



(51) International Patent Classification:
H01J 49/04 (2006.01)

(21) International Application Number:
PCT/US2010/051896

(22) International Filing Date:
8 October 2010 (08.10.2010)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/249,779 8 October 2009 (08.10.2009) US

(71) Applicant (for all designated States except US):
PERKIN ELMER HEALTH SCIENCES, INC.
[US/US]; 940 Winter Street, Waltham, MA 02451 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **FERRARA, Keith**
[US/US]; 135 Ripton Parish Lane, Stratford, CT 06614 (US).

(74) Agent: **RHODES, Christopher**; Woods Rogers PLC, 10
South Jefferson Street - Suite 1400, Roanoke, VA 24011 (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, 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, RO, RS, RU, 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, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, 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: COUPLING DEVICES AND METHODS OF USING THEM

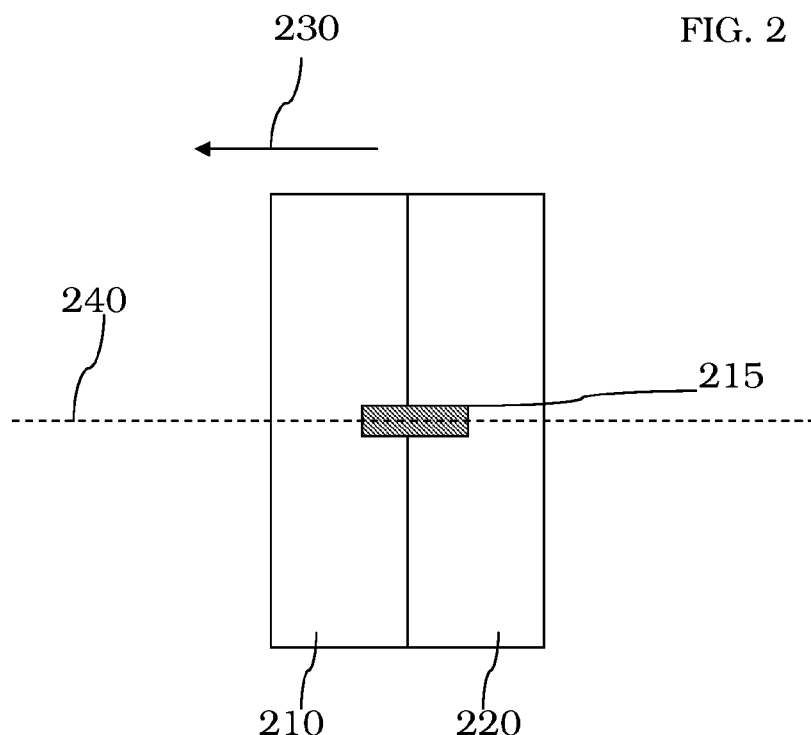


FIG. 2

(57) Abstract: Certain embodiments described herein are directed to couplers that can be used to provide a seal between a source assembly and a vacuum chamber. In certain examples, the seal can be provided upon movement of a moveable component of the coupler. In some examples, rotation of the moveable component is operative to provide an axial force to a stationary component coupled to the moveable component such that the stationary component is biased to provide a suitable seal to the vacuum chamber.