

Title (en)

BIODEGRADABLE ADDITIVE CONCENTRATE IMPROVING THE LUBRICITY OF AQUEOUS SLUDGES, USE THEREOF AND AQUEOUS SLUDGE FOR DRILLING

Title (de)

BIOLOGISCH ABBAUBARES ADDITIVKONZENTRAT ZUR VERBESSERUNG DER LUBRIZITÄT VON WÄSSRIGEN SCHLÄMMEN, VERWENDUNG DAVON UND WÄSSRIGER SCHLAMM ZUM BOHREN

Title (fr)

CONCENTRE D'ADDITIFS BIODEGRADABLE AMELIORANT LA LUBRIFICATION DES BOUES A L'EAU, SON UTILISATION ET BOUE A L'EAU POUR LE FORAGE

Publication

**EP 2938697 A1 20151104 (FR)**

Application

**EP 13815761 A 20131223**

Priority

- FR 1262900 A 20121228
- EP 2013077893 W 20131223

Abstract (en)

[origin: WO2014102237A1] A biodegradable additive concentrate having a pour point in accordance with the ASTM D97 standard lower than -5°C, improving the lubricity of aqueous sludges, comprising at least one compound chosen from the group consisting of: - mono- and diesters of diglycerol, - acids and ester derivatives of monocarboxylic fatty acids comprising between 16 and 22 carbon atoms per chain, - acids and ester derivatives of resin acids, - polyol monoesters comprising more than 4 hydroxylated groups and carboxylic fatty acids comprising between 6 and 12 saturated and unsaturated carbon atoms with an unsaturation number of at least 1, and - the mono- and polyalkoxylated esters of saturated and unsaturated dicarboxylic acids comprising between 6 and 12 carbon atoms. The use of this concentrate in an aqueous sludge and the aqueous sludge comprising said concentrate that can be used for drilling.

IPC 8 full level

**C09K 8/12** (2006.01); **C09K 8/08** (2006.01); **C09K 8/20** (2006.01)

CPC (source: EA EP US)

**C09K 8/06** (2013.01 - EA US); **C09K 8/08** (2013.01 - EA EP US); **C09K 8/12** (2013.01 - EA EP US); **C09K 8/20** (2013.01 - EA EP US); **C09K 2208/34** (2013.01 - EA EP US)

Citation (search report)

See references of WO 2014102237A1

Citation (examination)

- FR 2479251 A1 19811002 - LABOFINA SA [BE]
- "ANALYSIS, MODIFICATION AND EVALUATION OF THE COLD FLOW PROPERTIES OF VEGETABLE OILS AS BASE OILS FOR INDUSTRIAL LUBRICANTS", 31 July 2011, article G AJITHKUMAR: "Analysis of Pour Point of Vegetable Oils and Effect of Additives on Vegetable Oils by DSC", pages: 38 - 53, XP055431717

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**WO 2014102237 A1 20140703**; AR 094321 A1 20150729; BR 112015015475 A2 20170711; CA 2896415 A1 20140703; CN 104884567 A 20150902; CN 104884567 B 20190528; EA 033636 B1 20191112; EA 201591234 A1 20151030; EP 2938697 A1 20151104; FR 3000497 A1 20140704; FR 3000497 B1 20150403; KR 20150123223 A 20151103; TW 201514290 A 20150416; TW I609952 B 20180101; US 2015353806 A1 20151210; US 9719006 B2 20170801; ZA 201504341 B 20160428

DOCDB simple family (application)

**EP 2013077893 W 20131223**; AR P130105075 A 20131227; BR 112015015475 A 20131223; CA 2896415 A 20131223; CN 201380068816 A 20131223; EA 201591234 A 20131223; EP 13815761 A 20131223; FR 1262900 A 20121228; KR 20157017695 A 20131223; TW 102147898 A 20131224; US 201314758163 A 20131223; ZA 201504341 A 20150615