

Title (en)

ADDITIVE FOR REDUCING TORQUE ON A DRILL STRING

Title (de)

ZUSATZMITTEL ZUM REDUZIEREN DES DREHMOMENTS EINES BOHRGESTÄNGES

Title (fr)

ADDITIF POUR REDUIRE LE COUPLE D'UN TRAIN DE FORAGE

Publication

EP 1853685 A4 20111130 (EN)

Application

EP 06735616 A 20060222

Priority

- US 2006006030 W 20060222
- US 65528805 P 20050222

Abstract (en)

[origin: WO2006091562A1] A method of reducing the torque of a drill string used in drilling a subterranean well that includes injecting into the drilling fluid a composition including a base fluid and a polymer coated colloidal solid material. The polymer coated colloidal solid material includes: a solid particle having an weight average particle diameter (d50) of less than ten microns, and a polymeric dispersing agent coated onto the surface of the solid particle during the cominution (i.e. grinding) process utilized to make the colloidal particles. The polymeric dispersing agent may be a water soluble polymer having a molecular weight of at least 2000 Daltons. The solid particulate material may be selected from materials having of specific gravity of at least 2.68 and preferably the solid particulate material may be selected from barium sulfate (barite), calcium carbonate, dolomite, ilmenite, hematite, olivine, siderite, strontium sulfate, combinations and mixtures of these and other similar solids that should be apparent to one of skill in the art.

IPC 8 full level

C10M 173/00 (2006.01); **C09K 8/03** (2006.01); **C10M 101/02** (2006.01); **C10M 171/06** (2006.01); **C10N 20/06** (2006.01)

CPC (source: EP US)

C09K 8/03 (2013.01 - EP US); **C09K 8/035** (2013.01 - EP US); **C10M 171/06** (2013.01 - EP US); **C10M 173/00** (2013.01 - EP US); **C10M 173/02** (2013.01 - EP US); **C10M 2201/062** (2013.01 - EP US); **C10M 2201/084** (2013.01 - EP US); **C10M 2201/102** (2013.01 - EP US); **C10M 2209/084** (2013.01 - EP US); **C10N 2010/04** (2013.01 - EP US); **C10N 2010/14** (2013.01 - EP US); **C10N 2010/16** (2013.01 - EP US); **C10N 2020/06** (2013.01 - EP US); **C10N 2030/06** (2013.01 - EP US); **C10N 2040/00** (2013.01 - EP US); **C10N 2050/015** (2020.05 - EP US)

Citation (search report)

- [X] US 2003203822 A1 20031030 - BRADBURY ANDREW J [US], et al
- [X] WO 2004037947 A1 20040506 - MI LLC [US]
- [X] US 2004127366 A1 20040701 - BRADBURY ANDREW J [US], et al
- [XP] EP 1600486 A2 20051130 - SOFITECH NV [BE], et al
- [A] GB 2315505 A 19980204 - SOFITECH NV [BE]
- See references of WO 2006091562A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2006091562 A1 20060831; **WO 2006091562 A8 20071101**; BR PI0607902 A2 20091020; CA 2598123 A1 20060831; CA 2598123 C 20131112; CN 101124307 A 20080213; CN 101124307 B 20110420; EA 011177 B1 20090227; EA 200701078 A1 20071026; EP 1853685 A1 20071114; EP 1853685 A4 20111130; MX 2007010236 A 20071106; NO 20074059 L 20071119; US 2008167203 A1 20080710

DOCDB simple family (application)

US 2006006030 W 20060222; BR PI0607902 A 20060222; CA 2598123 A 20060222; CN 200680005406 A 20060222; EA 200701078 A 20060222; EP 06735616 A 20060222; MX 2007010236 A 20060222; NO 20074059 A 20070807; US 81630406 A 20060222