

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
17 March 2022 (17.03.2022)



(10) International Publication Number
WO 2022/055374 A1

(51) International Patent Classification:

F16K 17/04 (2006.01) F16K 31/143 (2006.01)
F16K 31/122 (2006.01) F16K 31/46 (2006.01)

(21) International Application Number:

PCT/NZ2021/050162

(22) International Filing Date:

10 September 2021 (10.09.2021)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

767885 10 September 2020 (10.09.2020) NZ

(71) Applicant: **GLOBALFORCE IP LIMITED** [NZ/NZ];
Suite 1, 283 Ponsonby Road, Auckland, 1011 (NZ).

(72) Inventor; and

(71) Applicant: **WALKER, Timothy** [NZ/NZ]; 22 Stephen
Lynsner Place, Hillsborough, Auckland, 1042 (NZ).

(74) Agent: **AJ PARK**; Level 22, Aon Centre, 1 Willis Street,
Wellington (NZ).

(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,

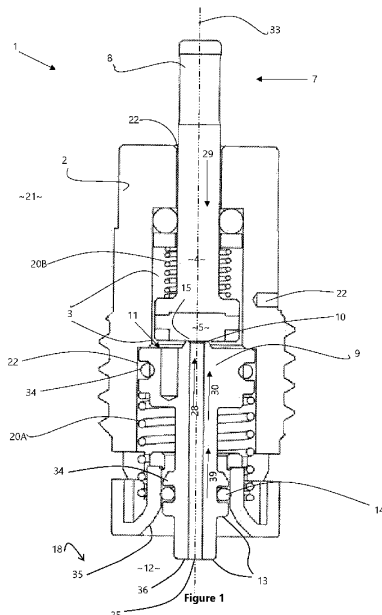
HR, HU, ID, IL, IN, IR, IS, IT, JO, JP, KE, KG, KH, KN,
KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD,
ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO,
NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW,
SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN,
TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, 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,
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))

(54) Title: IMPROVEMENTS IN, OR RELATING TO, TRIGGER VALVES



(57) Abstract: Disclosed is a trigger valve methods, use and apparatus. The valve has a housing enclosing, at least in part, a cavity. There is a trigger poppet including a poppet sealing portion at least in part within the cavity, the trigger poppet configured to receive an external input at, or toward, a receiving end thereof. A trigger piston including a primary sealing portion and a major face at least in part within the cavity, the trigger piston configured to receive high pressure fluid therethrough, the trigger piston having a minor face opposite the major surface and a secondary sealing portion. The trigger poppet and trigger piston are biased towards each other at least by the high-pressure fluid acting on the minor face, such that the high-pressure fluid is sealed from the cavity by the poppet sealing portion and primary sealing portion in sealing engagement on each other. The secondary sealing portion sealing against the housing, or part thereof, preventing release of the high-pressure fluid therefrom. The poppet sealing portion when displaced from the primary sealing portion by the external input unseals the sealing engagement and allows high pressure fluid to flow into the cavity and act on the major face causing the trigger poppet to move and unseats the secondary sealing portion from the housing, or part thereof, to allow flow of high pressure fluid to then do work, or cause work to be done.

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