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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
16 December 2004 (16.12.2004)

PCT

(10) International Publication Number
WO 2004/108881 A2

(51) International Patent Classification[7]: C12M 1/00

(21) International Application Number:
PCT/US2004/016437

(22) International Filing Date: 25 May 2004 (25.05.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/474,479 30 May 2003 (30.05.2003) US
10/845,914 14 May 2004 (14.05.2004) US

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(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: BIOREACTOR FOR GROWING BIOLOGICAL MATERIALS SUPPORTED ON A LIQUID SURFACE

(57) Abstract: A bioreactor assembly of the present invention for holding a media and supporting growth of a plurality of plants. The assembly includes a light source and a container having a light transmissive wall structure and defining a reservoir. A major axis of the reservoir is substantially horizontal allowing the reservoir to be filled with media to a partial level and to define a relatively large surface area for support of the plants. The assembly may also include clamps to secure and seal separate wall structure portions of the container together, and end caps to the wall portions, to define an aseptic environment. As another option, the clamps may define openings therethrough that allow passage of various devices for measuring and controlling bioreactor function such as a gas supply nozzle, a gas exit nozzle, an air temperature probe, a pH probe, a sampling drain, a gas composition probe and a media temperature probe.

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