

Title (en)
WRENCH AND WRENCH ASSEMBLY

Publication
EP 0166675 A3 19861210 (EN)

Application
EP 85630095 A 19850620

Priority
US 62618684 A 19840629

Abstract (en)
[origin: EP0166675A2] A wrench assembly for making and breaking connections between tubular members, such as a drill string and a top drive sub. The wrench assembly consists of a lower wrench (33) and an upper wrench (31). The lower wrench (33) has a curved gate arm (41) and a curved latch arm (43) pivotable between an open position and a closed position. The gate arm (41) has a plurality of teeth on its outer surface, and the latch arm (43) has a plurality of teeth on its inner surface, for locking engagement with the teeth on the gate arm (41). The lower wrench (33) also has a clamping cylinder (61) and a die block (59) for forcing the tubular member against the gate arm (41). The upper wrench (31), mounted above the lower wrench (33), has a semicircular plate (65). At least one spline (67) is mounted on the interior surface of the semicircular plate (59) for engagement with at least one spine on the top drive sub. A fluid cylinder (71) is provided for applying torque to the wrenches to rotate one of the wrenches with respect to the other wrenches.

IPC 1-7
E21B 19/16

IPC 8 full level
E21B 19/16 (2006.01)

CPC (source: EP)
E21B 19/16 (2013.01)

Citation (search report)
• [A] US 2495834 A 19500131 - ODIE COLQUITT
• [A] US 4200010 A 19800429 - HEWITT BURTON L [US]
• [A] US 3799009 A 19740326 - GUIER W
• [A] US 2649283 A 19530818 - LUNDEEN CHESTER A

Cited by
EP2273059A1; US6138529A; GB2549177A; GB2549177B; AT390124B; DE102016111122A1

Designated contracting state (EPC)
DE FR GB

DOCDB simple family (publication)
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EP 85630095 A 19850620; CA 472961 A 19850128; DE 3575448 T 19850620; NO 852466 A 19850619