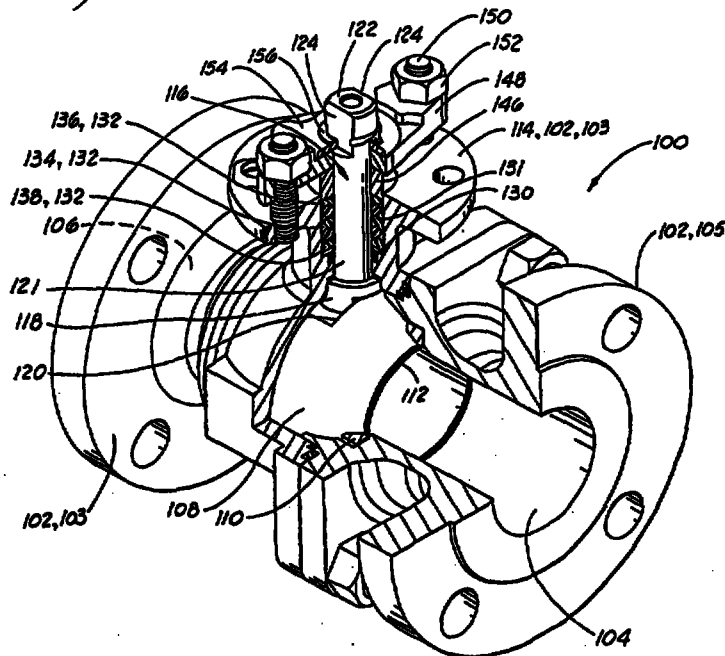


INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : F16K 17/14, 17/38	A1	(11) International Publication Number: WO/99/47840 (43) International Publication Date: 23 September 1999 (23.09.99)
(21) International Application Number: PCT/US99/06008 (22) International Filing Date: 19 March 1999 (19.03.99) (30) Priority Data: 09/044,765 20 March 1998 (20.03.98) US (71) Applicant: NORTH AMERICAN CORPORATION (US/US); P.O. Box 891737, Oklahoma City, OK 73189 (US). (72) Inventor: MAKI, Robert, E.; 5212 Northwest 111th Street, Oklahoma City, OK 73162 (US). (74) Agents: LaBRIE, Michael, J. et al.; McAfee & Taft, 10th floor, Two Leadership Square, 211 North Robinson, Oklahoma City, OK 73102 (US).		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

(54) Title: VALVE WITH FIRE-RESISTANT SEAL



(57) Abstract

A valve (100) with fire-resistant seal (170) for use in industrial piping applications. The valve (100) includes a valve body (102-105) with a valve element (108) therein. A conventional primary seal (132-134, 136, 138, 140 and 142) is used on the valve stem for normal conditions. The valve body defines a body bearing surface (160), and the valve stem defines a facing stem bearing surface (162). A thrust bearing (164) is disposed between the body and stem bearing surfaces (160 and 162), and a fire-resistant seal (170) is positioned radially inwardly from the thrust bearing (164).