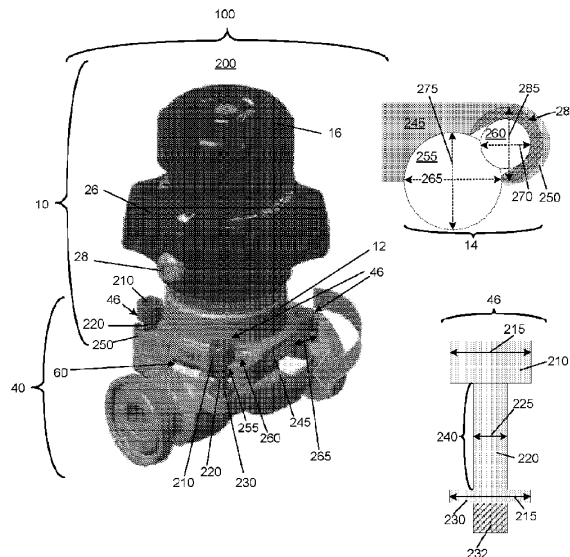




- (51) **International Patent Classification:**
F16K 7/12 (2006.01) *F16K 27/02* (2006.01)
- (21) **International Application Number:**
PCT/US2019/018736
- (22) **International Filing Date:**
20 February 2019 (20.02.2019)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (71) **Applicant:** ITT MANUFACTURING ENTERPRISES LLC [US/US]; 1105 N. Market Street, Wilmington, DE 19801 (US).
- (72) **Inventors:** MATALON, Louis Emmanuel; 104 Knight Lane, Lancaster, PA 17602 (US). KOVACS, Richard; 710 Orchard Lane, Lancaster, PA 17603 (US). YODER, Michael David; 130 Northview Lane, Quarryville, PA 17565 (US).
- (74) **Agent:** SHAPIRO, Bret P.; Moritt Hock & Hamroff LLP, 400 Garden City Plaza, Ste. 202, Garden City, NY 11530 (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, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, 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, ST, 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,

(54) **Title:** KEYING STRUCTURE

Fig. 3



(57) **Abstract:** Technologies are described for a bonnet assembly of a diaphragm valve. The bonnet assembly may comprise a hand-wheel. The bonnet assembly may comprise a housing. The housing may include a housing base. The housing base may include a top, a bottom, and four sides. Body stud heads of body studs of a body assembly may be in contact with an edge of the top of the housing base. The bonnet assembly may be configured to secure to the body assembly with the body stud heads at least partially exposed.

[Continued on next page]

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))*