



(43) International Publication Date
27 June 2013 (27.06.2013)

- (51) International Patent Classification:
B25B 29/02 (2006.01)
- (21) International Application Number:
PCT/GB2012/053167
- (22) International Filing Date:
18 December 2012 (18.12.2012)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
1121976.3 20 December 2011 (20.12.2011) GB
- (71) Applicant: CENEY, David [GB/GB]; 9 Turners Grove,
Lower Gornal, Dudley, West Midlands DY3 2JX (GB).
- (72) Inventor: CENEY, Stan; Clarkwood Engineering Ltd,
Sunbeam Street, Wolverhampton, West Midlands WV2
4PF (GB).
- (74) Agent: BARKER BRETTELL LLP; 100 Hagley Road,
Edgbaston, Birmingham, West Midlands B16 8QQ (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, 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, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU,
RW, 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, 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,
ML, MR, NE, SN, TD, TG).

Published:

— with international search report (Art. 21(3))

(54) Title: A TENSIONING APPARATUS

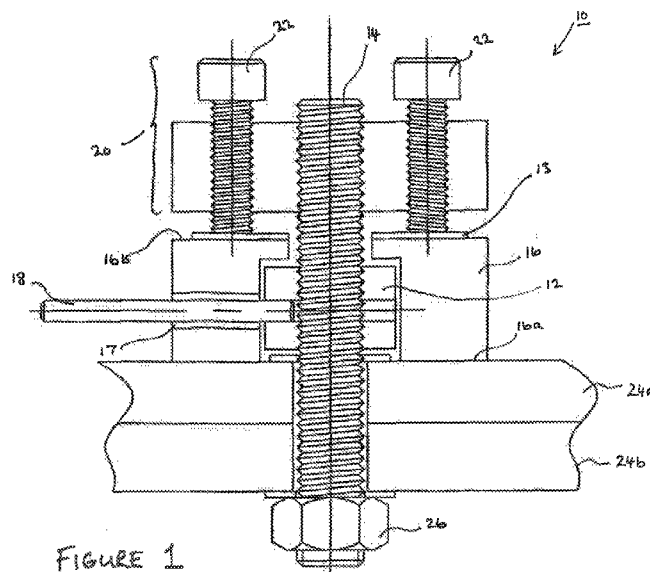


FIGURE 1

(57) Abstract: The present invention provides an apparatus and kit for tensioning a stud in a bolted joint to a desired preload, the apparatus comprising a locking means adapted for engagement with the stud, a removable bridge member arranged to at least partially enclose the locking means and to receive the stud therethrough, a removable actuator operable to actuate the locking means through the bridge member and removable tensioning means configured to apply tension to a load bearing surface of the bridge member so as to transfer tension to the stud, such that the actuator is operable to lock the locking means when the desired preload in the stud is achieved. The invention has application in many industries, including hydropower, wind, gas and steam turbines, nuclear, metal manufacturing, mining, shipbuilding and oil & petrochemical.

