 20111013 KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :	
WO12049277 A1	20130611	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 13878968 COUNTRY OF REF DOCUMENT : US	

Title: NAMPT INHIBITORS**Abstract:** Disclosed are compounds which inhibit the activity of NAMPT, compositions containing the compounds and methods of treating diseases during which NAMPT is expressed.**Classifications:**

International (IPC 8-9): [A61K31/4375](#) [A61K31/47](#) [A61K31/4709](#) [A61K31/472](#) [A61K31/4725](#) [A61K31/496](#) [A61K31/5377](#) [A61P1/00](#) [A61P1/04](#) [A61P11/00](#) [A61P11/06](#) [A61P11/08](#) [A61P13/12](#) [A61P17/00](#) [A61P17/04](#) [A61P17/06](#) [A61P19/02](#) [A61P19/08](#) [A61P19/10](#) [A61P25/00](#) [A61P25/28](#) [A61P29/00](#) [A61P3/10](#) [A61P31/12](#) [A61P31/18](#) [A61P35/00](#) [A61P35/02](#) [A61P37/00](#) [A61P37/02](#) [A61P43/00](#) [A61P9/00](#) [A61P9/10](#) [C07D217/06](#) [C07D217/16](#) [C07D401/12](#) [C07D405/12](#) [C07D409/12](#) [C07D409/14](#) [C07D413/12](#) [C07D417/12](#) [C07D471/04](#) [C07D487/00](#) (Advanced/Invention)

CPC: [C07D217/06](#) [C07D401/12](#) [C07D405/12](#) [C07D409/12](#) [C07D409/14](#) [C07D471/04](#) [C07D413/12](#)

European: [C07D217/06](#) [C07D401/12](#) [C07D405/12](#) [C07D409/12](#) [C07D409/14](#) [C07D413/12](#) [C07D471/04](#)

US: [514/311](#) [514/311S](#) [514/314](#) [514/314P](#) [546/144](#) [546/144S](#) [546/146](#) [546/146S](#)

Family:

Publication number	Publication date	Application number	Application date
CA2817093 AA	20130506	CA20112817093	20111111
CN103347860 A	20131009	CN201180065026	20111111
EP2640704 A1	20130925	EP20110785266	20111111
JP2013545750 T2	20131226	JP20130538942T	20111111
MX2013005479 A1	20130612	MX20130005479	20111111
US2012122924 AA	20120517	US20110294318	20111111
WO12067963 A1	20120524	WO2011US60411	20111111

Priority:

US20100413646P 20101115 US20110294318 20111111 WO2011US60411 20111111

Probable Assignee: ABBVIE INC**Assignee(s):** (std): ABBOTT LAB ; ABBVIE INC ; CLARK RICK F ; HEYMAN HOWARD R ; CURTIN MICHAEL L ; MICHAELIDES MICHAEL ; SORENSEN BRYAN K ; TSE CHRIS**Assignee(s):** CLARK RICHARD F ; ABBOTT LABORATORIES**Inventor(s):** (std): CLARK RICHARD F ; CLARK RICK F ; CURTIN MICHAEL L ; HEYMAN HOWARD R ; C XIE ; MICHAELIDES MICHAEL ; SORENSEN BRYAN K ; TSE CHRIS**Inventor(s):** BRYAN K SORENSEN ; RICHARD F CLARK ; CHRIS TSE ; HOWARD R HEYMAN ; MICHAEL L CURTIN ; MICHAEL MICHAELIDES**Agent(s):** TORYS LLP; MODIANO MICAELA NADIA; KAWAGUTI AND PARTNERS; MUELLER LISA V ET AL**Designated states:** AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW**Legal status (INPADOC)**[View legal status timeline](#)

Patent	Date recorded	Event group	Code	Event	Details
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CA2817093 AA	20130506	LSPB	+	published / reissued	
CA2817093 AA	20171226	LSLE	-FZDE	DEAD	EFFECTIVE DATE : 20171114
CN103347860 A	20131009	LSPB	+	published / reissued	
CN103347860 A	20131009	LSPB	+C06	PUBLICATION	
CN103347860 A	20170524	LSDW	-AD01	PATENT RIGHT DEEMED ABANDONED	
EP2640704 A1	20130925	LSPB	+	published / reissued	
EP2640704 A1	20130925	LSSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20130521
EP2640704 A1	20141029	LSSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 20140930
EP2640704 A1	20161102	LSGT	+INTG	ANNOUNCEMENT OF INTENTION TO GRANT	EFFECTIVE DATE : 20161005
EP2640704 A1	20170809	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20170216
JP2013545750 T2	20131226	LSPB	+	published / reissued	
JP2013545750 T2	20141112	LSSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20141111
JP2013545750 T2	20150708	LSSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20150707
JP2013545750 T2	20160107	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20160107
JP2013545750 T2	20160705	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20160705
MX2013005479 A1	20130612	LSPB	+	published / reissued	
US2012122924 AA	20120517	LSPB	+	published / reissued	
US2012122924 AA	20120110	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ABBOTT LABORATORIES, ILLINOIS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS: CURTIN, MICHAEL L.; SORESENSEN, BRYAN K.; HEYMAN, HOWARD R.; AND OTHERS; SIGNING DATES FROM 20120104 TO

					20120105; REEL/FRAME:027506/0033
US2012122924 AA	20130402	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ABBVIE INC., ILLINOIS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ABBOTT LABORATORIES; REEL/FRAME:030137/0222 EFFECTIVE DATE : 20120801
US2012122924 AA	20150828	LSES	NFA1	Non Final Action Mailed	
US2012122924 AA	20170110	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
WO12067963 A1	20120524	LSPB	+	published / reissued	
WO12067963 A1	20130506	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2817093 COUNTRY OF REF DOCUMENT : CA
WO12067963 A1	20130514	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2013538942 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO12067963 A1	20130515	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE

Title: PYRIDYL DERIVATIVES AND THEIR USE AS THERAPEUTIC AGENTS

Abstract: Methods of treating an SCD-mediated disease or condition in a mammal, preferably a human, are disclosed, wherein the methods comprise administering to a mammal in need thereof a compound of formula (I): wherein W, V, x, y, R1, R2, R3, R4, R5, R6, R7, R7a, R8, R8a, R9, R9a, R10 and R10a are defined herein. Pharmaceutical compositions comprising the compounds of formula (I) are also disclosed.

Classifications:

International (IPC 8-9): [A61K31/00](#) [A61K31/501](#) [A61P3/06](#) [C07D213/75](#) [C07D213/76](#) [C07D213/81](#) [C07D401/04](#) [C07D401/14](#) (Advanced/Invention)

CPC: [C07D213/75](#) [A61K31/00](#) [A61K31/444](#) [A61K31/501](#) [C07D213/76](#) [C07D213/81](#) [C07D401/14](#) [C07D401/04](#)

US: [435/184](#) [514/253.13](#) [544/364](#) [544/365](#)

Family:

Publication number	Publication date	Application number	Application date
US2013079354 AA	20130328	US20120620151	20120914

Priority:

US20030491140P 20030729	US20030491080P 20030730	US20030491116P 20030730
US20030491141P 20030730	US20030491322P 20030730	US20040566857 20040729
WO2004US24542 20040729	US20060566857 20060130	US20100816076 20100615
US20120620151 20120914		

Probable Assignee: XENON PHARMACEUTICALS INC

Assignee(s): (std): ABREO MELWYN ; CHAKKA NAGASREE ; GSCHWEND HEINZ W ; HARVEY DANIEL F ; KONDRATENKO MIKHAIL A ; KODUMURU VISHNUMURTHY ; WINTHER MICHAEL D ; KAMBOJ RAJENDER ; LIU SHIFENG ; SVIRIDOV SERGUEI ; SUN SHAOYI ; LI WENBAO ; XENON PHARMACEUTICALS INC

Inventor(s): (std): ABREO MELWYN ; CHAKKA NAGASREE ; GSCHWEND HEINZ W ; HARVEY DANIEL F ; KODUMURU VISHNUMURTHY ; KAMBOJ RAJENDER ; LI WENBAO ; WINTHER MICHAEL D ; SUN SHAOYI ; LIU SHIFENG ; KONDRATENKO MIKHAIL A ; SVIRIDOV SERGUEI

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US2013079354 AA	20130328	LSPB	+	published / reissued	
US2013079354 AA	20140324	LSWD	- ABD3	Abandoned -- Failure to Respond to an Office Action	

Title: A NOVEL METHOD FOR SYNTHESIZING CYCLE AMIDINE COMPOUND

Abstract: The invention provides a novel method for synthesizing a cycle amidine compound, and belongs to an organic synthesis field. The method comprises: using annular tertiary amine as a raw material, adding a catalyst consisting of a transition metal compound and a nitrogen-containing ligand, and heating without any oxidizing agents in a solvent, to obtain the cycle amidine compound with a good yield, wherein hydrogen released in the reaction is a by-product. The method has advantages of simple operation, high reaction yield, no need of oxidizing agent in the reaction, and recovery utilization of reaction by-product hydrogen, and has high utility value for industrial preparation of the cycle amidine compound.

Classifications:

International (IPC 8-9): [C07D471/04](#) [C07D471/14](#) [C07D487/04](#) [C07D495/14](#) [C07D513/04](#) (Advanced/Invention)

CPC: [C07D471/04](#) [C07D471/14](#) [C07D487/04](#) [C07D495/14](#) [C07D513/04](#)

Family:

Publication number	Publication date	Application number	Application date
CN103739600 A	20140423	CN201310270216	20130621
CN103739600 B	20160203	CN201310270216	20130621

Priority:

CN201310270216 20130621

Probable Assignee: UNIV SUN YAT SEN

Assignee(s): (std): SUN YAT SEN UNIV ; UNIV SUN YAT SEN

Inventor(s): (std): SUN XIANG ; YAN MING

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
CN103739600 A	20140423	LSPB	+	published / reissued	
CN103739600 A	20140423	LSPB	+C06	PUBLICATION	
CN103739600 B	20160203	LSGT	+	granted / extensions (spc, cpc, pte)	
CN103739600 B	20160203	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN103739600 B	20330621	PEXP		Calculated Patent Term Expiry	

Title: PRMT5 INHIBITORS AND USES THEREOF**Abstract:** Described herein are compounds of Formula (I), pharmaceutically acceptable salts thereof, and pharmaceutical compositions

thereof. Compounds of the present invention are useful for inhibiting PRMT5 activity. Methods of using the compounds for treating PRMT5-mediated disorders are also described.

**Classifications:**

International (IPC 8-9): [A61K](#) [A61K31/00](#) [A61K31/472](#) [A61K31/4725](#) [A61K31/496](#) [A61K31/497](#) [A61K31/506](#) [A61K31/519](#) [A61K31/5377](#) [A61P](#) [A61P3/04](#) [A61P3/10](#) [A61P35/00](#) [A61P43/00](#) [A61P7/00](#) [A61P7/06](#) [C07D](#) [C07D217/00](#) [C07D217/04](#) [C07D217/12](#) [C07D217/16](#) [C07D239/02](#) [C07D401/12](#) [C07D401/14](#) [C07D405/12](#) [C07D405/14](#) [C07D413/12](#) [C07D413/14](#) [C07D417/12](#) [C07D487/04](#) [C12N5/071](#) [C12N9/10](#) [C12N9/99](#) (Advanced/Invention);

[A61K](#) [A61P](#) [C07D](#) (Subclass/Invention)

International (IPC 1-7): [A61K31/472](#) [A61K31/4725](#) [A61P3/04](#) [A61P3/10](#) [A61P35/00](#) [A61P7/06](#) [C07D217/12](#) [C07D401/12](#) [C07D405/12](#)

CPC: [C07D405/14](#) [C07D401/12](#) [C07D405/12](#) [C07D217/12](#) [A61K31/472](#) [A61K31/4725](#) [C07D401/14](#) [C07D413/12](#) [C12N9/1007](#) [A61K31/506](#) [C07D217/04](#)

US: [1/1](#) [435/184](#) [435/375](#) [514/210.18](#) [514/210.21](#) [514/228.2](#) [514/230.5](#) [514/235.2](#) [514/249](#) [514/253.05](#) [514/255.05](#) [514/256](#) [514/275](#) [514/307](#) [544/105](#) [544/128](#) [544/328](#) [544/329](#) [544/331](#) [544/353](#) [544/363](#) [544/405](#) [544/58.2](#) [546/146](#) [546/147](#)

Family:

Publication number	Publication date	Application number	Application date
AU2013364163 AA	20140626	AU20130364163	20131220
AU2018202150 AA	20180419	AU20180202150	20180326
BR112015014590 A2	20171121	BR20151114590	20131220
CA2894228 AA	20150605	CA20132894228	20131220
CL2015001790 A1	20150921	CL20150001790	20150619
CN105452226 A	20160330	CN201380070441	20131220
CN105452226 B	20170912	CN201380070441	20131220
CR20150371 A	20151109	CR20150000371	20150713
DOP2015000158 A	20151130	DO20150000158	20150619
EA027908 B1	20170929	EA20150090975	20131220
EA201590975 A1	20160129	EA20150090975	20131220
EP2935222 A2	20151028	EP20130821599	20131220
HK1212690 A1	20160617	HK20160100586	20160120
ID201604263 A	20160701	ID2015P0004361	20131220
IL239296 A0	20150730	IL20130239296	20131220
IN02289KN2015 A	20160205	IN2015KN02289	20150715
JP2016505596 T2	20160225	JP20150549821T	20131220
KR20150112953 A	20151007	KR20157019530	20131220
MA38280 A1	20171031	MA20130038280	20131220
MX2015008052 A1	20160818	MX20150008052	20131220
PE15012015 A1	20151108	PE20150001047	20131220
PH2015501351 A	20150907	PH20150501351	20150615
US2014329794 AA	20141106	US20130136569	20131220
US2015252031 AA	20150910	US20150619371	20150211
US2015344434 AA	20151203	US20130654253	20131220
US2017027935 AA	20170202	US20160054193	20160226
US2017334861 AA	20171123	US20170419260	20170130
US2018098987 AA	20180412	US20170586775	20170504

US8993555 BB	20150331	US20130136569	20131220
US9365519 BB	20160614	US20150619371	20150211
US9604930 BB	20170328	US20130654253	20131220
US9675614 BB	20170613	US20160054193	20160226
WO14100719 A2	20140626	WO2013US77235	20131220
WO14100719 A3	20140814	WO2013US77235	20131220
ZA201505212 A	20161026	ZA20150005212	20131220

Priority:

US20120745485P	20121221	US20130790525P	20130315	US20130136569	20131220
US20130654253	20131220	WO2013US77235	20131220	US20150619371	20150211
US20150654253	20150619	US20160054193	20160226	US20170419260	20170130
US20170586775	20170504	AU20180202150	20180326		

Probable Assignee: EPIZYME INC

Assignee(s): (std): EPIZYME INC

Assignee(s): MUNCHHOF MICHAEL JOHN ; JIN LEI ; BORIACK SJODIN PAULA ANN ; CHESWORTH RICHARD ; DUNCAN KENNETH W

Inventor(s): (std): ANN BORIACK SJODIN PAULA ; JOHN MUNCHHOF MICHAEL ; KENNETH W DUNCAN ; LEI JIN ; MICHAEL JOHN MUNCHHOF ; PAULA ANN BORIACK SJODIN ; RICHARD CHESWORTH ; MUNCHHOF MICHAEL JOHN ; JIN LEI ; DUNCAN KENNETH W ; CHESWORTH RICHARD ; BORIACK SJODIN PAULA ANN

Agent(s): PIZZEYS; PIZZEYS PATENT AND TRADE MARK ATTORNEYS PTY LTD; BERESKIN AND PARR LLP SENCRL SRL; ESTUDIO CAREY LTDA; HARRIS JENNIFER LUCY; GEORGE WIDJOJO AND PARTNERS; WOLF GREENFIELD AND SACKS PC; BAKER C HUNTER

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 HW 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
AU2013364163 AA	20140626	LSPB	+	published / reissued	
AU2018202150 AA	20180419	LSPB	+	published / reissued	
CA2894228 AA	20150605	LSPB	+	published / reissued	
CL2015001790 A1	20150921	LSPB	+	published / reissued	
CN105452226 A	20160330	LSPB	+	published / reissued	
CN105452226 A	20160330	LSPB	+C06	PUBLICATION	
CN105452226 A	20170912	LSGT	+GR01	PATENT GRANT	
CN105452226 B	20170912	LSGT	+	granted / extensions (spc, cpc, pte)	

CN105452226 B	20331220	PEXP		Calculated Patent Term Expiry	
CR20150371 A	20151109	LSPB	+	published / reissued	
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EP2935222 A2	20151028	LSPB	+	published / reissued	
EP2935222 A2	20151028	LSSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20150611
EP2935222 A2	20160622	LSSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 20160520
EP2935222 A2	20171101	LSGT	+INTG	ANNOUNCEMENT OF INTENTION TO GRANT	EFFECTIVE DATE : 20171009
EP2935222 A2	20180418	LSGT	+INTG	ANNOUNCEMENT OF INTENTION TO GRANT	EFFECTIVE DATE : 20180321
HK1212690 A1	20160617	LSGT	+	granted / extensions (spc, cpc, pte)	
HK1212690 A1	20360120	PEXP		Calculated Patent Term Expiry	
ID201604263 A	20160701	LSPB	+	published / reissued	
IN02289KN2015 A	20160205	LSPB	+	published / reissued	
JP2016505596 T2	20160225	LSPB	+	published / reissued	
JP2016505596 T2	20161215	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20161215
JP2016505596 T2	20161215	LSSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20161215
JP2016505596 T2	20171205	LSSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20171205
KR20150112953 A	20151007	LSPB	+	published / reissued	
MA20200 A1	20171021	LSPB	+	published / reissued	

				reissued	
MX2015008052 A1	20160818	LSPB	+	published / reissued	
PE15012015 A1	20151108	LSPB	+	published / reissued	
PH2015501351 A	20150907	LSPB	+	published / reissued	
US2014329794 AA	20141106	LSPB	+	published / reissued	
US2014329794 AA	20140117	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : EPIZYME, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:DUNCAN, KENNETH W.; CHESWORTH, RICHARD; BORIACK-SJODIN, PAULA ANN; AND OTHERS; SIGNING DATES FROM 20130508 TO 20130523; REEL/FRAME:031994/0724
US2015252031 AA	20150910	LSPB	+	published / reissued	
US2015344434 AA	20151203	LSPB	+	published / reissued	
US2015344434 AA	20140529	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : EPIZYME, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:DUNCAN, KENNETH W.; CHESWORTH, RICHARD; BORIACK-SJODIN, PAULA ANN; AND OTHERS; SIGNING DATES FROM 20140407 TO 20140429; REEL/FRAME:032990/0093
US2015344434 AA	20150626	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : EPIZYME, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:DUNCAN, KENNETH W.; CHESWORTH, RICHARD; BORIACK-SJODIN, PAULA ANN; AND OTHERS; SIGNING DATES FROM 20140407 TO 20140429; REEL/FRAME:035967/0319
US2017027935 AA	20170202	LSPB	+	published / reissued	
US2017027935 AA	20160318	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : EPIZYME, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:DUNCAN, KENNETH W.; CHESWORTH, RICHARD; BORIACK-SJODIN,

					PAULA ANN; AND OTHERS; SIGNING DATES FROM 20130508 TO 20130523; REEL/FRAME:038029/0853
US2017027935 AA	20170221	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2017027935 AA	20170505	LSFE	+PPV1	Publications -- Issue Fee Payment Verified	
US2017334861 AA	20171123	LSPB	+	published / reissued	
US2017334861 AA	20170215	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : EPIZYME, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:DUNCAN, KENNETH W.; CHESWORTH, RICHARD; BORIACK-SJODIN, PAULA ANN; AND OTHERS; SIGNING DATES FROM 20140407 TO 20140429; REEL/FRAME:041257/0097
US2017334861 AA	20170914	LSES	NFA1	Non Final Action Mailed	
US2018098987 AA	20180412	LSPB	+	published / reissued	
US2018098987 AA	20180314	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : EPIZYME, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:DUNCAN, KENNETH W.; CHESWORTH, RICHARD; BORIACK-SJODIN, PAULA ANN; AND OTHERS; SIGNING DATES FROM 20130508 TO 20130523; REEL/FRAME:045202/0293
US2018098987 AA	20180404	LSWD	-EAB1	Expressly Abandoned -- During Examination	
US8993555 BB	20150331	LSGT	+	granted / extensions (spc, cpc, pte)	
US8993555 BB	20150311	LSGT	PAT1	Patented Case	
US8993555 BB	20331220	PEXP		Calculated Patent Term Expiry	
US9365519 BB	20160614	LSGT	+	granted / extensions (spc, cpc, pte)	
US0265510 BB	20150227	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER

OWNER : EPIZYME, INC.,
MASSACHUSETTS
OLDPARTY : ASSIGNMENT OF
ASSIGNORS INTEREST;
ASSIGNORS:DUNCAN,
KENNETH W.; CHESWORTH,
RICHARD; BORIACK-SJODIN,
PAULA ANN; AND OTHERS;
SIGNING DATES FROM
20130508 TO 20130523;
REEL/FRAME:035045/0720

US9365519 BB	20150930	LSSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US9365519 BB	20160525	LSGT	PAT1	Patented Case	
US9365519 BB	20170815	LSRE	CC	CERTIFICATE OF CORRECTION	
US9365519 BB	20350211	PEXP		Calculated Patent Term Expiry	
US9604930 BB	20170328	LSGT	+	granted / extensions (spc, cpc, pte)	
US9604930 BB	20170308	LSGT	PAT1	Patented Case	
US9604930 BB	20331220	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
US9675614 BB	20170613	LSGT	+	granted / extensions (spc, cpc, pte)	
US9675614 BB	20170524	LSGT	PAT1	Patented Case	
US9675614 BB	20360226	PEXP		Calculated Patent Term Expiry	
WO14100719 A2	20140626	LSPB	+	published / reissued	
WO14100719 A3	20150605	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2894228 COUNTRY OF REF DOCUMENT : CA
WO14100719 A3	20150609	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 239296 COUNTRY OF REF DOCUMENT : IL
WO14100719 A3	20150617	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 201590975 COUNTRY OF REF DOCUMENT : EA
WO14100719 A3	20150619	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 14654253 COUNTRY OF REF DOCUMENT : US

PHASE					
WO14100719 A3	20150622	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2015549821 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO14100719 A3	20150625	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2013364163 COUNTRY OF REF DOCUMENT : AU DATE OF REF DOCUMENT : 20131220 KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO14100719 A3	20150717	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 20157019530 COUNTRY OF REF DOCUMENT : KR KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO14100719 A3	20171121	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 112015014590 COUNTRY OF REF DOCUMENT : BR KIND CODE OF REF DOCUMENT : A2 DESIGNATED STATE(S) : EFFECTIVE DATE : 20150618
ZA201505212 A	20161026	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA201505212 A	20350719	PEXP		Calculated Patent Term Expiry	

Title: NOVEL COMPOUNDS AND COMPOSITIONS FOR INHIBITION OF FASN

Abstract: The present invention relates to compounds and composition for inhibition of FASN, their synthesis, applications, and antidotes. An illustrative compound of the invention is shown below:



Classifications:

International (IPC 8-9): [A61K](#) [A61K31/337](#) [A61K31/4188](#) [A61K31/4545](#) [A61K31/4745](#) [A61K31/495](#) [A61K31/496](#) [A61K31/4965](#) [A61K31/497](#) [A61K31/4985](#) [A61K31/5025](#) [A61K31/506](#) [A61K31/513](#) [A61K31/517](#) [A61K31/519](#) [A61K31/5377](#) [A61K31/55](#) [A61K31/675](#) [A61K31/704](#) [A61K31/7048](#) [A61K31/7068](#) [A61K33/24](#) [A61K45/00](#) [A61K45/06](#) [A61P1/04](#) [A61P1/18](#) [A61P11/00](#) [A61P11/06](#) [A61P13/02](#) [A61P13/08](#) [A61P13/10](#) [A61P13/12](#) [A61P15/00](#) [A61P17/00](#) [A61P17/06](#) [A61P19/02](#) [A61P19/08](#) [A61P19/10](#) [A61P25/00](#) [A61P29/00](#) [A61P3/00](#) [A61P3/04](#) [A61P31/12](#) [A61P31/14](#) [A61P31/18](#) [A61P31/20](#) [A61P31/22](#) [A61P35/00](#) [A61P35/02](#) [A61P37/02](#) [A61P37/06](#) [A61P37/08](#) [A61P43/00](#) [A61P7/00](#) [A61P9/10](#) [C07D205/04](#) [C07D207/27](#) [C07D209/08](#) [C07D209/12](#) [C07D209/18](#) [C07D209/24](#) [C07D209/34](#) [C07D209/42](#) [C07D209/44](#) [C07D211/34](#) [C07D213/56](#) [C07D213/61](#) [C07D213/65](#) [C07D213/69](#) [C07D213/75](#) [C07D213/76](#) [C07D213/81](#) [C07D215/06](#) [C07D215/12](#) [C07D215/14](#) [C07D215/18](#) [C07D215/20](#) [C07D215/227](#) [C07D217/02](#) [C07D217/04](#) [C07D217/16](#) [C07D217/22](#) [C07D223/16](#) [C07D231/12](#) [C07D231/56](#) [C07D233/34](#) [C07D233/76](#) [C07D235/06](#) [C07D235/08](#) [C07D235/18](#) [C07D235/26](#) [C07D239/28](#) [C07D239/74](#) [C07D241/04](#) [C07D241/36](#) [C07D249/06](#) [C07D249/14](#) [C07D249/18](#) [C07D257/04](#) [C07D261/14](#) [C07D261/20](#) [C07D263/56](#) [C07D263/57](#) [C07D263/58](#) [C07D271/06](#) [C07D271/12](#) [C07D275/03](#) [C07D277/40](#) [C07D277/62](#) [C07D277/66](#) [C07D285/12](#) [C07D285/14](#) [C07D295/192](#) [C07D305/06](#) [C07D305/08](#) [C07D307/79](#) [C07D307/85](#) [C07D309/08](#) [C07D401/04](#) [C07D401/06](#) [C07D401/10](#) [C07D403/04](#) [C07D403/06](#) [C07D403/10](#) [C07D405/04](#) [C07D405/06](#) [C07D405/12](#) [C07D405/14](#) [C07D413/10](#) [C07D413/12](#) [C07D417/04](#) [C07D417/10](#) [C07D417/12](#) [C07D471/04](#) [C07D487/04](#) [C07D491/048](#) [C07D495/04](#) [C07D513/04](#) (Advanced/Invention);

[A61K](#) (Subclass/Invention)

CPC: [A61K31/497](#) [C07D241/04](#) [C07D401/06](#) [C07D403/06](#) [A61K31/495](#) [C07D209/08](#) [A61K31/496](#) [C07D231/12](#) [C07D213/65](#) [C07D217/16](#) [C07D235/08](#) [C07D213/69](#) [C07D401/04](#) [C07D417/04](#) [A61K31/506](#) [C07D403/04](#) [A61K31/4985](#) [A61K31/5025](#) [C07D295/192](#) [A61K45/06](#) [C07D215/14](#) [C07D231/56](#) [C07D471/04](#) [C07D487/04](#) [A61K31/4965](#) [C07D209/18](#) [C07D213/56](#) [C07D257/04](#) [C07D263/57](#) [C07D271/12](#) [C07D277/62](#) [C07D277/66](#) [C07D305/08](#) [C07D405/12](#) [C07D413/12](#) [C07D417/12](#) [C07D491/048](#) [C07D495/04](#) [C07D513/04](#) [A61K2300/00](#)

US: [424/152.1](#) [424/649](#) [424/85.7](#) [424/94.6](#) [514/210.18](#) [514/248](#) [514/249](#) [514/252.11](#) [514/252.18](#) [514/253.04](#) [514/253.05](#) [514/253.06](#) [514/253.09](#) [514/253.12](#) [514/254.05](#) [514/254.06](#) [514/254.09](#) [514/255.01](#) [514/34](#) [514/90](#) [544/236](#) [544/295](#) [544/350](#) [544/357](#) [544/360](#) [544/362](#) [544/363](#) [544/364](#) [544/370](#) [544/371](#) [544/373](#) [544/387](#)

Family:

Publication number	Publication date	Application number	Application date
AU2014249003 AA	20141009	AU20140249003	20140311
AU2017268536 AA	20171221	AU20170268536	20171128
BR112015023279 A2	20170718	BR20151123279	20140311
CA2905751 AA	20150911	CA20142905751	20140311
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CR20150541 A	20160104	CR20150000541	20151013
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NO20151329 A	20151006	NO20150001329	20151006
PE01222016 A1	20160212	PE20150001983	20140311
PH2015502097 A	20160111	PH20150502097	20150914
RU2015141772 A	20170419	RU20150141772	20140311
SG10201707409P A1	20171030	SG20171007409	20140311
SG11201507486S A1	20151029	SG20151107486	20140311
TN2015000420 A1	20170103	TN20150000420	20150914
US2016002188 AA	20160107	US20140775877	20140311
US2018050997 AA	20180222	US20170786539	20171017
WO14164749 A1	20141009	WO2014US23388	20140311
WO14164767 A1	20141009	WO2014US23420	20140311

Priority:

US20130779962P 20130313	US20130779908P 20130313	AU20140249003 20140311
US20140775877 20140311	WO2014US23388 20140311	US20150775877 20150914
US20170786539 20171017	AU20170268536 20171128	

Probable Assignee: FORMA THERAPEUTICS INC

Assignee(s): (std): FORMA THERAPEUTICS ; FORMA THERAPEUTICS INC

Assignee(s): LANCIA DAVID R ; LANCIA DAVID R JR ; LOCH JAMES ; MARTIN MATTHEW W ; LU WEI ; SCHILLER SHAWN ER ; LI HONGBIN ; TEBBE MARK J ; MILLAN DAVID S ; BAIR KENNETH W

Inventor(s): (std): LANCIA JR DAVID R ; LI HONGBIN ; LOCH JAMES ; LU WEI ; MARK J TEBBE ; MARTIN MATTHEW W ; MATTHEW W MARTIN ; MILLAN DAVID S ; SCHILLER SHAWN ; BAIR KENNERTH W ; BAIR KENNETH W ; DAVID R LANCIA ; DAVID S MILLAN ; KENNETH W BAIR ; LANCIA DAVID R ; SHAWN E R SCHILLER ; TEBBE MARK J ; WEI LU ; SCHILLER SHAWN E R ; JAMES LOCH ; HONGBIN LI

Inventor(s): LANCIA JR ; WEILU ; LANCIA DAVID R JR ; SCHILLER SHAWN ER

Agent(s): BALDWIN'S INTELLECTUAL PROPERTY; DAVIES COLLISON CAVE PTY LTD; OSLER HOSKIN AND HARCOURT LLP; BORDEN LADNER GERVAIS LLP; SILVA AND CIA PATENTES Y MARCAS LTDA; CAREY; WICHMANN HENDRIK; PARDOMUAN OLOAN LUBIS; DREW AND NAPIER LLC; GEARHART RICHARD

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
AU2014249003 AA	20141009	LSPB	+	published / reissued	
AU2014249003 AA	20171019	LSRE	DA3	AMENDMENTS MADE SECTION 104	TEXT : THE NATURE OF THE AMENDMENT IS: AMEND THE NAME OF THE INVENTOR TO READ BAIR, KENNETH W.; LANCIA, JR., DAVID R ; LI HONGBIN.

					LOCH, JAMES; LU, WEI; MARTIN, MATTHEW W.; MILLAN, DAVID S.; SCHILLER, SHAWN E.R. AND TEBBE, MARK J.	
AU2014249003 AA	20180104	LSLE	-MK5	APPLICATION LAPSED SECTION 142(2)(E) - PATENT REQUEST AND COMPL. SPECIFICATION NOT ACCEPTED		
AU2017268536 AA	20171221	LSPB	+	published / reissued		
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CL2015002698 A1	20160819	LSPB	+	published / reissued		
CN105492008 A	20160413	LSPB	+	published / reissued		
CN105492008 A	20160413	LSPB	+C06	PUBLICATION		
CR20150541 A	20160104	LSPB	+	published / reissued		
CU20150120 A7	20160425	LSPB	+	published / reissued		
EP2968316 A1	20160120	LSPB	+	published / reissued		
EP2968316 A1	20160120	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20151012	
EP2968316 A4	20160921	LSES	+A4	DESPATCH OF SUPPLEMENTARY SEARCH REPORT	EFFECTIVE DATE : 20160822	
EP2968316 A4	20160921	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : A61K 31/496 20060101ALI20160816BHEP	
EP2968316 A4	20160921	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : A61P 35/00 20060101ALI20160816BHEP	

EP2968316 A4	20160921	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : C07D 295/192 20060101AFI20160816BHEP
EP2968316 A4	20180221	LSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 20180119
HK1220409 A1	20170505	LSGT	+	granted / extensions (spc, cpc, pte)	
HK1220409 A1	20360720	PEXP		Calculated Patent Term Expiry	
ID201700795 A	20170210	LSPB	+	published / reissued	
IN09539DN2015 A	20160226	LSPB	+	published / reissued	
JP2016517412 T2	20160616	LSPB	+	published / reissued	
JP2016517412 T2	20170302	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20170302
JP2016517412 T2	20171005	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20171005
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KR20150143479 A	20151223	LSPB	+	published / reissued	
MX2015012470 A1	20160628	LSPB	+	published / reissued	
NO20151329 A	20151006	LSPB	+	published / reissued	
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				reissued	
SG11201507486S A1	20151029	LSPB	+	published / reissued	
TN2015000420 A1	20170103	LSPB	+	published / reissued	
US2016002188 AA	20160107	LSPB	+	published / reissued	
US2016002188 AA	20150914	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : FORMA THERAPEUTICS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BAIR, KENNETH W.; LANCIA, DAVID R., JR.; LI, HONGBIN; AND OTHERS; SIGNING DATES FROM 20130618 TO 20130620; REEL/FRAME:036555/0609
US2016002188 AA	20151110	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : FORMA THERAPEUTICS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:SCHILLER, SHAWN E.R.; REEL/FRAME:037000/0182 EFFECTIVE DATE : 20151109
US2016002188 AA	20170713	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2016002188 AA	20170804	LSFE	-AWA4	Awaiting TC Resp., Issue Fee Not Paid	
US2016002188 AA	20170804	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2016002188 AA	20171018	LSFE	+PPV1	Publications -- Issue Fee Payment Verified	
US2016002188 AA	20171025	LSFE	+AWA3	Awaiting TC Resp, Issue Fee Payment Verified	
US2016002188 AA	20171025	LSFE	+PPV1	Publications -- Issue Fee Payment Verified	
US2016002188 AA	20180111	LSES	+NAM2	Allowed - Notice	

				of Allowance Not Yet Mailed	
US2016002188 AA	20180111	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2018050997 AA	20180222	LSPB	+	published / reissued	
US2018050997 AA	20180220	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : FORMA THERAPEUTICS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BAIR, KENNETH W.; LANCIA, DAVID R., JR.; LI, HONGBIN; AND OTHERS; SIGNING DATES FROM 20130618 TO 20130620; REEL/FRAME:044982/0516
US2018050997 AA	20180220	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : FORMA THERAPEUTICS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:SCHILLER, SHAWN E.R.; REEL/FRAME:044982/0534 EFFECTIVE DATE : 20151109
US2018050997 AA	20180402	LSES	-NFA2	Non Final Action Counted, Not Yet Mailed	
US2018050997 AA	20180403	LSES	NFA1	Non Final Action Mailed	
WO14164749 A1	20141009	LSPB	+	published / reissued	
WO14164749 A1	20150911	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2905751 COUNTRY OF REF DOCUMENT : CA
WO14164749 A1	20150911	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2016501223 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
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WO14164749 A1	20150914	LSNP	ENP	NON ENTRY	REF COUNTRY CODE : DE

				INTO THE NATIONAL PHASE IN:	
WO14164749 A1	20150917	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 241699 COUNTRY OF REF DOCUMENT : IL
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WO14164749 A1	20151013	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 20157028847 COUNTRY OF REF DOCUMENT : KR KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO14164749 A1	20151015	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2014249003 COUNTRY OF REF DOCUMENT : AU DATE OF REF DOCUMENT : 20140311 KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO14164749 A1	20170718	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 112015023279 COUNTRY OF REF DOCUMENT : BR KIND CODE OF REF DOCUMENT : A2 DESIGNATED STATE(S) : EFFECTIVE DATE : 20150914
WO14164767 A1	20141009	LSPB	+	published / reissued	
WO14164767 A1	20150914	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO14164767 A1	20160406	LSNE	-122	EP: PCT APPLICATION NON-ENTRY IN EUROPEAN PHASE	REF DOCUMENT NUMBER : 14780232 COUNTRY OF REF DOCUMENT : EP KIND CODE OF REF DOCUMENT : A1 DESIGNATED STATE(S) :

Title: NEW 3,4-DIHYDRO-2H-ISOQUINOLINE-1-ONE AND 2,3-DIHYDRO-ISOINDOL-1-ONE COMPOUNDS

Abstract: The invention provides novel compounds having the general formula (I) wherein R₁, R₂, R₃, R₄, R₅, R₆, R₇, R₈, R₉, R₁₀, R₁₁, R₁₂, R₁₃, R₁₄, R₁₅, A, m, n and p are as described herein, compositions including the compounds and methods of using the compounds.



Classifications:

International (IPC 8-9): [A61K31/4427](#) [A61K31/4439](#) [A61K31/444](#) [A61K31/4545](#) [A61K31/4725](#) [A61P13/12](#) [A61P43/00](#) [A61P5/42](#) [A61P9/00](#) [A61P9/04](#) [A61P9/12](#) [C07D401/14](#) [C07D403/14](#) [C07D413/14](#) (Advanced/Invention);

[A61K](#) [A61P](#) [C07D](#) (Subclass/Invention)

CPC: [C07D401/14](#) [C07D413/14](#)

US: [514/210.18](#) [514/210.21](#) [514/318](#) [514/339](#) [546/141](#) [546/15](#) [546/194](#) [546/256](#) [546/272.1](#) [546/275.4](#) [546/277.1](#)

Family:

Publication number	Publication date	Application number	Application date
AR096425 AA	20151230	AR2014P102073	20140526
BR112015029691 A2	20170725	BR20151129691	20140526
CA2902848 AA	20150827	CA20142902848	20140526
CN105143205 A	20151209	CN201480023910	20140526
CN105143205 B	20180202	CN201480023910	20140526
EP3004076 A1	20160413	EP20140726363	20140526
HK1213556 A1	20160708	HK20160101487	20160211
JP2016520106 T2	20160711	JP20160515760T	20140526
KR20160014610 A	20160211	KR20157033715	20140526
MX2015015058 A1	20160211	MX20150015058	20140526
RU2015149956 A	20170704	RU20150149956	20140526
RU2015149956 A3	20180319	RU20150149956	20140526
TW201534596 A	20150916	TW20140118319	20140526
US2016075688 AA	20160317	US20150947768	20151120
US9695152 BB	20170704	US20150947768	20151120
WO14191340 A1	20141204	WO2014EP60794	20140526

Priority:

CN20013076285 20130527 WO2013CN076285 20130527 CN201480023910 20140526
 WO2014EP60794 20140526 RU20150149956 20140526

Probable Assignee: HOFFMANN LA ROCHE INC

Assignee(s): (std): F HOFFMANN LA ROCHE AG ; HOFFMANN LA ROCHE INC ; HOFFMANN LA ROCHE

Assignee(s): KUHN BERND ; MAERKI HANS P ; MARTIN RAINER E ; LIU YONGFU ; HORNSPERGER BENOIT ; FHOFFMANN LA ROCHE AG ; TAN XUEFEI ; ZHOU MINGWEI ; MAYWEG ALEXANDER V ; WANG LISHA ; ROCHE R AND D CENTER CHINA LTD ; AEBI JOHANNES ; AMREIN KURT ; CHEN WENMING

Inventor(s): (std): AEBI JOHANNES ; AMREIN KURT ; CHEN WEN MING ; CHEN WENMING ; HORNSPERGER BENOIT ; KUHN BERND ; LIU YONG FU ; LIU YONGFU ; MAERKI HANS P ; MARTIN RAINER E ; MAYWEG ALEXANDER ; MAYWEG ALEXANDER V ; TAN XUEFEI ; WANG LI SHA ; WANG LISHA ; XUEFEI TAI ; ZHOU MING WEI ; ZHOU MINGWEI ; YONGFU LIU ; XUEFEI TAN ; WENMING CHEN ; RAINER E MARTIN ; MINGWEI ZHOU ; LISHA WANG ; KURT AMREIN ; JOHANNES AEBI ;

HANS P MAERKI ; BERND KUHN ; BENOIT HORNSPERGER ; ALEXANDER V
MAYWEG ; MAYWEG ALEXANDER V V ; MARTIN RAINER E E ; MAERKI HANS P P

Agent(s):

GOWLING LAFLEUR HENDERSON LLP; BERNARD GUILLAUME; TSUKUNI AND
ASSOCIATES

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
AR096425 AA	20151230	LSPB	+	published / reissued	
BR112015029691 A2	20180306	LSES	B07D	TECHNICAL EXAMINATION (OPINION) RELATED TO ARTICLE 229 OF INDUSTRIAL PROPERTY LAW	
CA2902848 AA	20150827	LSPB	+	published / reissued	
CN105143205 A	20151209	LSPB	+	published / reissued	
CN105143205 A	20151209	LSPB	+C06	PUBLICATION	
CN105143205 B	20180202	LSGT	+	granted / extensions (spc, cpc, pte)	
CN105143205 B	20180202	LSGT	+GR01	PATENT GRANT	
CN105143205 B	20340526	PEXP		Calculated Patent Term Expiry	
EP3004076 A1	20160413	LSPB	+	published / reissued	
EP3004076 A1	20160413	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20160104
EP3004076 A1	20161214	LSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 20161110
HK1213556 A1	20160708	LSGT	+	granted / extensions (spc, cpc, pte)	
HK1213556 A1	20360211	PEXP		Calculated Patent Term Expiry	
JP2016520106 T2	20160711	LSPB	+	published / reissued	

JP2016520106 T2	20170519	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20170519
JP2016520106 T2	20180227	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20180227
KR20160014610 A	20160211	LSPB	+	published / reissued	
MX2015015058 A1	20160211	LSPB	+	published / reissued	
RU2015149956 A	20170704	LSPB	+	published / reissued	
TW201534596 A	20150916	LSPB	+	published / reissued	
US2016075688 AA	20160317	LSPB	+	published / reissued	
US2016075688 AA	20170329	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2016075688 AA	20170420	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ROCHE R& D CENTER (CHINA) LTD., CHINA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:TAN, XUEFEI; LI, YONGFU; WANG, LISHA; AND OTHERS; SIGNING DATES FROM 20130813 TO 20130913; REEL/FRAME:042079/0764
US2016075688 AA	20170420	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ROCHE R& D CENTER (CHINA) LTD., CHINA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:CHEN, WENMING; REEL/FRAME:042079/0790 EFFECTIVE DATE : 20130825
US2016075688 AA	20170420	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : F. HOFFMANN-LA ROCHE AG, SWITZERLAND OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:MAYWEG, ALEXANDER V.; MAERKI, HANS P.; AMREIN, KURT; AND OTHERS; REEL/FRAME:042079/0823 EFFECTIVE DATE : 20130802
US2016075688 AA	20170420	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER

					OWNER : F. HOFFMANN-LA ROCHE AG, SWITZERLAND OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:ROCHE R& D CENTER (CHINA) LTD.; REEL/FRAME:042079/0810 EFFECTIVE DATE : 20131115
US2016075688 AA	20170420	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : HOFFMANN-LA ROCHE INC., NEW JERSEY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:F. HOFFMANN-LA ROCHE AG; REEL/FRAME:042079/0843 EFFECTIVE DATE : 20140217
US2016075688 AA	20170531	LSFE	+PPR1	Publications -- Issue Fee Payment Received	
US2016075688 AA	20170601	LSFE	+PPV1	Publications -- Issue Fee Payment Verified	
US9695152 BB	20170704	LSGT	+	granted / extensions (spc, cpc, pte)	
US9695152 BB	20170614	LSGT	PAT1	Patented Case	
US9695152 BB	20351120	PEXP		Calculated Patent Term Expiry	
WO14191340 A1	20141204	LSPB	+	published / reissued	
WO14191340 A1	20150827	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2902848 COUNTRY OF REF DOCUMENT : CA
WO14191340 A1	20151126	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 20157033715 COUNTRY OF REF DOCUMENT : KR KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO14191340 A1	20151127	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2016515760 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
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WO14191340 A1	20170725	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 112015029691 COUNTRY OF REF DOCUMENT : BR KIND CODE OF REF DOCUMENT : A2 DESIGNATED STATE(S) : EFFECTIVE DATE : 20151126

Title: SUBSTITUTED PYRIDINE DERIVATIVES USEFUL AS GSK-3 INHIBITORS

Abstract: The disclosure generally relates to compounds of formula I, including their salts, as well as compositions and methods of using the compounds. The compounds are ligands, antagonists of the NR2B receptor and may be useful for the



treatment of various disorders of the central nervous system.



Classifications:

International (IPC 8-9): [A61K31/4427](#) [A61K31/4436](#) [A61K31/444](#) [A61K31/4545](#) [A61K31/46](#) [A61K31/506](#) [A61K31/5377](#) [A61K31/55](#) [A61P21/02](#) [A61P25/00](#) [A61P25/02](#) [A61P25/14](#) [A61P25/16](#) [A61P25/28](#) [A61P43/00](#) [A61P9/00](#) [C07D](#) [C07D213/81](#) [C07D401/04](#) [C07D401/12](#) [C07D401/14](#) [C07D405/04](#) [C07D405/14](#) [C07D409/04](#) [C07D409/14](#) [C07D411/14](#) [C07D413/04](#) [C07D413/14](#) [C07D417/04](#) [C07D417/12](#) [C07D417/14](#) [C07D471/04](#) [C07D471/12](#) [C07D487/08](#) [C07D513/04](#) (Advanced/Invention);

[C07D](#) (Subclass/Invention)

CPC: [A61K31/4436](#) [A61K31/444](#) [C07D471/04](#) [C07D471/12](#) [C07D409/14](#) [C07D405/14](#) [C07D413/14](#) [C07D487/08](#) [C07D417/14](#) [C07D513/04](#) [C07D401/12](#) [C07D401/14](#) [C07D417/12](#) [A61K31/4427](#) [C07D213/81](#) [C07D401/04](#) [C07D405/04](#) [C07D409/04](#) [C07D413/04](#) [C07D417/04](#)

US: [514/217.04](#)

Family:

Publication number	Publication date	Application number	Application date
AU2014347026 AA	20150514	AU20140347026	20141103
BR112016009972 A2	20170801	BR20161109972	20141103
CA2929502 AA	20160503	CA20142929502	20141103
CN105849097 A	20160810	CN201480072310	20141103
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EP3066092 A1	20160914	EP20140802989	20141103
IL245443 A0	20160630	IL20140245443	20141103
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MX2016005759 A1	20160718	MX20160005759	20141103
US2016289210 AA	20161006	US20140033770	20141103
US9809573 BB	20171107	US20140033770	20141103
WO15069593 A1	20150514	WO2014US63666	20141103

Priority:

US20130900547P 20131106 US20140033770 20141103 WO2014US63666 20141103

Probable Assignee: BRISTOL MYERS SQUIBB CO

Assignee(s): (std): BRISTOL MYERS SQUIBB CO ; SQUIBB BRISTOL MYERS CO

Assignee(s): SIVAPRAKASAM PRASANNA ; LUO GUANGLIN ; MACOR JOHN E ; CHEN LING ; DUBOWCHIK GENE M ; JACUTIN PORTE SWANEE E

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Agent(s): AJ PARK; GOWLING WLG CANADA LLP; REITSTOETTER KINZEBACH; SAMEJIMA MUTSUMI; SHINAGAWA HISATOSHI; JAMES; EPPERSON JAMES ET AL

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

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AU2014347026 AA	20150514	LSPB	+	published / reissued	
CA2929502 AA	20160503	LSPB	+	published / reissued	
CN105849097 A	20160810	LSPB	+	published / reissued	
CN105849097 A	20160810	LSPB	+C06	PUBLICATION	
EA201690846 A1	20160831	LSPB	+	published / reissued	
EP3066092 A1	20160914	LSPB	+	published / reissued	
EP3066092 A1	20160914	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20160603
EP3066092 A1	20170524	LSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 20170421
EP3066092 A1	20171129	LSGT	+INTG	ANNOUNCEMENT OF INTENTION TO GRANT	EFFECTIVE DATE : 20171106
EP3066092 A1	20180411	LSGT	+INTG	ANNOUNCEMENT OF INTENTION TO GRANT	EFFECTIVE DATE : 20180316
IN201617018725 A	20160831	LSPB	+	published / reissued	
JP2017500287 T2	20170105	LSPB	+	published / reissued	
KR20160079092 A	20160705	LSPB	+	published / reissued	
MX2016005759 A1	20160718	LSPB	+	published / reissued	
US2016289210 AA	20161006	LSPB	+	published / reissued	
US2016289210 AA	20170202	LSES	NFA1	Non Final Action Mailed	
US2016289210 AA	20170627	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2016289210 AA	20170926	LSFE	+PPV1	Publications -- Issue Fee Payment Verified	
US9809573 BB	20171107	LSGT	+	granted / extensions (spc, cpc, pte)	
US9809573 BB	20171018	LSGT	PAT1	Patented Case	
US9809573 BB	20341103	PEXP		Calculated Patent Term Expiry	
WO15069593 A1	20150514	LSPB	+	published / reissued	

WO15069593 A1	20160502	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 15033770 COUNTRY OF REF DOCUMENT : US
WO15069593 A1	20160503	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2929502 COUNTRY OF REF DOCUMENT : CA
WO15069593 A1	20160503	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 245443 COUNTRY OF REF DOCUMENT : IL
WO15069593 A1	20160506	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2016528215 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO15069593 A1	20160506	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO15069593 A1	20160523	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 201690846 COUNTRY OF REF DOCUMENT : EA
WO15069593 A1	20160601	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 20167014614 COUNTRY OF REF DOCUMENT : KR KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO15069593 A1	20160623	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2014347026 COUNTRY OF REF DOCUMENT : AU DATE OF REF DOCUMENT : 20141103 KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO15069593 A1	20170801	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 112016009972 COUNTRY OF REF DOCUMENT : BR KIND CODE OF REF DOCUMENT : A2

DESIGNATED
STATE(S) :
EFFECTIVE DATE :
20160503

Title: BENZOPIPERAZINE COMPOSITIONS AS BET BROMODOMAIN INHIBITORS

Abstract: The present invention relates to inhibitors of bromo and extra terminal (BET) bromodomains that are useful for the treatment of cancer, inflammatory diseases, diabetes, and obesity, having Formula (I): wherein X, Y, Z, R1, R2, R4 and R7 are defined herein.



Classifications:

International (IPC 8-9): [A61K31/498](#) [A61K31/4985](#) [A61K31/506](#) [A61K31/517](#) [A61K31/519](#) [A61K31/53](#) [A61K31/5365](#) [A61K31/5377](#) [A61K31/541](#) [A61K31/55](#) [A61K31/551](#) [A61K31/553](#) [A61K45/06](#) [C07D241/12](#) [C07D241/42](#) [C07D401/04](#) [C07D401/14](#) [C07D403/04](#) [C07D403/10](#) [C07D403/14](#) [C07D405/06](#) [C07D405/14](#) [C07D409/14](#) [C07D413/04](#) [C07D413/14](#) [C07D417/10](#) [C07D417/14](#) [C07D471/04](#) [C07D487/04](#) [C07D498/04](#) (Advanced/Invention)

CPC: [A61K31/53](#) [C07D241/50](#) [C07D401/06](#) [C07D401/10](#) [C07D401/12](#) [C07D403/06](#) [C07D403/12](#) [C07D405/04](#) [C07D405/10](#) [C07D405/12](#) [C07D409/06](#) [C07D409/12](#) [C07D413/06](#) [C07D413/12](#) [C07D417/04](#) [C07D417/06](#) [C07D451/04](#) [C07D487/04](#) [C07D487/08](#) [C07D491/048](#) [C07D495/04](#) [A61K31/5025](#) [C07D241/42](#) [C07D401/04](#) [C07D403/04](#) [C07D403/14](#) [C07D405/06](#) [C07D405/14](#) [C07D409/14](#) [C07D413/04](#) [C07D413/14](#) [C07D417/10](#) [C07D417/14](#) [A61K31/55](#) [A61K31/553](#) [A61K31/498](#) [A61K31/4985](#) [A61K31/519](#) [A61K31/5377](#) [A61K31/541](#) [A61K31/551](#) [C07D498/04](#) [A61K45/06](#) [C07D401/14](#) [C07D403/10](#) [C07D471/04](#) [A61K31/138](#) [A61K31/337](#) [A61K31/427](#) [A61K31/4745](#) [A61K31/513](#) [A61K31/704](#) [A61K31/7048](#) [A61K33/24](#) [A61K31/506](#) [A61K31/517](#)
US: [1/1](#) [424/450](#) [514/210.18](#) [514/210.21](#) [514/218](#) [514/228.2](#) [514/234.8](#) [514/249](#) [540/575](#) [544/116](#) [544/230](#) [544/284](#) [544/295](#) [544/350](#) [544/353](#) [544/58.2](#)

Family:

Publication number	Publication date	Application number	Application date
CN106029076 A	20161012	CN201480073046	20141118
EP3071205 A1	20160928	EP20140862659	20141118
EP3071205 A4	20170510	EP20140862659	20141118
RU2016124178 A	20171220	RU20160124178	20141118
US2015232465 AA	20150820	US20140546896	20141118
US2016256458 AA	20160908	US20160153698	20160512
US2016257699 AA	20160908	US20160153699	20160512
US9422281 BB	20160823	US20140546896	20141118
WO15074081 A1	20150521	WO2014US66235	20141118

Priority:

US20130905633P 20131118	US20140054806P 20140924	US20140546896 20141118
WO2014US66235 20141118	US20160153698 20160512	US20160153699 20160512

Probable Assignee: FORMA THERAPEUTICS INC

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Assignee(s): SCHILLER SHAWN E

Inventor(s): (std): BAIR KENNETH W ; HERBERTZ TORSTEN ; KAUFFMAN GOSS S ; KAUFFMAN GOSS STRYKER ; KAYSER BRICKER KATHERINE J ; LUKE GEORGE P ; MARTIN MATTHEW W ; MILLAN DAVID S ; SCHILLER SHAWN E R ; TALBOT ADAM C ; TEBBE MARK J

Inventor(s): SCHILLER SHAWN ER ; SCHILLER SHAWN E

Agent(s): GRUND MARTIN; COOLEY LLP; FARMER DEAN ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG

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

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
CN106029076 A	20161012	LSPB	+	published / reissued	
CN106029076 A	20161012	LSPB	+C06	PUBLICATION	
EP3071205 A1	20160928	LSPB	+	published / reissued	
EP3071205 A1	20160928	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20160617
EP3071205 A4	20170510	LSES	+A4	DESPATCH OF SUPPLEMENTARY SEARCH REPORT	EFFECTIVE DATE : 20170412
EP3071205 A4	20170510	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : A61K 31/4985 20060101ALI20170406BHEP
EP3071205 A4	20170510	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : C07D 487/04 20060101ALI20170406BHEP
EP3071205 A4	20170510	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : A61K 31/53 20060101AFI20170406BHEP
EP3071205 A4	20180425	LSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 20180322
RU2016124178 A	20171220	LSPB	+	published / reissued	
US2015232465 AA	20150820	LSPB	+	published / reissued	
US2015232465 AA	20150618	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : FORMA THERAPEUTICS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BAIR, KENNETH W; HERBERTZ, TORSTEN; KAUFFMAN, GOSS S; AND OTHERS; SIGNING DATES

					FROM 20150602 TO 20150612; REEL/FRAME:035948/0563
US2016256458 AA	20160908	LSPB	+	published / reissued	
US2016256458 AA	20160726	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : FORMA THERAPEUTICS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BAIR, KENNETH W.; HERBERTZ, TORSTEN; KAUFFMAN, GOSS S.; AND OTHERS; SIGNING DATES FROM 20150602 TO 20150612; REEL/FRAME:039257/0491
US2016256458 AA	20170703	LSES	NFA1	Non Final Action Mailed	
US2016256458 AA	20180406	LSES	+ALW2	Allowed -- Notice of Allowance Not Yet Mailed	
US2016256458 AA	20180406	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2016257699 AA	20160908	LSPB	+	published / reissued	
US2016257699 AA	20160603	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : FORMA THERAPEUTICS, INC., MASSACHUSETTS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BAIR, KENNETH W.; HERBERTZ, TORSTEN; KAUFFMAN, GOSS S.; AND OTHERS; SIGNING DATES FROM 20150602 TO 20150612; REEL/FRAME:038795/0290
US2016257699 AA	20170703	LSES	NFA1	Non Final Action Mailed	
US9422281 BB	20160823	LSGT	+	granted / extensions (spc, cpc, pte)	
US9422281 BB	20151116	LSES	NFA1	Non Final Action Mailed	
US9422281 BB	20160803	LSGT	PAT1	Patented Case	
US9422281 BB	20341118	PEXP		Calculated Patent Term Expiry	
WO15074081 A1	20150521	LSPB	+	published / reissued	

WO15074081 A1	20160518	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO15074081 A1	20160620	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2016124178 COUNTRY OF REF DOCUMENT : RU KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :

Title: PYRROLCARBOXAMIDE DERIVATIVES FOR THE INHIBITION OF ERK5

Abstract: The invention provides compounds of

formula (I) or a tautomer, stereoisomer, N-oxide, pharmaceutically acceptable salt or solvate thereof. The compounds are useful for the prophylaxis or treatment of a disease state or condition mediated by ERK5, in particular cancers.

Classifications:

International (IPC 8-9): [A61K31/506](#) [A61P35/00](#) [C07D401/12](#) [C07D401/14](#) [C07D403/12](#)

[C07D403/14](#) [C07D405/14](#) [C07D413/12](#) [C07D413/14](#) (Advanced/Invention)

CPC: [C07D401/12](#) [C07D401/14](#) [C07D403/12](#) [C07D403/14](#) [C07D405/14](#) [C07D413/12](#) [C07D413/14](#)

Family:

Publication number	Publication date	Application number	Application date
EP3194390 A1	20170726	EP20150770614	20150918
GB201416513 A0	20141105	GB20140016513	20140918
WO16042341 A1	20160324	WO2015GB52707	20150918

Priority:

GB20140016513 20140918 WO2015GB52707 20150918

Probable Assignee: ASTEX THERAPEUTICS LTD AND CANCER RES TECHNOLOGY LTD

Assignee(s): (std): ASTEX THERAPEUTICS LTD AND CANCER RES TECHNOLOGY LTD ; CANCER REC TECH LTD ; CANCER RES TECH LTD

Assignee(s): CANCER RESEARCH TECHNOLOGY LTD ; ASTEX THERAPEUTICS AND CANCER RESEARCH TECHNOLOGY LTD

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Agent(s): COOKE RICHARD SPENCER; COOKE RICHARD

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
EP3194390 A1	20170726	LSPB	+	published / reissued	
EP3194390 A1	20170726	LSSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20170412
GB201416513 A0	20151014	LSAS	COOA	CHANGE IN APPLICANT'S NAME OR OWNERSHIP OF THE APPLICATION	PARTYTYPE : OWNER OWNER : CANCER RESEARCH TECHNOLOGY LIMITED OLD PARTY : FORMER

OWNERS: ASTEX
THERAPEUTICS LIMITED;
CANCER RESEARCH
TECHNOLOGY LIMITED

GB201416513 A0	20160629	LSWD	-AT	APPLICATIONS TERMINATED BEFORE PUBLICATION UNDER SECTION 16(1)	
WO16042341 A1	20160324	LSPB	+	published / reissued	
WO16042341 A1	20170320	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE

Title: NOVEL CLOSTRIDIUM DIFFICILE TOXIN INHIBITORS

Abstract: The present invention relates to benzodiazepine derivative compounds of formula (I), or pharmaceutically acceptable salts thereof.



The present benzodiazepine compounds are useful Clostridium difficile inhibitors in the treatment of Clostridium difficile infection in humans. The present invention provides a pharmaceutical composition containing benzodiazepine compounds of formula (I) and a method of making as well as a method of using the same in treating patients infected with Clostridium difficile infection by administering the same. The compounds of the present invention may be used in combination with additional antibiotics or anti-toxin antibody drugs.

Classifications:

International (IPC 8-9): [A61K31/167](#) [A61K31/437](#) [A61K31/496](#) (Advanced/Invention)

CPC: [A61P31/04](#) [C07D243/14](#) [C07D243/32](#) [C07D401/06](#) [C07D401/12](#) [C07D401/14](#) [C07D403/04](#) [C07D403/12](#) [C07D403/14](#) [C07D409/14](#) [C07D413/14](#) [C07D417/14](#) [C07D471/04](#)

Family:

Publication number	Publication date	Application number	Application date
WO17214359 A1	20171214	WO2017US36494	20170608

Priority:

US20160348327P 20160610

Probable Assignee: VENENUM BIODESIGN LLC

Assignee(s): (std): VENENUM BIODESIGN LLC

Inventor(s): (std): COLE ANDREW G ; LETOURNEAU JEFFREY J ; MARINELLI BRETT A ; QUINTERO JORGE G

Agent(s): DOWNING JESSICA A

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KH KM KN KP KR KW KZ LA LC 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
WO17214359 A1	20171214	LSPB	+	published / reissued	



roche aldosterone synthase inhibitor



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21 nov. 2016 - Preclinical and Early Clinical Profile of a Highly Selective and Potent Oral **Inhibitor of Aldosterone Synthase** (CYP11B2). ... Cardiovascular Diseases (P.F.), Pharma Research and Early Development, **Roche** Innovation Center Basel, Switzerland; and Clinical Pharmacology, William Harvey Research Institute ...

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1 jun. 2016 - Synthesis of annulated pyridines as **inhibitors of aldosterone synthase** (CYP11B2).

Martin RE(1), Lehmann J, Alzieu T, Lenz M, Carnero Corrales MA, Aebi JD, Märki HP, Kuhn B, Amrein K, Menzies M, Dittler D. *Author information: (1)Medicinal Chemistry, Roche Pharmaceutical Research*



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