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BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM,
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HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP,
KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD,
ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI,
NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU,
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1 September 2016



WO 2013/168005 A3

(54) Title: COMPOSITIONS AND METHODS FOR THE TREATMENT OF RESTLESS LEG SYNDROME AND FIBROMY-
ALGIA

(57) Abstract: The invention relates to the compounds of formula (I) or its pharmaceutical acceptable salts, as well as polymorphs, solvates, enantiomers, stereoisomers and hydrates thereof. The pharmaceutical compositions comprising an effective amount of compounds of formula (I), and methods for the treatment of fibromyalgia, restless leg syndrome may be formulated for oral, buccal, rectal, topical, transdermal, transmucosal, intravenous, parenteral administration, syrup, or injection. Such compositions may be used to treatment of motor neurone disease, diabetic neuropathy, postherpetic neuralgia, acute opioid withdrawal management, obsessive-compulsive disorder, premature ejaculation, PTSD, injury, post-operative pain, osteoarthritis, rheumatoid arthritis, multiple sclerosis, spinal cord injury, migraine, HIV related neuropathic pain, bipolar depression, depression, stress, cancer pain and lower back pain.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/IB2013/051266

A. CLASSIFICATION OF SUBJECT MATTER		
See the extra sheet		
According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED		
Minimum documentation searched (classification system followed by classification symbols)		
IPC: C07C, A61K, A61P		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)		
DATABASE: WPI, EPODOC, CNPAT(CN), CNKI(CN), REGISTRY, CAPLUS.		
KEYWORDS: tramadol, thioctic acid, lipoic acid, eicosapentaenoic acid, icosapent, doconexent, docosahexaenoic acid, acetyl cysteine, acetylcysteine, salsalate, acetylsalicylic acid, aspirin, pantothenic acid, pyridoxamine, pyridoxylamine, pyridinemethanconjugate, structure search		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	CN 1325377 A (VITA-INVEST SA) 05 December 2001 (05.12.2001) example 6, table 1-2, claim 1-12	1-3
A		6-12
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.		
* Special categories of cited documents:	“T” later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention	
“A” document defining the general state of the art which is not considered to be of particular relevance	“X” document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone	
“E” earlier application or patent but published on or after the international filing date	“Y” document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art	
“L” document which may throw doubts on priority claim (S) or which is cited to establish the publication date of another citation or other special reason (as specified)	“&” document member of the same patent family	
“O” document referring to an oral disclosure, use, exhibition or other means		
“P” document published prior to the international filing date but later than the priority date claimed		
Date of the actual completion of the international search 20 June 2013 (20.06.2013)	Date of mailing of the international search report 18 Jul. 2013 (18.07.2013)	
Name and mailing address of the ISA/CN The State Intellectual Property Office, the P.R.China 6 Xitucheng Rd., Jimen Bridge, Haidian District, Beijing, China 100088 Facsimile No. 86-10-62019451	Authorized officer SHENG, Qian Telephone No. (86-10)62411142	

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CLASSIFICATION OF SUBJECT MATTER:

C07C 215/42 (2006.01) i

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INTERNATIONAL SEARCH REPORT

International application No.

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Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos. 4-5:
because they relate to subject matter not required to be searched by this Authority, namely:

Claims 4-5 relate to methods of treatment of the human or animal body that belong to subject-matter not required to be searched (Rule 39.1(iv) PCT).
2. Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on protest

- The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.

PCT/IB2013/051266

Patent Documents referred in the Report	Publication Date	Patent Family	Publication Date
CN 1325377 A	05.12.2001	ES 2141688 A1	16.05.2000
		WO 0027799 A1	18.05.2000
		AU 1047300 A	29.05.2000
		ES 2141688 B1	01.02.2001
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		EP 1127871 A1	29.08.2001
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		SK 5842001 A3	03.12.2001
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		JP 2002529442 A	10.09.2002
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		DE 69914229 E	19.02.2004
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		ES 2207298 T3	16.05.2004
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		ES 2213732 T3	01.09.2004
		SK 284068 B6	08.09.2004
		KR 100453613 B	20.10.2004

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
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Patent Documents referred in the Report	Publication Date	Patent Family	Publication Date
		CN 1176902 C	24.11.2004
		INMUMNP 200100596 E	05.05.2006