



(51) International Patent Classification:
E21B 33/06 (2006.01) *E21B 33/064* (2006.01)

(21) International Application Number:
PCT/CA2011/000768

(22) International Filing Date:
4 July 2011 (04.07.2011)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
1011068.2 1 July 2010 (01.07.2010) GB

(71) Applicant (for all designated States except US): **ENOVATE SYSTEMS LIMITED** [GB/GB]; Unit A, Howemoss Drive, Kirkhill Industrial Estate, Dyce, Aberdeen, Aberdeenshire AB21 0GL (GB).

(71) Applicant (for GD, VC only): **MITCHELL, Richard** [CA/CA]; 10095 Shaw Road, RR2, Mountain, Ontario K0E 1S0 (CA).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **EDWARDS, Jeffrey** [GB/GB]; Enovate Sytems Limited, Unit A, Howemoss Drive, Kirkhill Industrial Estate, Dyce, Aberdeen Aberdeenshire AB21 0GL (GB).

(74) Agents: **MITCHELL, Richard** et al.; Marks & Clerk Canada, PO Box 957, Station B, Ottawa, Ontario K1P 5S7 (CA).

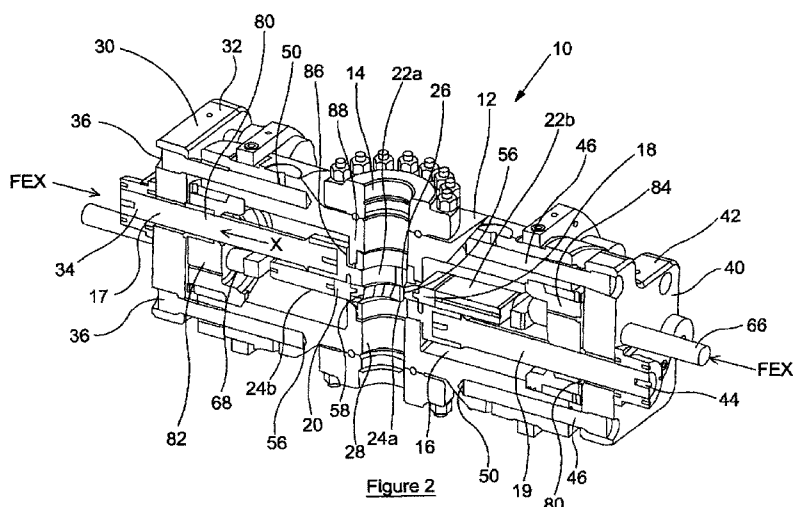
(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, 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: WELLBORE CONTROL DEVICE



(57) Abstract: A wellbore control device for use in a blow out preventer is described. The control device comprising a housing defining a throughbore, a gate, the gate being movable between a throughbore open position and a throughbore closed position, a first stem attached to the gate and a second stem releasably engageable with the gate, the first and second stems being arranged such that a portion of each stem is exposed to an internal housing pressure and a portion of each stem is exposed to an external housing pressure. When the internal pressure is greater than the external pressure, the pressure differential results in a force being applied to the gate to move the gate to, or retain the gate in, the throughbore closed position.