

Title (en)
A COUPLING

Title (de)
KUPPLUNG

Title (fr)
ACCOUPLEMENT

Publication
EP 3822449 A1 20210519 (EN)

Application
EP 20205320 A 20180130

Priority

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- EP 18706322 A 20180130
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Abstract (en)

A coupling assembly for elongate elements (1, 2) comprises a pin member (5) and a box member (6), said pin and box members having complementary and respective frusto-conical pin and box mating surfaces (12, 13). A bore (9; 9') has as a first opening a port (9a) configured for connection to an injection fluid reservoir (10) and a second opening (9b) penetrating the pin mating surface (12) or the box mating surface (13). The surfaces (12, 13) may be plain surfaces without helical threads or other pronounced protrusions configured for mating engagement, but comprise a textured finish in order to augment static friction between the surfaces (12, 13) when the surfaces are connected. A region (R_b) of the box surface (13) comprises a wall thickness (ta) which is less than the thicknesses (t_b, t_c) of the adjacent box walls; and/or a region (R_p) of the pin surface (12) comprises a wall thickness (td) which is less than the thicknesses (te, tf) of the adjacent pin walls; and/or a region (R_b) of the box surface (13) comprises a material of a lower modulus of elasticity than the material of a corresponding region (R_p) of the pin surface (12), or vice versa.

IPC 8 full level

E21B 17/02 (2006.01); **E21B 17/04** (2006.01); **E21B 17/046** (2006.01)

CPC (source: EP US)

E21B 17/02 (2013.01 - EP); **E21B 17/04** (2013.01 - EP); **E21B 17/046** (2013.01 - EP US)

Citation (applicant)

- GB 2064041 A 19810610 - HUNTING OILFIELD SERVICES LTD
- US 4648627 A 19870310 - REIMERT LARRY E [US]
- US 2012049513 A1 20120301 - HERRERA DEREK F [GB]
- WO 2005061852 A1 20050707 - BP EXPLORATION OPERATING [GB], et al
- US 2004065446 A1 20040408 - TRAN KHAI [US], et al
- US 2011147009 A1 20110623 - DUPAL KENNETH [US], et al
- US 3923324 A 19751202 - CRUICKSHANK JAMES R, et al
- GB 2113335 A 19830803 - HUNTING OILFIELD SERVICES
- GB 2180312 A 19870325 - POND LTD R J
- GB 2113334 A 19830803 - HUNTING OILFIELD SERVICES
- US 4561683 A 19851231 - LUMSDEN NORMAN [GB], et al

Citation (search report)

- [XDYI] US 4648627 A 19870310 - REIMERT LARRY E [US]
- [XDYI] GB 2064041 A 19810610 - HUNTING OILFIELD SERVICES LTD
- [A] US 2296198 A 19420915 - ALEXANDER BOYNTON
- [A] US 4830408 A 19890516 - REIMERT LARRY E [US]
- [Y] US 7011344 B1 20060314 - BAKKE STIG [NO]
- [XI] US 4828295 A 19890509 - PLAQUIN BERNARD [FR], et al

Designated contracting state (EPC)

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