

Title (en)

ENHANCED RETINAL DELIVERY OF A NUCLEIC ACID THROUGH IONTOPHORESIS

Title (de)

VERSTÄRKT RETINALE FREISETZUNG EINER NUKLEINSÄURE DURCH IONTOPHORESE

Title (fr)

ADMINISTRATION RÉTINIENNE D'UN ACIDE NUCLÉIQUE AMÉLIORÉE PAR IONOPHORÈSE

Publication

EP 2099497 A2 20090916 (EN)

Application

EP 07873352 A 20071205

Priority

- IB 2007004565 W 20071205
- US 87323306 P 20061205

Abstract (en)

[origin: WO2008125908A2] The present invention provides a device and a method for the enhanced retinal delivery of nucleic acid therapeutics utilizing iontophoresis to evoke a transient elongation of the Muller Cells of a mammalian eye. The enhanced retinal deposition can be achieved by either a topical application, subconjunctival, or an intravitreal injection of the nucleic acid composition followed by, preceded by, or administered simultaneously with the iontophoretic application. The present invention thus provides a particularly advantageous method for the treatment of ocular diseases comprising the in vivo administration of a nucleic acid capable of alleviating the symptoms of a disease, the delivery of the nucleic acid being enhanced by using iontophoresis. This method can be applied particularly to the diseases of the retina resulting from an alteration of a gene expression and/or the over-expression of particular growth factors. The diseases include, but are not limited to, human ocular retinopathies including, neovascular diseases (Age-Related Macular Edema, Diabetic Retinopathies, Diabetic Macular Edema, etc.) and inherited retinopathies such as retinitis pigmentosa.

IPC 8 full level

A61K 48/00 (2006.01)

CPC (source: EP)

A61K 48/0075 (2013.01); **A61P 27/02** (2017.12)

Citation (search report)

See references of WO 2008125908A2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2008125908 A2 20081023; **WO 2008125908 A3 20090409**; CA 2671961 A1 20081023; EP 2099497 A2 20090916; JP 2010511692 A 20100415

DOCDB simple family (application)

IB 2007004565 W 20071205; CA 2671961 A 20071205; EP 07873352 A 20071205; JP 2009539834 A 20071205