



(51) International Patent Classification:

A61J 1/14 (2006.01) *B65D 81/32* (2006.01)
A61J 3/00 (2006.01)

(21) International Application Number:

PCT/CA2012/000650

(22) International Filing Date:

5 July 2012 (05.07.2012)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

2,745,320 6 July 2011 (06.07.2011) CA

(71) Applicant (for all designated States except US): **DUO-JECT MEDICAL SYSTEMS INC.** [CA/CA]; 50, rue De Gaspe, Complex B-5, Bromont, Quebec J2L 2N8 (CA).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **REYNOLDS, David L.** [CA/CA]; 50, rue De Gaspe, Complex B-5, Bromont, Quebec J2L 2N8 (CA). **MACDONALD, Daniel** [CA/CA]; 202-5 Des Deux-Montagnes, Bromont, Quebec J2L 1P3 (CA). **TREMBLAY, Yan** [CA/CA]; 165, rue De L'Erabliere, Orford, Quebec J1X 6J8 (CA). **GEOFFROY, Eric** [CA/CA]; 1421, Chemin Vallieres, Ayer's Cliff, Quebec J1X 6J8 (CA). **VIENS, Mathieu**; 403, rue Georges-Cros, Granby, Quebec J2C 0C7 (CA).

(74) Agent: **FINCHAM, Eric**; 1991 Perigny Blvd., Suite 104, Chambly, Quebec J3L 4C3 (CA).

(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, CL, 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, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

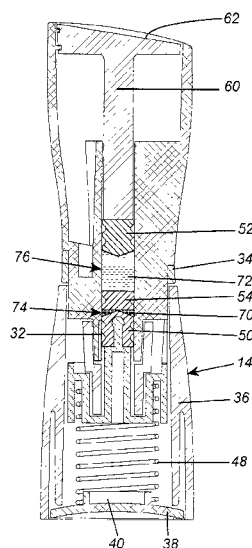
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report (Art. 21(3))

(54) Title: RECONSTITUTION DEVICE

FIG. 9



(57) Abstract: A reconstitution device (10) for mixing a first component (70) with a second component (72) wherein there are provided first and second housings (12, 14) which are engageable together, a conduit (28) having an internal passageway (30) having a dispensing end and an inlet end, first, second and third plungers (52, 54) mounted in said internal passageway (30), first and second compartments (70, 72) being defined by the plungers, a shearing channel (32) formed in a side wall of conduit (28) to permit mixing of contents located in the first and second compartments (74, 76), a plunger rod (58) to cause initial mixing of the first and second components (70, 72), and a spring member (48) biasing against the moveable member (42).