



(43) International Publication Date
30 October 2014 (30.10.2014)

- (51) International Patent Classification:
B01D 11/00 (2006.01)
- (21) International Application Number:
PCT/US2014/035557
- (22) International Filing Date:
25 April 2014 (25.04.2014)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
61/815,818 25 April 2013 (25.04.2013) US
- (71) Applicant: **FLODESIGN SONICS, INC.** [US/US]; 380 Main Street, Wilbraham, Massachusetts 01095 (US).
- (72) Inventors: **LIPKENS, Bart**; 380 Main Street, Wilbraham, Massachusetts 01095 (US). **MERCADO, Ari**; 380 Main Street, Wilbraham, Massachusetts 01095 (US). **MARTIN, Arthur**; 380 Main Street, Wilbraham, Massachusetts 01095 (US). **MASI, Louis**; 380 Main Street, Wilbraham, Massachusetts 01095 (US). **DIONNE, Jason**; 380 Main Street, Wilbraham, Massachusetts 01095 (US).
- (74) Agent: **KLEIN, Richard M.**; Fay Sharpe LLP, 1228 Euclid Avenue, Fifth Floor, Cleveland, Ohio 44115 (US).
- (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, BN, 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, IR, IS, JP, KE, KG, 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, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, 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, KM, ML, MR, NE, SN, TD, TG).

Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

(54) Title: EXCIPIENT REMOVAL FROM PHARMACOLOGICAL SAMPLES

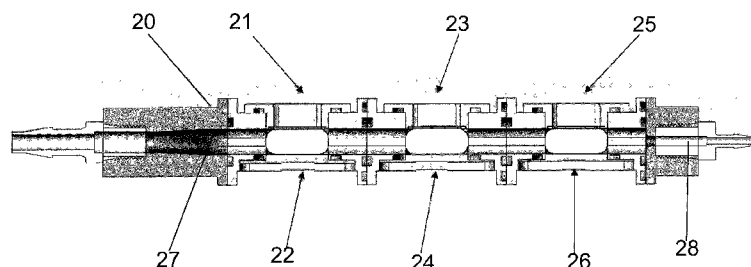


FIGURE 2

(57) Abstract: Active pharmaceutical ingredients can be separated from their excipients by dissolving a pharmaceutical product (e.g. tablet, pill) into a solvent, then running the solution through an acoustophoretic device. Standing waves are used to separate the excipient from the active ingredient dissolved in the solvent.

