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(71) Applicant (*for all designated States except US*): **BIOKI-
ER, INC.** [US/US]; 105 Green Willow Ct., Chapel Hill,
NC 27514 (US).

(72) Inventor; and

(75) Inventor/Applicant (*for US only*): **SZEWCZYK, Jerzy,
Ryszard** [US/US]; 105 Green Willow Court, Chapel Hill,
NC 27514 (US).

(74) Agent: **PASSE, James, G.**; Passe Intellectual Property,
LLC, 1717 Brassfield Road, Raleigh, NC 27614 (US).

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HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR,
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(54) Title: COMPOSITION AND METHOD FOR TREATMENT OF DIABETES

(57) Abstract: The present invention relates to a method of treating diabetes type II by delivery of butyric acid, bile acid, long chain fatty acid or glutamine to the colon by bypassing the upper digestive tract. The composition is combined either by the same or different route of administration with a DPP-IV inhibitor such as vildagliptin.



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A. CLASSIFICATION OF SUBJECT MATTER

A61K 31/191(2006.01)i, A61K 31/195(2006.01)i, A61K 47/48(2006.01)i, A61K 9/127(2006.01)i, A61P 3/10(2006.01)i, A61P 3/00(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 31/191; A61K 31/195; A61K 31/155; A61K 31/19; A61K 31/7016; A61K 31/704; A61K 38/04; A61P 3/00; A61K 9/24; A61K 38/22

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) & Keywords: diabetes mellitus type 2, gut hormone, butyric acid, bile acid, long chain fatty acid, glutamine, DPP-IV inhibitor, colon targeted delivery system

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 2010-081079 A2 (BIOKIER INC.) 15 July 2010 See abstract, claims 7-13.	10-16
Y	US 2011-0065660 A1 (BARON, A. et al.) 17 March 2011 See abstract, pages 5, 6, 22, 23, example 2, claims 1-3, 7-12.	10-16
A	US 2007-0098781 A1 (LOEFFLER, B. M. et al.) 3 May 2007 See the whole document.	10-16
A	WO 2006-086727 A2 (ENTELOS INC.) 17 August 2006 See the whole document.	10-16
A	US 2010-0130426 A1 (YOUNG, A. A. et al.) 27 May 2010 See the whole document.	10-16



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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Name and mailing address of the ISA/KR



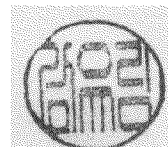
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Kam Yoolim

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2012/036077**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.: 1-9
because they relate to subject matter not required to be searched by this Authority, namely:
Claims 1-9 pertain to methods for treatment of the human body by surgery or therapy, as well as 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 Regulations under the PCT, to search.
2. ☒ Claims Nos.: 17
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:
The subject matter of claim 17 is not clear because claim 17 relates to a composition according to claim 10, and to a composition according to claim 11, simultaneously.
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/US2012/036077

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