



(51) International Patent Classification:

F16L 59/18 (2006.01) *F16L 21/08* (2006.01)
F16L 21/06 (2006.01) *F16L 47/12* (2006.01)

(21) International Application Number:

PCT/GB2014/052678

(22) International Filing Date:

4 September 2014 (04.09.2014)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

1315975.1 6 September 2013 (06.09.2013) GB

(71) Applicant: **TAYLOR KERR (COUPLINGS) LIMITED** [GB/GB]; Disraeli House, 12 Aylesbury End, Old Beaconsfield, Buckinghamshire HP91LW (GB).

(72) Inventors: **WEBB, Ian, Richard**; 57 The Uplands, Gerrards Cross, Buckinghamshire SL97JQ (GB). **TAYLOR, Neil, John, Thornton**; 44 Pheasants Way, Rickmansworth, Hertfordshire WD32HA (GB).

(74) Agent: **TAYLOR, Gillian**; 16 Theobalds Road, London, Greater London WC1X 8PL (GB).

(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, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KN, KP, KR, 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, 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, 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: PIPE COUPLING WITH DYNAMIC AXIAL RESTRAINT SYSTEM

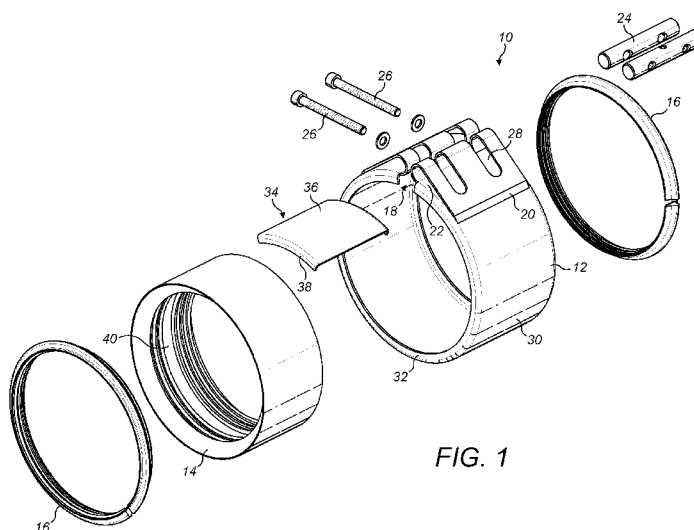


FIG. 1

(57) Abstract: A pipe coupling (10) for connecting together the ends of two pipes comprises: a tubular casing (12) for fitting around a pipe; tensioning means (26) for tightening the casing around the outer surface of the pipe; and a dynamic axial restraint system comprising at least one resilient gripping ring (16) mounted within the casing (12) for gripping the outer surface of the pipe. The gripping ring (16) comprises: an outer surface (42) engaging with an inner surface of the casing (12) and adapted to roll against the inner surface of the casing upon axial loading of the pipe; and an inner gripping surface (46) for engaging the outer surface of the pipe. The gripping surface (46) of the resilient gripping ring is adapted such that upon rolling of the outer surface (42) against the inner surface of the tubular casing (12), the area of the gripping surface (46) in contact with the pipe increases.

