

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
15 February 2007 (15.02.2007)

PCT

(10) International Publication Number
WO 2007/018870 A1

- (51) International Patent Classification:
F04D 25/16 (2006.01) **F04B 41/06** (2006.01)
- (21) International Application Number:
PCT/US2006/026485
- (22) International Filing Date: 5 July 2006 (05.07.2006)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/706,130 5 August 2005 (05.08.2005) US
- (71) Applicant (for all designated States except US): **EXXON-MOBIL CHEMICAL PATENTS INC.** [US/US]; A CORPORATION OF THE STATE OF DELAWARE, 5200 Bayway Drive, Baytown, TX 77520 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **NAETS, Jan, J.** [BE/BE]; M. Lefevrelaan 13, B-3012 Leuven (BE). **CORNELISSEN, Philip, Henri** [BE/BE]; B. J. Eerdekenstraat 25, B-3001 Heverlee (BE). **MORGAN, Christopher, K.** [US/US]; 12473 Starhill Trace, St. Francisville, LA 70775 (US).
- (74) Agents: **TREXLER, Amy, C.** et al.; EXXONMOBIL CHEMICAL COMPANY, P.o. Box 2149, Baytown, TX 77522-2149 (US).

- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, 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, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

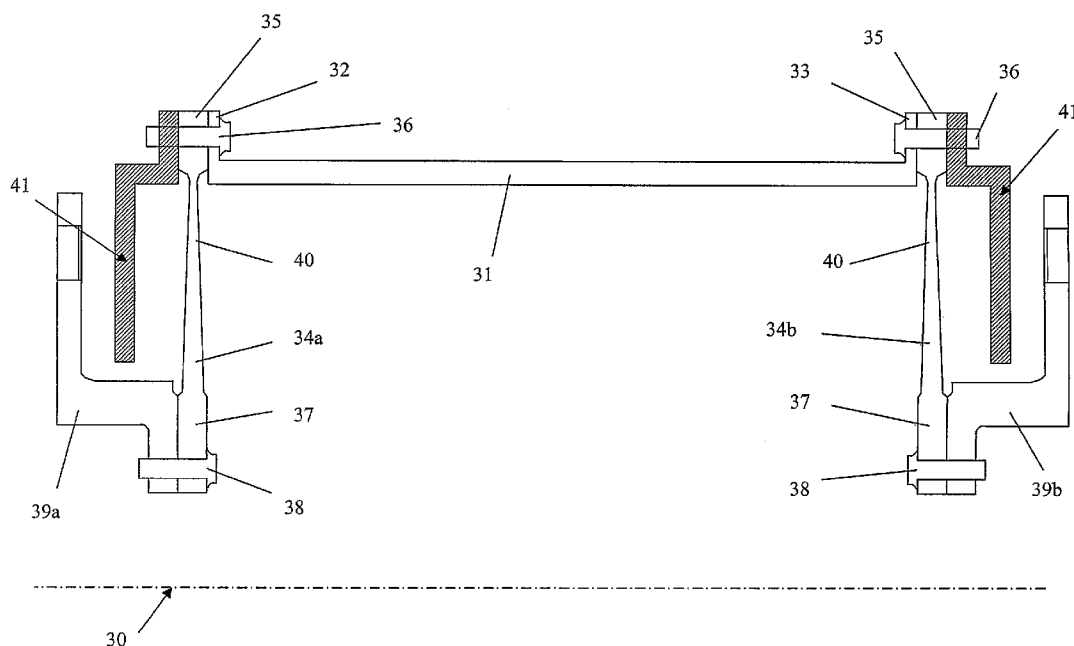
- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

Published:

- with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: COMPRESSOR FOR HIGH PRESSURE POLYMERIZATION



(57) Abstract: The invention provides a compressor for use as a secondary compressor for an ethylene polymerization tubular reactor comprising a motor and at least two compressor frames, at least one of the compressor frames being coupled to the motor by means of a contoured diaphragm flexible coupling.

WO 2007/018870 A1