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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
24 March 2005 (24.03.2005)

PCT

(10) International Publication Number
WO 2005/026331 A2

(51) International Patent Classification[7]: C12N 1/06, 15/10

(21) International Application Number:
PCT/EP2004/011437

(22) International Filing Date:
17 September 2004 (17.09.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/503,464 17 September 2003 (17.09.2003) US
60/563,008 19 April 2004 (19.04.2004) US

(71) Applicant *(for all designated States except US)*: **GENCELL SAS** [FR/FR]; 72-82 rue Leon Geffroy, F-94400 Vitry-sur-Seine (FR).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **BLANCHE, Francis**; 41, rue des Solitaires, F-75019 Paris (FR). **COUDER, Michel**; 15, rue du Vert Galant, F-94370 Sucy-en-Brie (FR). **MAESTRALI, Nicolas**; 51, rue Guisseray, F-91650 Breuillet (FR). **GAILLAC, David**; 37, rue Maryse Bastié, F-69008 Lyon (FR). **GUILLEMIN, Thierry**; 10, rue des Sablons, F-91590 Boissy Le Cutte (FR).

(74) Agent: **LECCA, Patricia?**; Gencell SAS, 72-82, rue Leon Geffroy, F-94400 Vitry-sur-Seine (FR).

(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— *without international search report and to be republished upon receipt of that report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD OF PREPARATION OF PHARMACEUTICALLY GRADE PLASMID DNA

(57) Abstract: This invention provides a process for the continuous alkaline lysis of a bacterial suspension in order to harvest pDNA. It further provides for optional additional purification steps, including lysate filtration, anion exchange chromatography, triplex affinity chromatography, and hydrophobic interaction chromatography. These optional purification steps can be combined with the continuous lysis in order to produce a highly purified pDNA product substantially free of gDNA, RNA, protein, endotoxin, and other contaminants.

WO 2005/026331 A2