

## Title (en)

LUBRICATING GREASES CONTAINING LIGNOSULFONATE, THE PRODUCTION THEREOF, AND THE USE THEREOF

## Title (de)

SCHMIERFETTE ENTHALTEND LIGNINSULFONAT, DEREN HERSTELLUNG UND VERWENDUNG

## Title (fr)

GRAISSES CONTENANT DU SULFONATE DE LIGNINE, LEUR PRODUCTION ET LEUR UTILISATION

## Publication

**EP 2531587 A1 20121212 (DE)**

## Application

**EP 11711018 A 20110131**

## Priority

- DE 102010006745 A 20100202
- DE 2011000087 W 20110131

## Abstract (en)

[origin: CA2788157A1] The invention relates to lubricating greases that contain calcium lignosulfonate, comprising a base oil, calcium soaps, calcium lignosulfonate having average molecular weights (weight average) of greater than 10000 g/mol, optionally in addition to further alkaline earth lingosulfonates, which can be produced by heating to greater than 120 °C while reacting and while driving out low-boiling components to produce a basic grease and cooling and adding base oil and optionally additives while mixing, to a corresponding method, and to the use of the lubricating greases containing calcium lignosulfonate.

## IPC 8 full level

**C10M 135/10** (2006.01); **C10M 141/08** (2006.01); **C10M 159/24** (2006.01); **C10N 10/02** (2006.01); **C10N 10/04** (2006.01); **C10N 30/02** (2006.01); **C10N 30/06** (2006.01); **C10N 30/12** (2006.01); **C10N 40/02** (2006.01); **C10N 50/10** (2006.01)

## CPC (source: EP KR US)

**C10M 135/10** (2013.01 - EP KR US); **C10M 141/08** (2013.01 - EP KR US); **C10M 159/24** (2013.01 - EP KR US); **C10M 2201/041** (2013.01 - EP US); **C10M 2201/066** (2013.01 - EP US); **C10M 2207/127** (2013.01 - EP US); **C10N 2010/02** (2013.01 - EP US); **C10N 2010/04** (2013.01 - EP US); **C10N 2030/02** (2013.01 - EP US); **C10N 2030/06** (2013.01 - EP US); **C10N 2030/12** (2013.01 - EP US); **C10N 2030/26** (2020.05 - EP US); **C10N 2030/36** (2020.05 - EP US); **C10N 2040/02** (2013.01 - EP US); **C10N 2050/10** (2013.01 - EP US)

## Citation (search report)

See references of WO 2011095155A1

## 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

## DOCDB simple family (publication)

**DE 102010006745 A1 20110804**; AU 2011212763 A1 20120906; AU 2011212763 B2 20131017; BR 112012019181 A2 20180327; BR 112012019181 B1 20180911; CA 2788157 A1 20110811; CA 2788157 C 20180626; CN 102770513 A 20121107; CN 102770513 B 20150930; DK 2531587 T3 20160125; EP 2531587 A1 20121212; EP 2531587 B1 20151104; EP 2531587 B9 20161005; ES 2561821 T3 20160301; HR P20160072 T1 20160408; HU E026690 T2 20160728; JP 2013518929 A 20130523; JP 5856078 B2 20160209; KR 101833854 B1 20180305; KR 20120139730 A 20121227; MX 2012008960 A 20121015; PL 2531587 T3 20160630; PT 2531587 E 20160226; RS 54610 B1 20160831; RU 2012136909 A 20140310; RU 2554873 C2 20150627; SI 2531587 T1 20160429; US 2012302472 A1 20121129; WO 2011095155 A1 20110811

## DOCDB simple family (application)

**DE 102010006745 A 20100202**; AU 2011212763 A 20110131; BR 112012019181 A 20110131; CA 2788157 A 20110131; CN 201180008171 A 20110131; DE 2011000087 W 20110131; DK 11711018 T 20110131; EP 11711018 A 20110131; ES 11711018 T 20110131; HR P20160072 T 20160122; HU E11711018 A 20110131; JP 2012550318 A 20110131; KR 20127023089 A 20110131; MX 2012008960 A 20110131; PL 11711018 T 20110131; PT 11711018 T 20110131; RS P20160037 A 20110131; RU 2012136909 A 20110131; SI 201130721 T 20110131; US 201113576857 A 20110131