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— with international search report (Art. 21(3))

[Continued on next page]

(54) Title: NUTRACEUTICAL BASED TOPICAL ANXIOLYTIC AGENT AND METHOD OF USE

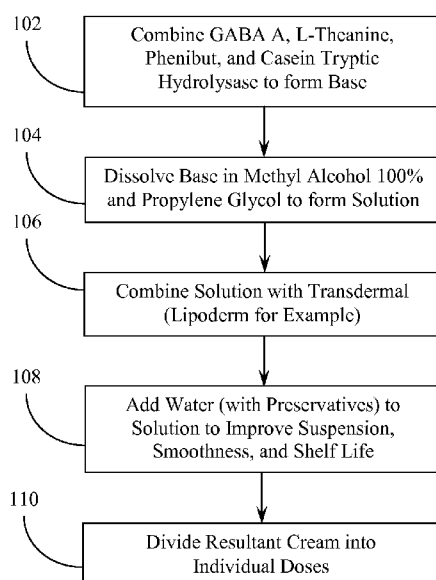


Fig. 1

(57) Abstract: A nutraceutical-based anxiolytic agent (composition) for topical application is described. The formulation utilizes a combination of active ingredients directed to up-regulate the parasympathetic nervous system and calming vagal nerve enervation and its resultant stress symptomatology. The active ingredients in the topical composition include GABA (gamma-aminobutyric acid), L-theanine, Phenibut (beta-phenyl-gamma-aminobutyric acid), and casein tryptic hydrolysase. The active ingredients are dissolved in a lecithin organogel carrier such as Lipoderm or Phloclerm to provide a superior transdermal delivery system.



(88) Date of publication of the international search report:

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A. CLASSIFICATION OF SUBJECT MATTER*A61K 31/195(2006.01)i, A61K 31/4965(2006.01)i, A61K 31/185(2006.01)i, A61P 25/22(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 31/195; A23L 1/305; A61K 31/198

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal), Google Scholar & Keywords: GABA, L-Theanine, Phenibut, Casein tryptic hydrolysase, anxiolytic

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	IZYASLAV LAPIN, 'Phenibut(β -phenyl-GABA): A Tranquilizer and Nootropic Drug', CNS Drug Review, 2001, 7(4), pp. 471-481 See whole document	1
A	JP 2005-206462 A (TAIYO KAGAKU CO LTD) 04 August 2005 See whole document	1
A	MICHAEL MESSAOUDI et al., 'Anxiolytic-like effect and safety profile of a tryptic hydrolysate from bovine alpha s1-casein in rats', Fundamental & Clinical Pharmacology, May 2009, 23, pp. 323-330 See whole document	1
A	A. N. TALALAENKO et al., 'Neurochemical mechanisms of the dorsal pallidum in the antiaversive effects of anxiolytics in various models of anxiety', Neuroscience and Behavioral Physiology, 2006, 36(7), pp. 749-754 See whole document	1



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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Date of mailing of the international search report

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Name and mailing address of the ISA/KR

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2010/057300**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.: 2
because they relate to subject matter not required to be searched by this Authority, namely:
Claim 2 pertains to methods for treatment of the human body 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

International application No.

PCT/US2010/057300Patent document
cited in search reportPublication
datePatent family
member(s)Publication
date

JP 2005-206462 A

04.08.2005

None