

Title (en)

METHODS AND COMPOSITIONS FOR EFFICIENT DELIVERY THROUGH MULTIPLE BIO BARRIERS

Title (de)

VERFAHREN UND ZUSAMMENSETZUNGEN ZUR EFFIZIENTEN ABGABE DURCH MEHRERE BIOSPERREN

Title (fr)

MÉTHODES ET COMPOSITIONS POUR UNE ADMINISTRATION EFFICACE À TRAVERS DE MULTIPLES BARRIÈRES BIOLOGIQUES

Publication

**EP 3691670 A4 20210804 (EN)**

Application

**EP 18864985 A 20181002**

Priority

- US 201762566813 P 20171002
- US 2018053873 W 20181002

Abstract (en)

[origin: WO2019070645A1] Mini nanodrugs that include a polymalic-based molecular scaffold with one or more peptides capable of crossing the blood-brain barrier, one or more plaque-binding peptides and one or more therapeutic agents attached to the scaffold are provided. Methods of treating brain diseases or abnormal conditions, and imaging of the same in a subject by administering the mini nanodrugs are described. Methods for reducing formation of amyloid plaques in the brain of a subject are disclosed.

IPC 8 full level

**A61K 38/00** (2006.01); **A61K 31/713** (2006.01); **A61K 38/08** (2019.01); **A61K 47/59** (2017.01); **A61K 47/64** (2017.01); **A61P 25/00** (2006.01); **A61P 35/00** (2006.01); **C07K 5/083** (2006.01); **C07K 5/087** (2006.01); **C07K 7/00** (2006.01); **C07K 7/06** (2006.01); **C07K 7/08** (2006.01); **C07K 14/435** (2006.01); **C07K 14/47** (2006.01); **C07K 14/81** (2006.01); **C07K 17/08** (2006.01); **C07K 19/00** (2006.01)

CPC (source: EP)

**A61K 31/713** (2013.01); **A61K 38/00** (2013.01); **A61K 38/08** (2013.01); **A61K 47/593** (2017.07); **A61K 47/64** (2017.07); **A61P 25/00** (2017.12); **A61P 35/00** (2017.12); **C07K 5/0808** (2013.01); **C07K 5/0812** (2013.01); **C07K 7/06** (2013.01); **C07K 14/43572** (2013.01); **C07K 14/4711** (2013.01); **C07K 14/8117** (2013.01); **C07K 14/8121** (2013.01); **C07K 17/08** (2013.01); **C07K 19/00** (2013.01); **C07K 2319/01** (2013.01); **C07K 2319/03** (2013.01); **C07K 2319/06** (2013.01)

Citation (search report)

- [T] ISRAEL LIRON L. ET AL: "A Combination of Tri-Leucine and Angiopep-2 Drives a Polyanionic Polymalic Acid Nanodrug Platform Across the Blood-Brain Barrier", ACS NANO, 26 February 2019 (2019-02-26), US, XP055811026, ISSN: 1936-0851, Retrieved from the Internet <URL:https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7641102/pdf/nihms-1054603.pdf> DOI: 10.1021/acsnano.8b06437
- [A] "Correction for Ding et al., Inhibition of brain tumor growth by intravenous poly(L-malic) acid nanobioconjugate with pH-dependent drug release", PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES, vol. 107, no. 45, 27 October 2010 (2010-10-27), pages 19603 - 19603, XP055098887, ISSN: 0027-8424, DOI: 10.1073/pnas.1015385107
- See references of WO 2019070645A1

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)

**WO 2019070645 A1 20190411**; CN 111182913 A 20200519; EP 3691670 A1 20200812; EP 3691670 A4 20210804; RU 2020114744 A 20211109

DOCDB simple family (application)

**US 2018053873 W 20181002**; CN 201880065055 A 20181002; EP 18864985 A 20181002; RU 2020114744 A 20181002