

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
18 December 2008 (18.12.2008)

PCT

(10) International Publication Number
WO 2008/153401 A1

(51) International Patent Classification:
C12M 1/00 (2006.01) *B01F 11/00* (2006.01)
C12M 1/02 (2006.01)

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(21) International Application Number:
PCT/NL2008/050388

(22) International Filing Date: 16 June 2008 (16.06.2008)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
07110320.4 15 June 2007 (15.06.2007) EP

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(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, BR, BW, BY, BZ, CA,
CH, 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, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC,
LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN,
MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH,
PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV,
SY, 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, 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, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL,
NO, 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:
— with international search report

(54) Title: IMPROVED FLEXIBLE BIOREACTOR

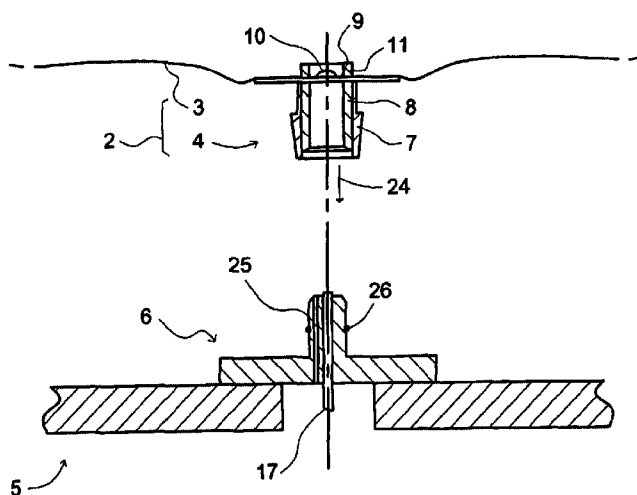


FIG. 1

(57) Abstract: A flexible bioreactor intended for culturing cells in a liquid medium (20), the bioreactor (1) comprising a flexible wall forming a fluid impermeable bottom wall (2) of the bioreactor when in use, wherein flexible parts (3) of said flexible bottom wall are interrupted by at least one rigid element (4) of said flexible bottom wall, the rigid element (4) and the flexible parts (3) being connected fluid tightly, and wherein the rigid element comprises measuring means (10; 110) allowing for non-invasive monitoring of cellular activity in said bioreactor when in use. To be depicted together with abstract: Figure 1