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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
11 December 2003 (11.12.2003)

PCT

(10) International Publication Number
WO 03/102125 A1

(51) International Patent Classification[7]: C12M 1/42, C12N 5/12, 5/16, 5/28, 13/00, A61K 48/00, 35/54

(21) International Application Number: PCT/AU03/00660

(22) International Filing Date: 30 May 2003 (30.05.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/384,882	31 May 2002 (31.05.2002)	US
60/387,284	7 June 2002 (07.06.2002)	US
PS 3078	19 June 2002 (19.06.2002)	AU
2002951223	5 September 2002 (05.09.2002)	AU
2002951222	5 September 2002 (05.09.2002)	AU

(71) Applicant *(for all designated States except US)*: **APOLLO LIFE SCIENCES PTY LIMITED** [AU/AU]; ACN. 102 084 917, 12B Grafton Street, Balmain, New South Wales 2041 (AU).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **WILLS, Ivan, Nicholas** [AU/AU]; 120 Terry Street, Tempe, New South Wales 2044 (AU). **MONAGHAN, Dave, Robert, James** [AU/AU]; 35/73 Banksia Street, Botany, New South Wales 2019 (AU).

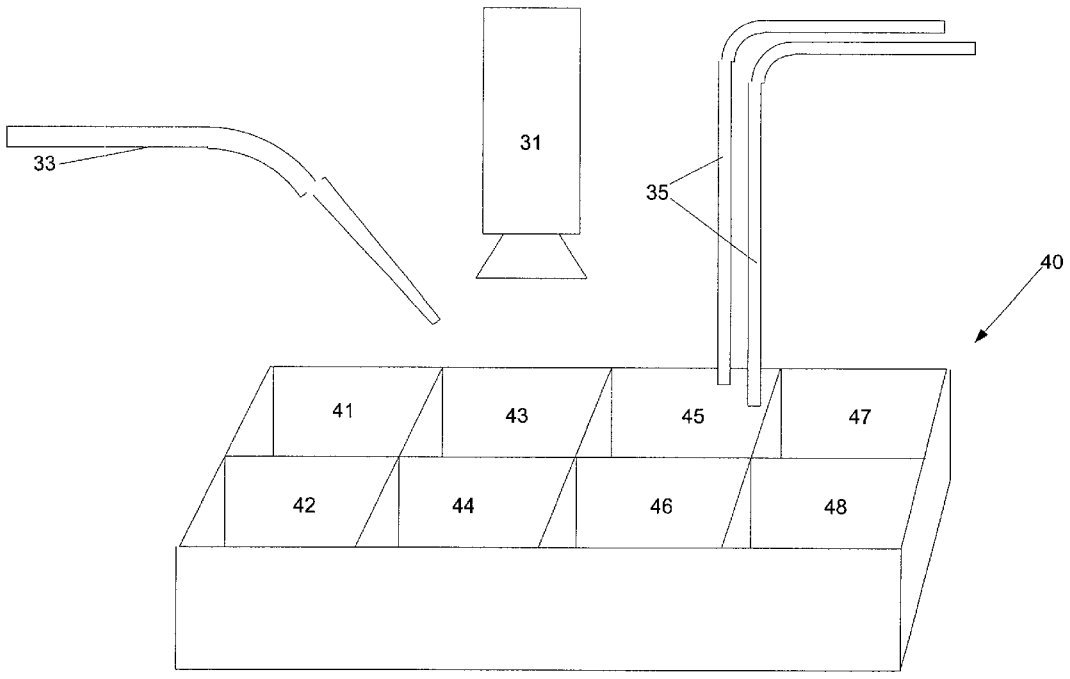
(74) Agents: **COWLE, Anthony, John** et al.; Davies Collison Cave, Level 10, 10 Barrack Street, Sydney, New South Wales 2000 (AU).

(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, 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, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

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

[Continued on next page]

(54) Title: ELECTROFUSION OF CELLS AND APPARATUS THEREFORE



(57) Abstract: The present invention relates to a method and apparatus for fusing first and second cells. In particular, the method includes positioning the first and second cells between two electrodes (35) in a fluid filled container (40) using a pipette system (33), with the first and second cells being held separated from each electrode. Once this has been achieved a current having a predetermined waveform is applied to the electrodes (35) to generate a predetermined electric field thereby causing the cells to fuse.

WO 03/102125 A1

Published:
— *with international search 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.