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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,
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RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ,
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(54) Title: COMPOSITIONS AND METHODS FOR THE TREATMENT OF MUSCLE PAIN

(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 treating or preventing muscle pain, a neurological disease, allergy, respiratory, diseases or inflammatory disorder may be formulated for oral, buccal, rectal, topical, transdermal, transmucosal intravenous, parenteral administration, syrup, or injection. Such compositions may be used to treatment of muscle disorders, muscle pain, spasticity, neuropathic pain, fibromyalgia, Parkinson's disease, allergy, chronic obstructive pulmonary disease, allergic rhinitis, headache, chronic pain, sub-chronic pain and local pain or its associated complications.



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INTERNATIONAL SEARCH REPORT

International application No.

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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)

CA, WPI, EPODOC, GOOGLE, CNTXT: structure search, CAS 17630-53-4, 53499-34-6, 58-73-1, dimethylethanamine, phenyl tolyl ethanamine, lipoic acid, eicosapentaenoic acid, docosahexaenoic acid, salsalate, acetylcysteine, cysteine, conjugate

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	CN 101327184 A (KOWA CO LTD), 24 December 2008 (24.12.2008), see claims 1-2, page 1 section 1	1-4
X	US 2009/0163545 A1 (UNIVERSITY OF ROCHESTER), 25 June 2009 (25.06.2009), see Fig. 6c, compound cc5	1
A	WO 2009012376 A1 (THE OHIO STATE UNIVERSITY RESEARCH FOUNDATION), 22 January 2009 (22.01.2009), see section 23	5-24

☐ Further documents are listed in the continuation of Box C.

☒ 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
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“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 01 July 2013 (01.07.2013)	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 WANG Jingjing Telephone No. (86-10)62411133

INTERNATIONAL SEARCH REPORT
Information on patent family members

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Patent Documents referred in the Report	Publication Date	Patent Family	Publication Date
CN 101327184 A	24.12.2008	JP2009001520 A	08.01.2009
		KR20080112937 A	26.12.2008
US 2009/0163545 A1	25.06.2009	WO2009086303 A2	09.07.2009
		WO2009086303 A3	30.12.2009
		AU2008345225 A1	09.07.2009
		EP2219646 A2	25.08.2010
		CA2709784 A1	09.07.2009
		JP2011507910 A	10.03.2011
WO 2009012376 A1	22.01.2009	US2010221200 A1	02.09.2010

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International application No.

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