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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
9 July 2009 (09.07.2009)

PCT

(10) International Publication Number
WO 2009/083603 A1

(51) International Patent Classification:
B01J 13/04 (2006.01)

(21) International Application Number:
PCT/EP2009/000005

(22) International Filing Date: 2 January 2009 (02.01.2009)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
08150004.3 2 January 2008 (02.01.2008) EP

(71) Applicant *(for all designated States except US)*: **ZIEL BIOPHARMA LTD.** [IE/IE]; Abbey House, 19 Grove Island, Corbally, Limerick (IE).

(72) Inventor; and

(75) Inventor/Applicant *(for US only)*: **HAUSER, Oliver** [AT/AT]; Bergheidengasse 92, A-1130 Wien (AT).

(74) Agents: **FLEUCHAUS, Andrea** et al.; Fleuchaus & Gallo, Sollner Strasse 36, 81479 München (DE).

(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, ST, 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, MK, 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*
— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

(54) **Title:** PROCESS AND APPARATUS FOR THE PRODUCTION OF MICROCAPSULES

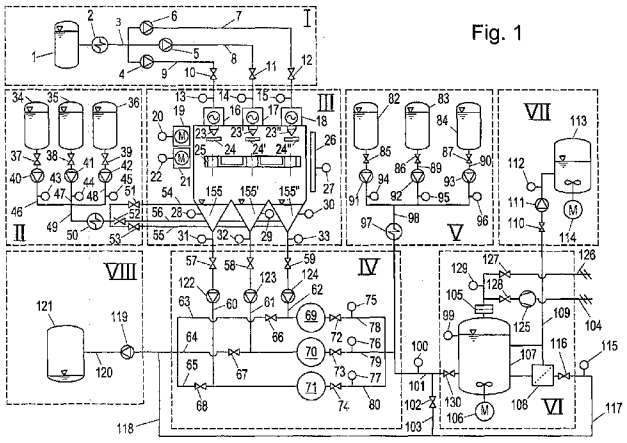

Fig. 1

(57) **Abstract:** The present invention relates to an apparatus and a method for producing microcapsules. The apparatus according to the invention comprises at least one bead generator, having at least one nozzle passed by a liquid during operation, with a liquid reservoir arranged before the nozzle. The liquid reservoir comprises a membrane in the region of at least one boundary wall for generating a mechanical oscillation in the liquid. The apparatus comprises at least one reaction and transport device passed by a reaction medium, in which the beads generated in the bead generator are received. Microcapsules are formed during a predetermined reaction time period between at least one first polymeric component of the beads and at least one second polymeric component in the reaction medium and are transported along a reaction path. The apparatus is characterized in that at least one electrode, movable substantially parallel to the nozzle axis by a drive, is arranged between the bead generator and the reaction and transport device, which generates an electric field between an outlet region of the nozzle and the electrode for influencing the bead properties. The invention further includes a use of the apparatus for producing microcapsules and a method for controlling the apparatus.

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