

Title (en)  
METHODS AND COMPOSITIONS FOR PREVENTING AND TREATING MYOPIA WITH FENOTEROL HYDROBROMIDE, A  $\beta$ 2- ADRENERGIC RECEPTOR AGONIST, AND DERIVATIVES THEREOF

Title (de)  
VERFAHREN UND ZUSAMMENSETZUNGEN ZUR PRÄVENTION UND BEHANDLUNG VON MYOPIE MIT FENOTEROLHYDROBROMID, EINEM  $\beta$ 2-ADRENERGEN REZEPTORAGONISTEN UND DERIVATEN DAVON

Title (fr)  
MÉTHODES ET COMPOSITIONS POUR PRÉVENIR ET TRAITER LA MYOPIE À L'AIDE DE BROMHYDRATE DE FÉNOTÉROL, UN AGONISTE DU RÉCEPTEUR  $\beta$ 2-ADRÉNERGIQUE, ET DE SES DÉRIVÉS

Publication  
**EP 4164607 A4 20240710 (EN)**

Application  
**EP 21822599 A 20210609**

Priority

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- US 2021036614 W 20210609

Abstract (en)  
[origin: WO2021252626A1] The disclosure relates to methods and compositions for preventing and/or treating an ocular disease. In particular, the disclosure relates to preventing and/or treating myopia with systemic or topical administration of fenoterol hydrobromide, which is a  $\beta$ 2-adrenergic receptor agonist, or a derivative thereof.

IPC 8 full level  
**A61K 31/137** (2006.01); **A61K 9/00** (2006.01); **A61P 27/10** (2006.01)

CPC (source: EP IL KR)  
**A61K 9/0014** (2013.01 - IL); **A61K 9/0019** (2013.01 - IL); **A61K 9/0048** (2013.01 - IL KR); **A61K 9/0053** (2013.01 - IL); **A61K 31/137** (2013.01 - EP IL KR); **A61K 45/06** (2013.01 - EP IL); **A61P 27/10** (2017.12 - EP IL KR); **A61K 9/0014** (2013.01 - EP); **A61K 9/0019** (2013.01 - EP); **A61K 9/0048** (2013.01 - EP); **A61K 9/0053** (2013.01 - EP)

Citation (search report)

- [XP] WO 2020251926 A1 20201217 - JENIVISION INC [US]
- [A] TATIANA V. TKATCHENKO: "Analysis of genetic networks regulating refractive eye development in collaborative cross progenitor strain mice reveals new genes and pathways underlying human myopia", BMC MEDICAL GENOMICS, vol. 12, no. 1, 30 July 2019 (2019-07-30), London UK, XP093163579, ISSN: 1755-8794, Retrieved from the Internet <URL:http://link.springer.com/article/10.1186/s12920-019-0560-1/fulltext.html> DOI: 10.1186/s12920-019-0560-1
- [A] TATIANA V. TKATCHENKO: "Gene expression in response to optical defocus of opposite signs reveals bidirectional mechanism of visually guided eye growth", PLOS BIOLOGY, vol. 16, no. 10, 9 October 2018 (2018-10-09), US, pages e2006021, XP093163623, ISSN: 1545-7885, DOI: 10.1371/journal.pbio.2006021
- [A] TATIANA V. TKATCHENKO: "Pharmacogenomic Approach to Antimyopia Drug Development: Pathways Lead the Way", TRENDS IN PHARMACOLOGICAL SCIENCES., vol. 40, no. 11, 1 November 2019 (2019-11-01), GB, pages 833 - 852, XP093163629, ISSN: 0165-6147, DOI: 10.1016/j.tips.2019.09.009
- See references of WO 2021252626A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
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**US 2021036614 W 20210609**; CA 3182397 A 20210609; CN 202180061075 A 20210609; EP 21822599 A 20210609; IL 29897422 A 20221211; JP 2022576461 A 20210609; KR 20237001143 A 20210609