

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization

International Bureau

(43) International Publication Date
28 June 2018 (28.06.2018)



(10) International Publication Number
WO 2018/114945 A1

(51) International Patent Classification:

A61K 41/00 (2006.01) *A61N 1/36* (2006.01)
A61P 25/00 (2006.01) *A61N 1/04* (2006.01)
A61N 2/00 (2006.01)

Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

(21) International Application Number:

PCT/EP2017/083533

(22) International Filing Date:

19 December 2017 (19.12.2017)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

16306750.7 21 December 2016 (21.12.2016) EP

(71) Applicant: **NANOBIOTIX** [FR/FR]; 60, rue de Wattignies, 75012 Paris (FR).

(72) Inventors: **MEYRE, Marie-Edith**; 3, square Nungesser, 94160 Saint Mande (FR). **POTTIER, Agnès**; 6, rue Sainte Beuve, 75006 Paris (FR). **LEVY, Laurent**; 246, boulevard Raspail, 75014 Paris (FR).

(74) Agent: **CABINET BECKER ET ASSOCIES**; 25, rue Louis le Grand, 75002 Paris (FR).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, 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, JO, 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, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

(54) Title: NANOPARTICLES FOR USE FOR TREATING A NEURONAL DISORDER

(57) Abstract: The present invention relates to the medical field, in particular to the treatment of neurological disorders. More specifically the present invention relates to a nanoparticle or nanoparticles' aggregate for use in prevention or treatment of a neurological disease or at least one symptom thereof in a subject when the nanoparticle or nanoparticles' aggregate is exposed to an electric field, wherein the nanoparticle's or nanoparticles' aggregate's material is selected from a conductor material, a semiconductor material, an insulator material with a dielectric constant (ϵ_{ijk}) equal to or above 200, and an insulator material with a dielectric constant (ϵ_{ijk}) equal to or below 100. It further relates to compositions and kits comprising such nanoparticles and/or nanoparticles' aggregates as well as to uses thereof.



WO 2018/114945 A1