

Title (en)
DRILLING FLUID, APPARATUS, AND METHOD

Title (de)
BOHRFLÜSSIGKEIT, GERÄT UND VERFAHREN

Title (fr)
FLUIDE, APPAREIL ET PROCEDE DE FORAGE

Publication
EP 1532223 A1 20050525 (EN)

Application
EP 03749028 A 20030811

Priority
• US 0325116 W 20030811
• US 40660402 P 20020828

Abstract (en)
[origin: WO2004020546A1] Disclosed are drilling fluids suitable for use in connection with oil well drilling. The drilling fluids of the invention include in one embodiment a liquid base, an alkyl glucoside, such as methyl glucoside, and a borehole stability promoter that includes a maltodextrin, a carboxyalkyl starch, a hemicellulose-containing material, or a mixture of the foregoing. In another embodiment, the drilling fluid includes a liquid base and molasses solids, preferably in combination with an alkyl glucoside and more preferably in further combination with one of the aforementioned borehole stability promoters. In another embodiment, the drilling fluid includes sorbitol, preferably in conjunction with a borehole stability promoter. The drilling fluids of the invention surprisingly have a reduced tendency to swell shale as compared with known drilling fluids. Also disclosed are a drilling apparatus and process. The drilling apparatus includes a drill string, which may be conventional, that is fluidically coupled to a source of drilling fluid, the source of drilling fluid including the drilling fluid of the invention. The process of the invention includes the step of circulating the drilling fluid of the invention through a drill string during borehole drilling.

IPC 1-7
C09K 7/02; E21B 33/138

IPC 8 full level
C09K 8/08 (2006.01); **C09K 8/20** (2006.01); **C09K 8/514** (2006.01)

CPC (source: EP US)
C09K 8/08 (2013.01 - EP US); **C09K 8/206** (2013.01 - EP US); **C09K 8/514** (2013.01 - EP US)

Citation (search report)
See references of WO 2004020546A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2004020546 A1 20040311; AU 2003268077 A1 20040319; CA 2463714 A1 20040311; EP 1532223 A1 20050525; NO 20041393 L 20040625; US 2004124013 A1 20040701

DOCDB simple family (application)
US 0325116 W 20030811; AU 2003268077 A 20030811; CA 2463714 A 20030811; EP 03749028 A 20030811; NO 20041393 A 20040405; US 63890303 A 20030811