



- (51) **International Patent Classification:**
A61K 9/10 (2006.01) *A61K 9/107* (2006.01)
- (21) **International Application Number:**
PCT/IB2015/052541
- (22) **International Filing Date:**
8 April 2015 (08.04.2015)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
1872/CHE/2014 9 April 2014 (09.04.2014) IN
- (71) **Applicant:** **NANOCEUTICA LABORATORIES PVT. LTD** [IN/IN]; 28/1//11, B/C, Road No.15, IDA Nacharam, Uppal Mandal, Hyderabad-500076, Telangana State (IN).
- (72) **Inventors:** **DEVRAJ, Rambhau**; Nanoceutica Laboratories Pvt. Ltd, 28/1//11, B/C, Road No.15, IDA Nacharam, Uppal Mandal, Hyderabad-500076, Telangana, India., Hyderabad 500076 (IN). **CHHATOI, Pranati**; Nanoceutica Laboratories Pvt. Ltd, 28/1//11, B/C, Road No.15, IDA Nacharam, Uppal Mandal, Hyderabad-500076, Telangana, India, Hyderabad 500076 (IN). **PARVATHABHATLA, Naga Hemanth Kumar**; Nanoceutica Laboratories Pvt. Ltd, 28/1//11, B/C, Road No.15, IDA Nacharam, Uppal Mandal, Hyderabad-500076, Telangana, India, Hyderabad 500076 (IN). **DESHMUKH, Anand Vasant**; Nanoceutica Laboratories Pvt. Ltd, 28/1//11, B/C, Road No.15, IDA Nacharam, Uppal Mandal, Hyderabad-500076, Telangana, India., Hyderabad 500076 (IN). **CHINTABHATLA, Krishna Kaushik**; Nanoceutica Laboratories Pvt. Ltd, 28/1//11, B/C, Road No.15, IDA Nacharam, Uppal Mandal, Hyderabad-500076, Telangana, India, Hyderabad 500076 (IN).

- (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, 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, KN, KP, KR, 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).

Declarations under Rule 4.17:

- as to the identity of the inventor (Rule 4.17(i))
- 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:**
30 December 2015

(54) **Title:** COMPOSITION AND METHOD OF PRODUCING NANOFORMULATION OF WATER INSOLUBLE BIOACTIVES IN AQUEOUS BASE

(57) **Abstract:** Exemplary embodiment of the present disclosure are directed towards a stable nanodispersion comprising an aqueous dispersion medium, a dispersed phase, a surface active agent and optionally, an additive, wherein the aqueous dispersion medium comprises of a nanodispersion stabilizing vehicle base component, wherein the nanodispersion stabilizing vehicle base component improves long term physical stability of the nanodispersion with or without particle size reduction, wherein the dispersed phase comprises of a bioactive compound and wherein the bioactive compound is lipophilic and hydrophobic. Another exemplary embodiment of the present disclosure is directed towards a method of preparation of such stable nanodispersion.



INTERNATIONAL SEARCH REPORT

International application No.
PCT/IB2015/052541

A. CLASSIFICATION OF SUBJECT MATTER
A61K9/10, A61K9/107 Version=2015.01

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

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

patseer, IPO internal database

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US5444041 A1 (IBAH INC. US) 22-08-1995 abstract and claims 1-2 and claims 59-62	1-12
X	WO2011075623 A1 (LATITUDE PHARMACEUTICALS, INC. US) 23-06-2011 abstract and claims	1-12

☐ Further documents are listed in the continuation of Box C. ☒ See patent family annex.

* Special categories of cited documents:	"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
"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	"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
"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)	"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
"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	"&" document member of the same patent family

Date of the actual completion of the international search

22-09-2015

Date of mailing of the international search report

22-09-2015

Name and mailing address of the ISA/

Indian Patent Office
Plot No.32, Sector 14, Dwarka, New Delhi-110075
Facsimile No.

Authorized officer

Mukesh Kumar Jangid

Telephone No. +91-1125300200

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/IB2015/052541

Citation	Pub.Date	Family	Pub.Date
US 5444041 A1	22-08-1995	EP 0580778 A1	02-02-1994
		WO 1992018147 A1	22-10-1992
		US 5633226 A1	27-05-1997
WO 2011075623 A1	26-06-2011	CN 102933200 A1	13-02-2013