

Title (en)
GRAFT COPOLYMER, METHOD FOR THE PRODUCTION THEREOF, AND USE THEREOF

Title (de)
PFROPF-COPOLYMER, VERFAHREN ZU DESSEN HERSTELLUNG UND SEINE VERWENDUNG

Title (fr)
COPOLYMÈRE GREFFÉ, PROCÉDÉ DE FABRICATION ET UTILISATION

Publication
EP 2285835 A1 20110223 (DE)

Application
EP 08750360 A 20080521

Priority
EP 2008056240 W 20080521

Abstract (en)
[origin: WO2009141007A1] The invention relates to a graft copolymer on the basis of a component a), comprising silica, which has been converted using unsaturated silane, and a sulfonic acid-containing polymer component b). The silica used is preferably nanosilica, and the unsaturated silane is an ethylenically unsaturated alkoxy silane. Component b) is represented by a copolymer on the basis of AMPS and a further ethylenically unsaturated monomer. The polymer according to the invention, which generally constitutes a nanocomposite, is excellently suited as an additive in construction chemistry applications and for the development, extraction and completion of underground crude oil and natural gas deposits, wherein the effect thereof as a water retention agent is particularly advantageous for high salinity and elevated temperatures.

IPC 8 full level
C08F 292/00 (2006.01); **C04B 40/00** (2006.01); **C09K 8/487** (2006.01); **C04B 103/46** (2006.01)

CPC (source: EP US)
C04B 40/0039 (2013.01 - EP US); **C08F 2/44** (2013.01 - EP US); **C08F 30/08** (2013.01 - US); **C08F 292/00** (2013.01 - EP US); **C09K 8/487** (2013.01 - EP US); **C04B 2103/46** (2013.01 - EP US)

Citation (search report)
See references of WO 2009141007A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA MK RS

DOCDB simple family (publication)
WO 2009141007 A1 20091126; BR PI0822660 A2 20150630; CA 2723941 A1 20091126; CN 102037023 A 20110427; EP 2285835 A1 20110223; MX 2010012630 A 20101214; RU 2010152013 A 20120627; RU 2470041 C2 20121220; US 2011118382 A1 20110519; US 2013203951 A1 20130808

DOCDB simple family (application)
EP 2008056240 W 20080521; BR PI0822660 A 20080521; CA 2723941 A 20080521; CN 200880129361 A 20080521; EP 08750360 A 20080521; MX 2010012630 A 20080521; RU 2010152013 A 20080521; US 201313796097 A 20130312; US 99034608 A 20080521