

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
9 March 2006 (09.03.2006)

PCT

(10) International Publication Number
WO 2006/026564 A2

(51) International Patent Classification:
F16K 3/00 (2006.01)

(21) International Application Number:
PCT/US2005/030705

(22) International Filing Date: 29 August 2005 (29.08.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/605,176 27 August 2004 (27.08.2004) US

(71) Applicant (for all designated States except US): **VETCO GRAY INC.** [US/US]; 3010 Briarpark, Houston, TX 77042 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **HUNTER, Rick, C.** [US/US]; 716 Pin Oak Drive, Friendswood, TX 77546 (US).

(74) Agent: **BRADLEY, James, E.**; Bracewell & Giuliani L.L.P., P.O. Box 61389, Houston, TX 77208-1389 (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, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

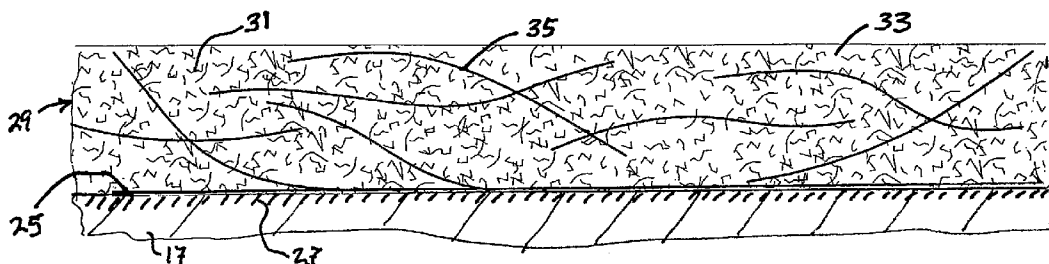
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, 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).

Published:

— without international search report and to be republished upon receipt of that 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: LOW FRICTION COATINGS FOR DYNAMICALLY ENGAGING LOAD BEARING SURFACES



(57) Abstract: A gate valve has a body, the body having a cavity and a flow passage intersecting the cavity. A seat ring is mounted to the body at the intersection of the flow passage and the cavity, the seat ring having an engaging face. A gate in the cavity has an engaging face that slidingly engages the face of the seat ring while being moved between open and closed positions. A polymer coating is on at least one of the faces. The polymer contains a quantity of carbon nanotubes for stiffening.

WO 2006/026564 A2