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(71) Applicant (for all designated States except US): **RECRO PHARMA, INC.** [US/US]; 55 Valley Stream Parkway, Suite 100, Malvern, PA 19355 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **HENWOOD, Geraldine Anne** [US/US]; 3 Jorrocks Lane, Malvern, PA 19355 (US). **MACK, Randall Jerome** [US/US]; 1633 Valley Greene Road, Paoli, PA 19301 (US). **SHARR, Christopher Thomas** [US/US]; 907 Brookmont Circle, Malvern, PA 19355 (US). **KOLENG, John Joseph** [US/US]; 11113 Alison Parke Trail, Austin, TX 78750 (US).

(74) Agent: **EHRESMAN, Kurt L.**; Pepper Hamilton LLP, BNY Mellon Center, 50th Floor, 500 Grant Street, Pittsburgh, PA 15219 (US).

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Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

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(54) Title: SUBLINGUAL DEXMEDETOMIDINE COMPOSITIONS AND METHODS OF USE THEREOF

(57) Abstract: Analgesic sublingual formulations of dexmedetomidine and methods of use thereof are provided for use in the prevention, treatment and management of pain and other conditions.



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A. CLASSIFICATION OF SUBJECT MATTER

A61K 31/415(2006.01)i, A61K 9/107(2006.01)i, A61K 9/14(2006.01)i, A61P 35/00(2006.01)i, A61P 17/02(2006.01)i, A61P 3/00(2006.01)i, A61P 25/00(2006.01)i

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)

A61K 31; A61L 9; A61K 35

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)

eKOMPASS(KIPO internal), PUBMED

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	KARAASLAN D. et al., Comparison of buccal and intramuscular dexmedetomidine premedication for arthroscopic knee surgery, J Clin Anesth. December 2006, Vol.18, No.8, pp.589-593. See abstract, table 1, Fig. 3, pages 590, 592 and 593.	21-31
Y	ANTTILA M. et al., Bioavailability of dexmedetomidine after extravascular doses in healthy subjects, Br J Clin Pharmacol. December 2003, Vol.56, No.6, pp.691-693. See methods and discussion.	21-31
Y	HALL J.E. et al., Sedative, amnestic, and analgesic properties of small-dose dexmedetomidine infusions, Anesth Analg. March 2000, Vol.90, No.3, pp.699-705 See abstract, Fig. 5, and discussion.	21-31
A	US 2005-0281752 A1 (HARRY DUGGER) 22 December 2005 See whole document.	21-31
A	MARBIN S. et al., Intranasal Dexmedetomidine for Sedation during CT Scanning, American Society of Anesthesiologists, Annual Meeting Abstracts. 20 October 2008, A998. See whole document.	21-31

Further documents are listed in the continuation of Box C.

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

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 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

Kim Mi Hwa

Telephone No. 82-42-481-8736



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.: 1-20
because they relate to subject matter not required to be searched by this Authority, namely:
Claims 1-20 pertain to the method for treatment of the human by therapy, 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 Regulations 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

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PCT/US2010/035136

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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