

INFORME DE BÚSQUEDA DE PATENTES				
N° de solicitud: NC2017/0005201				
CRITERIOS PARA LA BÚSQUEDA				
PALABRAS CLAVE UTILIZADAS		Oxycodone and ibupro* Oxycodone and conjugate Opioid* and conjugate		
CLASIFICACIONES UTILIZADAS PARA LA BÚSQUEDA		A61K 31/485; A61P 25/36		
		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	US2005/203115	16/09/2005	1-9	A
	WO2012/096887	19/07/2012	1-9	A
	EP1782834	09/05/2007	1-9	Y
	US2012/142720	07/06/2012	1-9	Y
USPTO	US20110002991	06/01/2011	1-9	Y
	US887780	28/10/2014	1-9	Y
PATBASE	US2004204434	14/10/2004	1-9	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:		27/Julio/2018		

SIPI

Supernormal GOBIERNO DE COLOMBIA

INICIO > Búsqueda de solicitudes de Patente/Modelo de Utilidad/PCT/Esquemas de Trazado

Puede utilizar los símbolos comodín (*) y (?) para ampliar su búsqueda, y las comillas para buscar frases, como ejemplo "Productos lácteos". Se pueden utilizar los operadores booleanos AND, OR, NOT, asteriscos y comillas en su consulta de búsqueda.

Criterio de búsqueda

Palabra clave/Número de expediente:

Buscar - [Limpiar](#) | [Búsqueda Avanzada](#)

9 Casos asociados

Expediente No.	Título	Figura Característica	Fecha de presentación	Estado(s)	Titular
03097627	FORMULACIONES DE OXICODONA PARA TOMA UNA VEZ AL DIA		04 nov 2003	Negada	EURO-CELTIQUE S.A
04004901	PREPARACION FARMACEUTICA QUE CONTIENE OXICODONA Y NALOXONA		23 sep 2004	Negada	EURO-CELTIQUE S.A
11133740	COMPOSICIONES FARMACEUTICAS DE LIBERACION INMEDIATA QUE COMPRENDEN OXICODONA Y NALOXONA		10 oct 2011	Concedido	EURO-CELTIQUE S.A
11150587	COMPOSICION FARMACEUTICA TERMOFORMADA RESISTENTE A LA MANIPULACION QUE COMPRENDE HIDROCLORURO DE OXICODONA Y ANTIOXIDANTES		22 nov 2011	Negada	GRUNENTHAL GMBH
12223054	MÉTODO PARA ELABORAR UNA COMPOSICIÓN FARMACÉUTICA ORAL DE LIBERACIÓN PROLONGADA QUE CONTIENE UN OPIOIDE (TAL COMO OXICODONA, HIDROMORFONA, HIDROCODONA, TRAMADOL, OXIMORFONA, NALTREXONA O NALOXONA) Y UN ANTAGONISTA OPIOIDE		10 dic 2012	Negada	EURO-CELTIQUE S.A
13026655	COMPOSICIÓN DE LIBERACIÓN PROLONGADA QUE CONTIENE UN MATERIAL DE LIBERACIÓN PROLONGADA, OPIOIDES (OXICODONA Y NALOXONA) Y EL AGSLUTINANTE HPC		13 feb 2013	Negada	EURO-CELTIQUE S.A
13187107	COMPOSICIÓN FARMACÉUTICA QUE CONTIENE UN AGONISTA OPIOIDE (TAL COMO CODEÍNA, BUPRENORFINA, FENTANILO, HIDROCODONA, HIDROMORFONA, OXICODONA, OXIMORFONA, TRAMADOL O TAPENTADOL), UN COPOLÍMERO Y UN ANTAGONISTA OPIOIDE		03 jul 2013	Negada	EURO-CELTIQUE S.A
14020500	FORMA DE DOSIFICACIÓN RESISTENTE A LA ALTERACIÓN QUE COMPRENDE OXICODONA HCL Y NALOXONA HCL		12 feb 2014	Negada	GRUNENTHAL GMBH

Cerrar

EPO

minesoft chemical explorer

Search type: Identity **Similarity** Substructure

Similarity search

Tanimoto threshold %:

Return structures:

Filter by molecular weight:

Filter by molecular formula:

☒ Found in claims ☐ All

Country:

Number of structures to return:

Search **Clear**

About Similarity Search

Chemical Structure:

PatBase - Search results 27 July 2018
Search query (2): [Chemical Explorer]: Selected structures (50)
Results: 4

Search history

Search 1: [Chemical Explorer]: (4a-hydroxy-9-methoxy-3-methyl-1,2,4,5,7a,13-hexahydro-4,12-methanobenzofuro[3,2-e]isoquinoline-7-yl) 2-[4-(2-methylpropyl)phenyl]propanoate (Results 1)

Search 2: [Chemical Explorer]: Selected structures (50) (Results 4)

1) Family number: 30999814 (US2004204434A)

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Title: COMPOUNDS AND METHODS FOR LOWERING THE ABUSE POTENTIAL AND EXTENDING THE DURATION OF ACTION OF A DRUG

Abstract: The abuse potential of a bioavailable drug such as an opiate analgesic agent is reduced and its duration of action is extended by converting it to a poorly absorbed ester prodrug or other prodrug derivative prior to formulation. Unlike many existing sustained release formulations of active pharmaceutical agents wherein an active pharmaceutical agent can be released by chewing, crushing, or otherwise breaking tablets or capsule beads containing the active pharmaceutical agent, such mechanical processing of tablets or capsule beads containing a prodrug of this invention neither releases the active drug nor compromises the controlled conversion of prodrug to drug. Moreover, tablets and capsule beads containing prodrugs of this invention or other drugs can be formulated with a sufficient amount of a thickening agent such as hydroxypropylmethylcellulose or carboxymethylcellulose to impede inappropriate intravenous and nasal administration of formulations that are not indicated for these modes of administration.

Classifications:

International (IPC 8-9): [A61K31/48](#) [A61K31/485](#) [A61K45/00](#) [A61K47/38](#) [A61K47/48](#) [A61K9/20](#)

[A61K9/48](#) [A61P25/04](#) [A61P29/00](#) [A61P43/00](#) [C07D489/02](#) (Advanced/Invention);

[A61K31/48](#) [A61K31/485](#) [A61K47/48](#) [A61P29/00](#) (Core/Invention)

International (IPC 1-7): [A61K0/00](#) [A61K31/485](#) [A61K47/48](#)

CPC: [C07D489/08](#) [A61K47/555](#) [A61K47/60](#)

European: [A61K47/48H4](#) [A61K47/48H4S](#) [A61K47/48K6P](#) [C07D489/08](#)

US: [514/282](#) [546/44](#) [546/44S](#) [546/46](#)

Family:

Publication number	Publication date	Application number	Application date
AT454169 E	20100115	AT20040757462T	20040315
CA2518834 AA	20050912	CA20042518834	20040315
DE602004024963 D1	20100225	DE200460024963T	20040315
EP1603597 A2	20051214	EP20040757462	20040315
EP1603597 B1	20100106	EP20040757462	20040315
EP1782834 A2	20070509	EP20070003844	20040315
EP1782834 A3	20070801	EP20070003844	20040315
JP2006520392 T2	20060907	JP20060507215T	20040315
MXPA05009757 A1	20051205	MX2005PA09757	20040315
US2004204434 AA	20041014	US20040800898	20040315
US2007203165 AA	20070830	US20070742566	20070430
US7230005 BB	20070612	US20040800898	20040315
WO04082620 A2	20040930	WO2004US07910	20040315
WO04082620 A3	20050915	WO2004US07910	20040315

Priority:

US20030454253P 20030313 EP20040757462 20040315 US20040800898 20040315
WO2004US07910 20040315 US20070742566 20070430

Probable Assignee: CONTROLLED CHEMICALS INC

Assignee(s): (std): CONTROLLED CHEMICALS INC

Assignee(s): GUO ZHIWEI ; SHAFER JULES A ; TELYATNIKOV VLADISLAV V

Inventor(s): (std): GUO ZHIWEI ; JULES A SHAFER ; SHAFER JULES ; SHAFER JULES A ;
TELYATNIKOV VLADISLAV ; TELYATNIKOV VLADISLAV V

Agent(s): BORDEN LADNER GERVAIS LLP; MACLEAN MARTIN ROBERT; CHIBA AKIO;
MASUI CHUJI; SHAMOTO ICHIO; KOBAYASHI YASUSHI; TOMITA HIROYUKI;
YAMAGUCHI AKIKO; NASTECH PHARMACEUTICAL COMPANY INC; PETER J

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

VN YU ZA ZM ZW

Legal status (INPADOC)

[View legal status timeline](#)

Patent	Date recorded	Event group	Code	Event	Details
AT454169 E	20100115	LSGT	+	granted / extensions (spc, cpc, pte)	
AT454169 E	20100715	LSLE	-RER	CEASED AS TO PARAGRAPH 5 LIT. 3 LAW INTRODUCING PATENT TREATIES	
AT454169 E	20240315	PEXP		Calculated Patent Term Expiry	
CA2518834 AA	20050912	LSPB	+	published / reissued	
CA2518834 AA	20100315	LSLE	-FZDE	DEAD	
DE602004024963 D1	20110127	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
EP1603597 A2	20051214	LSPB	+	published / reissued	
EP1603597 A2	20051214	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20051007
EP1603597 A2	20070328	LSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 20070226
EP1603597 A2	20100106	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP1603597 A2	20100115	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP1603597 A2	20100217	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP1603597 A2	20100506	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : VDEP EFFECTIVE DATE : 20100106
EP1603597 A2	20100531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO	COUNTRY OF REF DOCUMENT : SI NOTIFICATION OF LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY

				EPO	THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20100106
EP1603597 A2	20100630	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 : 20100106
EP1603597 A2	20100730	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 : 20100417
EP1603597 A2	20100730	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 : 20100106
EP1603597 A2	20100730	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 FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20100506
EP1603597 A2	20100831	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 : 20100106
EP1603597 A2	20100831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : PL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE

					PREScribed TIME-LIMIT LAPSED DATE : 20100106
EP1603597 A2	20101029	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 : 20100106
EP1603597 A2	20101029	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 : 20100106
EP1603597 A2	20101029	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : EE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PREScribed TIME-LIMIT LAPSED DATE : 20100106
EP1603597 A2	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 : 20100407
EP1603597 A2	20101029	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 : 20100331
EP1603597 A2	20101029	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 : 20100106

EP1603597 A2	20101029	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 : 20100106
EP1603597 A2	20101029	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP1603597 A2	20101130	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 : 20100406
EP1603597 A2	20101130	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 : 20100106
EP1603597 A2	20101130	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 : 20100106
EP1603597 A2	20101215	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20101007
EP1603597 A2	20101224	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20101130
EP1603597 A2	20110131	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 : 20100106

EP1603597 A2	20110131	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 : 20100331
EP1603597 A2	20110131	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 : 20100315
EP1603597 A2	20110228	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 : 20100331
EP1603597 A2	20110228	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 : 20100331
EP1603597 A2	20110331	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 : 20100106
EP1603597 A2	20120928	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 LAPSED DATE : 20100707
EP1603597 A2	20120928	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : LU NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20100315
EP1603597 A2	20121031	LSLE	-PG25	LAPSED IN A	COUNTRY OF REF

				CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	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 : 20100106
EP1603597 A2	20160531	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20160324 YEAR OF FEE PAYMENT : 13
EP1603597 A2	20160729	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20160323 YEAR OF FEE PAYMENT : 13
EP1603597 A2	20170428	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170316 YEAR OF FEE PAYMENT : 14
EP1603597 A2	20170531	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20170329 YEAR OF FEE PAYMENT : 14
EP1603597 B1	20100106	LSGT	+	granted / extensions (spc, cpc, pte)	
EP1603597 B1	20240315	PEXP		Calculated Patent Term Expiry	
EP1782834 A2	20070509	LSPB	+	published / reissued	
EP1782834 A2	20070509	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20070226
EP1782834 A2	20070516	LSRE	RTI1	TITLE (CORRECTION)	TEXT : OXYCODONE CONJUGATES WITH LOWER ABUSE POTENTIAL AND EXTENDED DURATION OF ACTION
EP1782834 A3	20070801	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATION SCHEME : IPC CLASSIFICATION SYMBOL : A61K 47/48 20060101AFI20070323BHEP
EP1782834 A3	20070801	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATION SCHEME : IPC CLASSIFICATION SYMBOL : A61P 29/00 20060101ALI20070627BHEP
EP1782834 A3	20070801	LSRE	RTI1	TITLE (CORRECTION)	TEXT : OXYCODONE CONJUGATES WITH LOWER

					ABUSE POTENTIAL AND EXTENDED DURATION OF ACTION
EP1782834 A3	20080409	LSFE	+AKX	PAYMENT OF DESIGNATION FEES	COUNTRY OF REF DOCUMENT : AT COUNTRY OF REF DOCUMENT : BE COUNTRY OF REF DOCUMENT : BG COUNTRY OF REF DOCUMENT : CH COUNTRY OF REF DOCUMENT : CY COUNTRY OF REF DOCUMENT : CZ COUNTRY OF REF DOCUMENT : DE COUNTRY OF REF DOCUMENT : DK COUNTRY OF REF DOCUMENT : EE COUNTRY OF REF DOCUMENT : ES COUNTRY OF REF DOCUMENT : FI COUNTRY OF REF DOCUMENT : FR COUNTRY OF REF DOCUMENT : GB COUNTRY OF REF DOCUMENT : GR COUNTRY OF REF DOCUMENT : HU COUNTRY OF REF DOCUMENT : IE COUNTRY OF REF DOCUMENT : IT COUNTRY OF REF DOCUMENT : LI COUNTRY OF REF DOCUMENT : LU COUNTRY OF REF DOCUMENT : MC COUNTRY OF REF DOCUMENT : NL COUNTRY OF REF DOCUMENT : PL COUNTRY OF REF DOCUMENT : PT COUNTRY OF REF DOCUMENT : RO COUNTRY OF REF DOCUMENT : SE COUNTRY OF REF DOCUMENT : SI COUNTRY OF REF DOCUMENT : SK COUNTRY OF REF DOCUMENT : TR
EP1782834 A3	20080709	LSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE : 20080605
EP1782834 A3	20091111	LSRV	-18R	REFUSED	EFFECTIVE DATE : 20090526
JP2006520392 T2	20060907	LSPB	+	published / reissued	

JP2006520392 T2	20070310	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20070309
JP2006520392 T2	20070310	LSES	+A621	WRITTEN REQUEST FOR APPLICATION EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A621 EFFECTIVE DATE : 20070309
JP2006520392 T2	20101216	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20101215
JP2006520392 T2	20120124	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20120123
MXPA05009757 A1	20051205	LSPB	+	published / reissued	
MXPA05009757 A1	20080218	LSGT	+FG	GRANT OR REGISTRATION	
US2004204434 AA	20041014	LSPB	+	published / reissued	
US2004204434 AA	20040609	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CONTROLLED CHEMICALS, INC., PENNSYLVANIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:SHAFER, JULES A.; TELYATNIKOV, VLADISLAV V.; GUO, ZHIWEI; REEL/FRAME:014714/0264; SIGNING DATES FROM 20040507 TO 20040607
US2007203165 AA	20070830	LSPB	+	published / reissued	
US2007203165 AA	20070523	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CONTROLLED CHEMICALS, INC., PENNSYLVANIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:SHAFER, JULES A.; TELYATNIKOV, VLADISLAV V.; GUO, ZHIWEI; REEL/FRAME:019333/0235; SIGNING DATES FROM 20040507 TO 20040607
US2007203165 AA	20100623	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US7230005 BB	20070612	LSGT	+	granted / extensions (spc,	

cpc, pte)					
US7230005 BB	20070523	LSGT	PAT1	Patented Case	
US7230005 BB	20110214	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US7230005 BB	20150603	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US7230005 BB	20250702	PEXP		Calculated Patent Term Expiry (PTA 474 days)	
WO04082620 A2	20040930	LSPB	+	published / reissued	
WO04082620 A2	20050912	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2518834 COUNTRY OF REF DOCUMENT : CA
WO04082620 A2	20050913	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2006507215 COUNTRY OF REF DOCUMENT : JP
WO04082620 A2	20050913	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : PA/A/2005/009757 COUNTRY OF REF DOCUMENT : MX
WO04082620 A3	20051007	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2004757462 COUNTRY OF REF DOCUMENT : EP
WO04082620 A3	20051214	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 2004757462 COUNTRY OF REF DOCUMENT : EP

2) Family number: 62538161 (US2016168160A)

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Title: BENZOIC ACID, BENZOIC ACID DERIVATIVES AND HETEROARYL CARBOXYLIC ACID CONJUGATES OF OXYCODONE, PRODRUGS, METHODS OF MAKING AND USE THEREOF

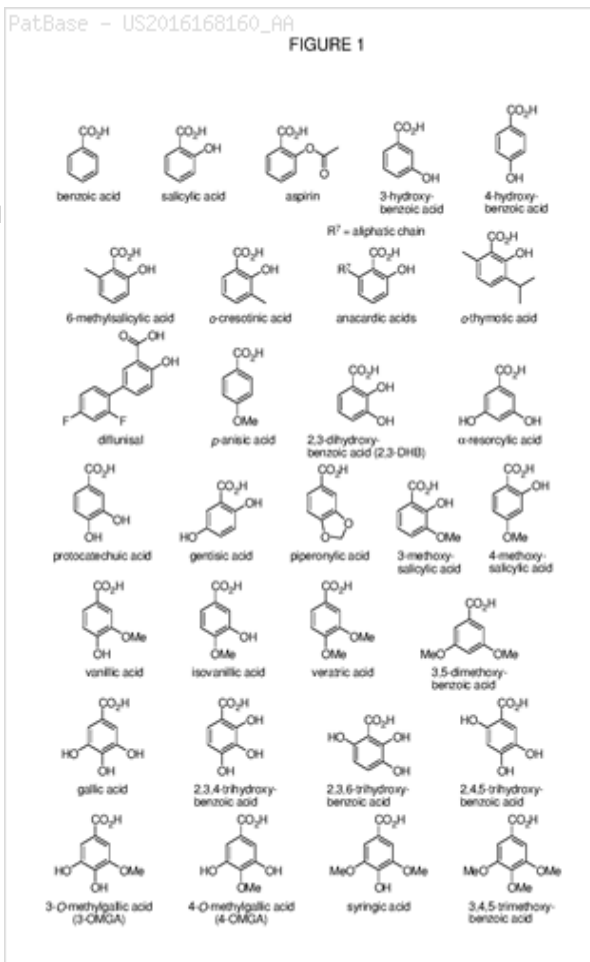
Abstract: The presently described technology provides compositions comprising aryl carboxylic acids and, for example NSAIDs, chemically conjugated to oxycodone (4,5-a-epoxy-14-hydroxy-17-methylmorphinan-6-one) to form novel prodrugs/compositions of oxycodone, including benzoates, salicylates, propionates, fenamates, and acetates, which have a decreased potential for abuse of oxycodone. The present technology also provides methods of treating patients, pharmaceutical kits and methods of synthesizing conjugates of the present technology.

Classifications:

International (IPC 8-9): [A01N43/42](#) [A61K31/44](#) [A61K31/485](#) [A61K45/06](#) [A61K47/38](#) [A61K9/00](#) [A61K9/08](#) [A61K9/10](#) [A61K9/107](#) [A61K9/14](#) [A61K9/20](#) [A61K9/48](#) [A61K9/70](#) [A61P25/04](#) [A61P25/36](#) [C07D](#) [C07D489/04](#) [C07D489/08](#) [C07D498/08](#) (Advanced/Invention); [C07D](#) (Subclass/Invention)

CPC: [C07D489/04](#) [A61K31/485](#) [A61K45/06](#) [A61K9/00](#) [C07D498/08](#) [A61P25/36](#)

US: [514/282](#) [546/45](#)

**Family:**

Publication number	Publication date	Application number	Application date
AU2015353502 AA	20160602	AU20150353502	20151125
BR112017011069 A2	20180710	BR20171111069	20151125
CA2967424 AA	20170510	CA20152967424	20151125
CL2017001353 A1	20180105	CL20170001353	20170525
CN106999486 A	20170801	CN201580064309	20151125
CO20170005201 A2	20170831	CO20170005201	20170525
EP3223819 A1	20171004	EP20150863639	20151125
EP3223819 A4	20180425	EP20150863639	20151125
ID201803215 A	20180329	ID2017P0003208	20151125
IL252470 A0	20170731	IL20150252470	20151125
IN201747018363 A	20170825	IN201747018363	20170525
JP2017535593 T2	20171130	JP20170528967T	20151125
KR20170094249 A	20170817	KR20177017408	20151125
MX2017006520 A1	20170809	MX20170006520	20151125
PH2017500963 A	20171018	PH20170500963	20170525
SG11201704178U A1	20170629	SG20171104178	20151125

US2016168160 AA	20160616	US20150952348	20151125
US2018065975 AA	20180308	US20170812730	20171114
US9850252 BB	20171226	US20150952348	20151125
WO16086113 A1	20160602	WO2015US62637	20151125

Priority:

US20140084216P 20141125 US20140084246P 20141125 US20150952348 20151125
WO2015US62637 20151125 US20170812730 20171114

Probable Assignee: KEMPHARM INC

Assignee(s): (std): KEMPHARM INC

Assignee(s): MARTIN ANDREA K ; MICKLE TRAVIS ; BERA BINDU ; BERA SANJIB ; GUENTHER SVEN ; KANSKI JAROSLAW

Inventor(s): (std): ANDREA K MARTIN ; BERA BINDU ; BERA SANJIB ; BINDU BERA ; GUENTHER SVEN ; JAROSLAW KANSKI ; KANSKI JAROSLAW ; MARTIN ANDREA ; MARTIN ANDREA K ; MICKLE TRAVIS ; SANJIB BERA ; SVEN GUENTHER ; TRAVIS MICKLE

Agent(s): SPRUSON AND FERGUSON; MBM INTELLECTUAL PROPERTY LAW LLP; ESTUDIO CLARKE MODET AND CO CHILE LIMITADA; CAROLINA MERCEDES DAZA MONTALVO; MUELLER CHRISTIAN STEFAN GERD; DORA AM BADAR SPSI; ONO SHINJIRO; YAMAMOTO OSAMU; MIYAMAE TORU; NAKANISHI MOTOHARU; KAJITA TSUYOSHI; MCANDREWS HELD AND MALLOY; GAO FRANK

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
AU2015353502 AA	20160602	LSPB	+	published / reissued	
CA2967424 AA	20170510	LSPB	+	published / reissued	
CL2017001353 A1	20180105	LSPB	+	published / reissued	
CN106999486 A	20170801	LSPB	+	published / reissued	
CN106999486 A	20170801	LSPB	PB01	PUBLICATION	
CO20170005201 A2	20170831	LSPB	+	published / reissued	
EP3223819 A1	20171004	LSPB	+	published / reissued	
EP3223819 A1	20171004	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20170529
EP3223819 A1	20171018	LSAS	RAP1	TRANSFER OF RIGHTS OF AN APPLICATION	PARTYTYPE : OWNER OWNER : KEMPHARM, INC.
EP3223819 A4	20180425	LSES	+A4	DESPATCH OF SUPPLEMENTARY SEARCH	EFFECTIVE DATE : 20180323

REPORT					
EP3223819 A4	20180425	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : A61P 25/36 20060101ALI20180319BHEP
EP3223819 A4	20180425	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : A61K 31/485 20060101AFI20180319BHEP
EP3223819 A4	20180425	LSRE	RIC1	CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : C07D 498/08 20060101ALI20180319BHEP
ID201803215 A	20180329	LSPB	+	published / reissued	
IN201747018363 A	20170825	LSPB	+	published / reissued	
JP2017535593 T2	20171130	LSPB	+	published / reissued	
JP2017535593 T2	20170908	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20170831
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JP2017535593 T2	20180418	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20180418
KR20170094249 A	20170817	LSPB	+	published / reissued	
KR20170094249 A	20170623	LSES	A201	REQUEST FOR EXAMINATION	
MX2017006520 A1	20170809	LSPB	+	published / reissued	
PH2017500963 A	20171018	LSPB	+	published / reissued	
SG11201704178U A1	20170629	LSPB	+	published / reissued	
US2016168160 AA	20160616	LSPB	+	published / reissued	
US2016168160 AA	20170823	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of	

Publications					
US2016168160 AA	20171117	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KEMPHARM, INC., IOWA OLDPARTY : CORRECTIVE ASSIGNMENT TO CORRECT THE ASSIGNEE ADDRESS PREVIOUSLY RECORDED AT REEL: 037524 FRAME: 0078. ASSIGNOR(S) HEREBY CONFIRMS THE ASSIGNMENT; ASSIGNORS:GUENTHER, SVEN; MICKLE, TRAVIS; BERA, SANJIB; AND OTHERS; SIGNING DATES FROM 20170919 TO 20170920; REEL/FRAME:044783/0784
US2016168160 AA	20171121	LSFE	+PPV1	Publications -- Issue Fee Payment Verified	
US2018065975 AA	20180308	LSPB	+	published / reissued	
US2018065975 AA	20180228	LSSES	NFA1	Non Final Action Mailed	
US2018065975 AA	20180316	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KEMPHARM, INC., IOWA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:GUENTHER, SVEN; MICKLE, TRAVIS; BERA, SANJIB; AND OTHERS; SIGNING DATES FROM 20180228 TO 20180305; REEL/FRAME:045255/0508
US9850252 BB	20171226	LSGT	+	granted / extensions (spc, cpc, pte)	
US9850252 BB	20160119	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KEMPHARM, INC., FLORIDA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:GUENTHER, SVEN; MICKLE, TRAVIS; BERA, SANJIB; AND OTHERS; SIGNING DATES FROM 20151216 TO 20160112; REEL/FRAME:037524/0078
US9850252 BB	20171206	LSGT	PAT1	Patented Case	
US9850252 BB	20180619	LSRE	CC	CERTIFICATE OF CORRECTION	
US9850252 BB	20351125	PEXP		Calculated Patent Term Expiry	

WO16086113 A1	20160602	LSPB	+	published / reissued	
WO16086113 A1	20170510	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2967424 COUNTRY OF REF DOCUMENT : CA
WO16086113 A1	20170525	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2015353502 COUNTRY OF REF DOCUMENT : AU DATE OF REF DOCUMENT : 20151125 KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO16086113 A1	20170525	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2017528967 COUNTRY OF REF DOCUMENT : JP KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO16086113 A1	20170526	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO16086113 A1	20170623	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 20177017408 COUNTRY OF REF DOCUMENT : KR KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO16086113 A1	20170626	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2017122144 COUNTRY OF REF DOCUMENT : RU KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :
WO16086113 A1	20180710	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 112017011069 COUNTRY OF REF DOCUMENT : BR KIND CODE OF REF DOCUMENT : A2 DESIGNATED STATE(S) : EFFECTIVE DATE : 20170525

Title: METHODS AND COMPOSITIONS FOR PREVENTING OPIOID ABUSE

Abstract: Abuse-resistant opioid compounds, drug delivery systems, pharmaceutical compositions comprising an opioid covalently bound to a chemical moiety are provided. Methods of delivering an active ingredient to a subject and methods of preventing opioid abuse are also provided.

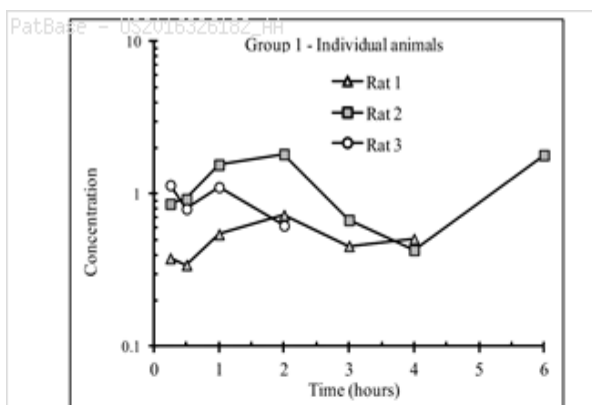
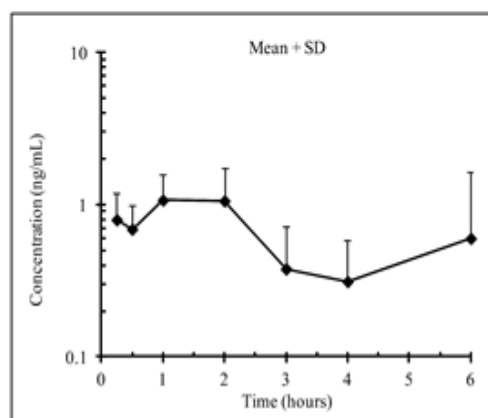
Classifications:

International (IPC 8-9): [A61K31/485](#)

[C07D489/08](#) (Advanced/Invention)

CPC: [A61K31/485](#) [C07D489/08](#) [A61K47/542](#)

US: [514/282](#)

**FIG. 1****FIG. 2****Family:**

Publication number	Publication date	Application number	Application date
US2016326182 AA	20161110	US20160139836	20160427
US2017151232 AA	20170601	US20170431624	20170213
US2017157116 AA	20170608	US20170431572	20170213

Priority:

US20150153157P 20150427 US20160139836 20160427 US20170431624 20170213
 US20170431572 20170213

Probable Assignee: 3ST RESEARCH LLC

Assignee(s): (std): ALBANY MOLECULAR RES INC ; WATERVILLE VALLEY TECH INC ; THOTTATHIL JOHN K

Assignee(s): MORGAN STANLEY SENIOR FUNDING INC ; 3ST RESEARCH LLC ; ALBANY MOLECULAR RESEARCH INC ; BARCLAYS BANK PLC COLLATERAL AGENT AS ; WATERVILLE VALLEY TECHNOLOGIES INC

Inventor(s): (std): THOTTATHIL JOHN K ; SURMAN MATTHEW ; PELTIER JAMES ; PASETTO PAOLO ; JIN XIAOMIN ; JIANG XIAOWU ; GOLDEN KATHRYN ; CAMARA FATOUMATA

Legal status (INPADOC)

[View legal status timeline](#)

Patent	Date recorded	Event group	Code	Event	Details
US2016326182 AA	20161110	LSPB	+	published / reissued	
US2016326182 AA	20161121	LSSES	NFA1	Non Final Action Mailed	
US2016326182 AA	20170126	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ALBANY MOLECULAR RESEARCH, INC., NEW YORK OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:SURMAN, MATTHEW; GOLDEN, KATHRYN; PASETTO, PAOLO; AND OTHERS; REEL/FRAME:041092/0686 EFFECTIVE DATE : 20170126
US2016326182 AA	20170126	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WATERVILLE VALLEY TECHNOLOGIES, INC., RHODE ISLAND OLDPARTY : RESCISSION OF ASSIGNMENT; ASSIGNORS:SURMAN, MATTHEW; GOLDEN, KATHRYN; PASETTO, PAOLO; AND OTHERS; REEL/FRAME:041502/0904 EFFECTIVE DATE : 20170126
US2016326182 AA	20170607	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : THOTTATHIL, JOHN K., ILLINOIS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:WATERVILLE VALLEY TECHNOLOGIES; REEL/FRAME:042630/0620 EFFECTIVE DATE : 20170519
US2016326182 AA	20170607	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : THOTTATHIL, JOHN K., ILLINOIS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:PELTIER, JAMES; REEL/FRAME:042630/0617 EFFECTIVE DATE : 20170519
US2016326182 AA	20170711	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : 3ST RESEARCH LLC, NEW JERSEY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:THOTTATHIL, JOHN K.; REEL/FRAME:042969/0834 EFFECTIVE DATE : 20170707
US2016326182 AA	20180226	LSSES	NFA1	Non Final Action Mailed	
US2017151232 AA	20170601	LSPB	+	published / reissued	
US2017151232 AA	20170217	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER

					OWNER : ALBANY MOLECULAR RESEARCH, INC., NEW YORK OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS: SURMAN, MATTHEW; GOLDEN, KATHRYN; PASETTO, PAOLO; AND OTHERS; REEL/FRAME: 041749/0642 EFFECTIVE DATE : 20170217
US2017151232 AA	20170614	LSSES	NFA1	Non Final Action Mailed	
US2017151232 AA	20170711	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : 3ST RESEARCH LLC, NEW JERSEY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR: THOTTATHIL, JOHN K.; REEL/FRAME: 042970/0273 EFFECTIVE DATE : 20170707
US2017151232 AA	20170901	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BARCLAYS BANK, PLC AS COLLATERAL AGENT, NEW YORK OLDPARTY : FIRST LIEN SECURITY AGREEMENT; ASSIGNORS: ALBANY MOLECULAR RESEARCH, INC.; AMRI BURLINGTON, INC.; CEDARBURG PHARMACEUTICALS, INC.; AND OTHERS; REEL/FRAME: 043746/0621 EFFECTIVE DATE : 20170831
US2017151232 AA	20170901	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MORGAN STANLEY SENIOR FUNDING, INC., MARYLAND OLDPARTY : SECOND LIEN SECURITY AGREEMENT; ASSIGNORS: ALBANY MOLECULAR RESEARCH, INC.; AMRI BURLINGTON, INC.; CEDARBURG PHARMACEUTICALS, INC.; AND OTHERS; SIGNING DATES FROM 20170830 TO 20170901; REEL/FRAME: 043746/0657
US2017157116 AA	20170608	LSPB	+	published / reissued	
US2017157116 AA	20170217	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ALBANY MOLECULAR RESEARCH, INC., NEW YORK OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS: SURMAN, MATTHEW; GOLDEN, KATHRYN; PASETTO, PAOLO; AND OTHERS; REEL/FRAME: 041289/0162 EFFECTIVE DATE : 20170217
US2017157116 AA	20170711	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : 3ST RESEARCH LLC, NEW JERSEY OLDPARTY : ASSIGNMENT OF

					ASSIGNORS INTEREST; ASSIGNOR:THOTTATHIL, JOHN K.; REEL/FRAME:042970/0929 EFFECTIVE DATE : 20170707
US2017157116 AA	20170901	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MORGAN STANLEY SENIOR FUNDING, INC., MARYLAND OLDPARTY : SECOND LIEN SECURITY AGREEMENT; ASSIGNORS:ALBANY MOLECULAR RESEARCH, INC.; AMRI BURLINGTON, INC.; CEDARBURG PHARMACEUTICALS, INC.; AND OTHERS; SIGNING DATES FROM 20170830 TO 20170901; REEL/FRAME:043746/0657
US2017157116 AA	20170901	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BARCLAYS BANK, PLC AS COLLATERAL AGENT, NEW YORK OLDPARTY : FIRST LIEN SECURITY AGREEMENT; ASSIGNORS:ALBANY MOLECULAR RESEARCH, INC.; AMRI BURLINGTON, INC.; CEDARBURG PHARMACEUTICALS, INC.; AND OTHERS; REEL/FRAME:043746/0621 EFFECTIVE DATE : 20170831
US2017157116 AA	20171205	LSES	NFA1	Non Final Action Mailed	
US2017157116 AA	20171205	LSES	- NFA2	Non Final Action Counted, Not Yet Mailed	
US2017157116 AA	20180404	LSES	- NFA2	Non Final Action Counted, Not Yet Mailed	
US2017157116 AA	20180405	LSES	NFA1	Non Final Action Mailed	

4) Family number: 65822632 (US10017519B)

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Title: ALPHA-HYDROXY CARBOXYLIC ACID AND DERIVATIVES AND OTHER GRAS BASED PRODRUGS OF OXYCODONE AND USES THEREOF

Abstract: The invention describes pharmaceutical compounds and compositions comprised of a ligand attached to the opioid oxycodone, in a manner that substantially decreases or deters the potential for opioid abuse, addiction, illicit and illegal use, and overdose. When delivered at the proper dosage, the pharmaceutical composition provides therapeutic activity similar to that of the parent active agent.

**Classifications:**

International (IPC 8-9): [A01N43/42](#) [A61K31/44](#) [A61K31/485](#) [A61K47/48](#) [A61K47/54](#) [A61K9/00](#) [A61P25/36](#) [C07D489/02](#) [C07D489/08](#) (Advanced/Invention)

CPC: [A61K31/485](#) [A61K9/0053](#) [A61K47/542](#) [A61K47/48038](#) [A61K47/543](#) [C07D489/02](#) [C07D489/12](#) [C07D489/08](#)

Family:

Publication number	Publication date	Application number	Application date
US10017519 BB	20180710	US20150953392	20151129
US2017151228 AA	20170601	US20150956143	20151201
US2017152266 AA	20170601	US20150953392	20151129
US2017196851 AA	20170713	US20170472758	20170329
US2017273973 A9	20170928	US20150956143	20151201
US2017275293 A9	20170928	US20150953392	20151129
US9987269 BB	20180605	US20150956143	20151201
WO17091827 A1	20170601	WO2016US63834	20161128
WO17095734 A1	20170608	WO2016US63836	20161128

Priority:

US20150153157P 20150427 US20150953392 20151129 US20150956143 20151201
US20170472758 20170329

Probable Assignee: 3ST RES LLC

Assignee(s): (std): 3ST RES LLC ; THOTTATHIL JOHN K

Assignee(s): 3ST RESEARCH LLC

Inventor(s): (std): THOTTATHIL JOHN K

Agent(s): SERVILLA WHITNEY LLC; FUGIT DONNA R

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KW KZ LA LC 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
US10017519 BB	20180710	LSGT	+	granted / extensions (spc, cpc, pte)	
US10017519 BB	20351129	PEXP		Calculated Patent Term Expiry	

US2017151228 AA	20170601	LSPB	+	published / reissued	
US2017151228 AA	20170711	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : 3ST RESEARCH LLC, NEW JERSEY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:THOTTATHIL, JOHN K.; REEL/FRAME:042969/0745 EFFECTIVE DATE : 20170707
US2017151228 AA	20171013	LSES	ADV2	Advisory Action Counted, Not Yet Mailed	
US2017151228 AA	20171016	LSES	ADV1	Advisory Action Mailed	
US2017151228 AA	20180123	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2017151228 AA	20180419	LSFE	+PPR1	Publications -- Issue Fee Payment Received	
US2017151228 AA	20180423	LSFE	+PPV1	Publications -- Issue Fee Payment Verified	
US2017152266 AA	20170601	LSPB	+	published / reissued	
US2017152266 AA	20170711	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : 3ST RESEARCH LLC, NEW JERSEY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:THOTTATHIL, JOHN K.; REEL/FRAME:042969/0703 EFFECTIVE DATE : 20170707
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US2017152266 AA	20180531	LSFE	+PPR1	Publications -- Issue Fee Payment Received	
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US2017196851 AA	20180604	LSES	-NFA2	Non Final Action Counted, Not Yet Mailed	

US2017196851 AA	20180605	LSSES	NFA1	Non Final Action Mailed	
US9987269 BB	20180605	LSGT	+	granted / extensions (spc, cpc, pte)	
US9987269 BB	20180516	LSGT	PAT1	Patented Case	
US9987269 BB	20351201	PEXP		Calculated Patent Term Expiry	
WO17091827 A1	20170601	LSPB	+	published / reissued	
WO17091827 A1	20180530	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO17095734 A1	20170608	LSPB	+	published / reissued	
WO17095734 A1	20180602	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE