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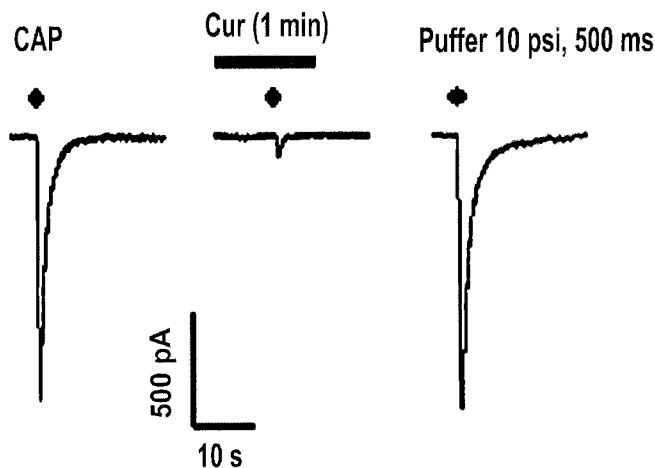
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[Continued on next page]

(54) Title: COMPOSITION FOR PREVENTION AND TREATMENT OF PAIN CONTAINING CURCUMIN OR PHARMACEUTICALLY ACCEPTABLE SALT THEREOF AS AN ACTIVE INGREDIENT

FIGURE 2



(57) Abstract: The present invention relates to a composition for prevention and treatment of pain containing curcumin or pharmaceutically acceptable salts thereof as an active ingredient. The composition for prevention and treatment of pain according to the present invention may significantly inhibit the activation of TRPV1 which causes all pain including dentalgia and inflammation induced by various stimulants such as temperature, capsaicin, and acids, effectively inhibit pain caused thereby, and be produced from natural products. Thus, the composition is biologically stable and may be used in the products for treatment and alleviation of pain, including analgesics, functional toothpastes for prevention and improvement of pain, functional foods, and food additives.

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NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG,  
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<b>A. CLASSIFICATION OF SUBJECT MATTER</b>		
<i>A61K 31/12(2006.01)i</i>		
According to International Patent Classification (IPC) or to both national classification and IPC		
<b>B. FIELDS SEARCHED</b>		
Minimum documentation searched (classification system followed by classification symbols) IPC as above		
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) eKIPASS(KIPO internal), PubMed, "Keywords:curcumin or tumeric, pain or TRPV1 "		
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	JP 18-347948 A (RYUKYU BIO RESOURCE KAIHATSU et al.) 28 Dec 2006 See the paragraph <2>, <7> and clims 1-2	1-2,12, 3-9,13
Y	MARTELLI L et al., "A potential role for the vanilloid receptor TRPV1 in the therapeutic effect of curcumin in dinitrobenzene sulphonic acid-induced colitis in mice.", Neurogastroenterol Motil. Aug 2007, Vol.19, No.8, pp.668-74 See the abstract	3-9,13
Y	LEVINE JD et al., "TRP channels: targets for the relief of pain.", Biochim Biophys Acta. Aug 2007(Epub 23 Jan 2007), Vol.1772, No.8, pp.989-1003. See the abstract	3-9,13
A	KP 10-2007-0086093 A (METAPROTEOMICS, LLC) 27 Aug 2007 See the pages 2-4	1-9,12-13
A	US 06201014 B1 (GARDINER) 13 Mar 2001 See the abstract and col.3	1-9,12-13
<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: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified) "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 "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 "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 "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 "&" document member of the same patent family		
Date of the actual completion of the international search 23 APRIL 2009 (23.04.2009)		Date of mailing of the international search report <b>23 APRIL 2009 (23.04.2009)</b>
Name and mailing address of the ISA/KR  Korean Intellectual Property Office Government Complex-Daejeon, 139 Seonsa-ro, Seo-gu, Daejeon 302-701, Republic of Korea Facsimile No. 82-42-472-7140		Authorized officer YEO, Kyeong Sook Telephone No. 82-42-481-5612 

**INTERNATIONAL SEARCH REPORT**

International application No.

**PCT/KR2008/006576****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.: 10-11  
because they relate to subject matter not required to be searched by this Authority, namely:  
Claims 10-11 pertain to methods for treatment (or screening) of the human or animal body by therapy/diagnostic methods, and thus relate to a subject matter which this International Searching Authority is not required, under Article 17(2)(a)(i) of the PCT and Rule 39.1(iv) of the Regulation under the PCT, to search.
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 fee, this Authority did not invite payment of any 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/KR2008/006576**

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