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CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO,
DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN,
HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KH, KN, KP, KR,
KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG,
MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM,
PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC,
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EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV,
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KM, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

Published:

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

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

26 July 2018 (26.07.2018)

(54) Title: TREATMENT OF GLAUCOMA AND/OR RETINAL DISEASES AND FORMULATIONS USEFUL THEREFORE

(57) Abstract: Provided herein are formulations for topical administration, such as ophthalmic formulations, and methods of using such formulations. In some aspects and embodiments the formulations may include a polyoxyl lipid or fatty acid, and/or a polyalkoxylated alcohol and may include nanomicelles. Also included are methods of treating or preventing diseases or conditions, such as ocular diseases or conditions.



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A. CLASSIFICATION OF SUBJECT MATTER

A61K 9/00(2006.01)i, A61K 31/19(2006.01)i, A61K 31/505(2006.01)i, A61K 47/12(2006.01)i, A61K 47/10(2006.01)i, A61K 45/06(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 9/00; A61K 38/49; A61K 47/44; A61K 47/10; A61K 38/08; A61K 31/366; A61K 31/519; A61K 31/19; A61K 31/505; A61K 47/12; A61K 45/06

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: ophthalmic formulation, iloprost, macitentan, polyoxyl lipid, octoxynol-40, nanomicelles

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 2015-179527 A1 (OCULAR TECHNOLOGIES SARL) 26 November 2015 See claims 1-18; paragraphs [0010], [0044], [0084]; and page 27.	1-11
X		24
Y	HOYNG, PHILIP F. J. et al., 'Iloprost, a stable prostacyclin analog, reduces intraocular pressure', Investigative Ophthalmology & Visual Science, 1987, Vol.28, No.3, pp.470-476 See pages 470 and 473.	1,3,5,7,9,11
Y	HOWELL, GARETH R. et al., 'Combinatorial targeting of early pathways profoundly inhibits neurodegeneration in a mouse model of glaucoma', Neurobiology of Disease, 2014, Vol.71, pp.44-52 See abstract; and pages 50-51.	2,4,6,8,10-11
A	US 2015-0366953 A1 (THE RESEARCH FOUNDATION FOR THE STATE UNIVERSITY OF NEW YORK et al.) 24 December 2015 See the whole document.	1-11,24
A	US 2003-0176356 A1 (YORIO, THOMAS et al.) 18 September 2003 See the whole document.	1-11,24

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 another 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

15 June 2017 (15.06.2017)

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16 June 2017 (16.06.2017)

Name and mailing address of the ISA/KR

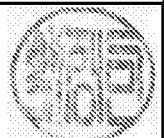
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Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

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.: 23
because they relate to subject matter not required to be searched by this Authority, namely:
Claim 23 pertains to a method for treatment of the human body by therapy, and thus relate to a subject matter which this International Searching Authority is not required, under PCT Article 17(2)(a)(i) and PCT Rule 39.1(iv), 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.: 12-23
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 fees, this Authority did not invite payment of any additional fees.
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/US2017/020795

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2015-179527 A1	26/11/2015	AU 2015-264181 A1 CA 2949954 A1 SG 11201609742 A US 2017-0065611 A1	26/11/2015 26/11/2015 29/12/2016 09/03/2017
US 2015-0366953 A1	24/12/2015	WO 2014-126997 A1	21/08/2014
US 2003-0176356 A1	18/09/2003	None	