

Title (en)

DRILL PIPE TORQUE-REDUCTION AND PROTECTION APPARATUS

Title (de)

VORRICHTUNG ZUM SCHUTZ VON BOHRGESTÄNGEN UND ZUR VERRINGERUNG VON TORSION

Title (fr)

APPAREIL DE PROTECTION ET DE REDUCTION DU COUPLE D'UNE TIGE DE FORAGE

Publication

**EP 1254299 A2 20021106 (EN)**

Application

**EP 01904095 A 20010208**

Priority

- GB 0100486 W 20010208
- GB 0002916 A 20000210

Abstract (en)

[origin: WO0159249A2] A torque-reduction and/or protection device for use in a drill string comprises a generally cylindrical body (10) including a mandrel portion (18) and a rotatable collar (20) mounted on the mandrel portion between first and second shoulders (22, 24), one of which is defined by a ring member (24) secured to said body after the collar has been located. A low friction bearing is provided between the collar and the mandrel including at least one of the following on the bearing surfaces of each of the collar and mandrel: low friction alloy coating; low friction ceramic coating; low friction alloy insert; low friction ceramic insert; magnetic elements. The collar has a low friction coating (30) on its outer surface comprising a composite coating having an inner layer of hard low friction material and an outer coating of relatively softer low friction material. The device may be incorporated into a sub but is preferably incorporated in a tool joint of a length of drill pipe.

IPC 1-7

**E21B 17/00**

IPC 8 full level

**E21B 17/10** (2006.01)

CPC (source: EP)

**E21B 17/1064** (2013.01)

Citation (search report)

See references of WO 0159249A2

Designated contracting state (EPC)

AT BE FR GB

DOCDB simple family (publication)

**WO 0159249 A2 20010816; WO 0159249 A3 20020131**; AU 3201401 A 20010820; EP 1254299 A2 20021106; GB 0002916 D0 20000329; NO 20023760 D0 20020808; NO 20023760 L 20020903

DOCDB simple family (application)

**GB 0100486 W 20010208**; AU 3201401 A 20010208; EP 01904095 A 20010208; GB 0002916 A 20000210; NO 20023760 A 20020808