Title (en)
    METHOD FOR TREATING HEAVY CRUDE OIL

Title (de)
    VERFAHREN ZUR BEHANDLUNG VON SCHWEREM ROHÖL

Title (fr)
    PROCÉDÉ DE TRAITEMENT DE PÉTROLE BRUT LOURD

Publication
    EP 2260089 A4 20111005 (EN)

Application
    EP 09719531 A 20090311

Priority
    • CA 2009000289 W 20090311
    • US 3569008 P 20080311

Abstract (en)
    [origin: WO2009111871A1] According to the invention, there is provided a method for treating heavy crude oil (HCO) which includes the steps of combining the HCO with an alkane containing solvent to form an HCO/solvent mixture, sonicating this mixture at audio frequency to precipitate asphaltenes from the HCO/solvent mixture, and separating the precipitated asphaltenes from the HCO/solvent mixture.

IPC 8 full level
    C10G 17/00 (2006.01); **C10G 21/00** (2006.01); **C10G 29/20** (2006.01); **C10G 31/00** (2006.01); **C10G 31/09** (2006.01); **C10G 32/02** (2006.01)

CPC (source: EP US)
    C10G 21/003 (2013.01 - EP US); **C10G 32/02** (2013.01 - EP US)

Citation (search report)
    • [A] US 5017281 A 19910521 - SADEGHI MOHAMMAD-ALI [US], et al
    • [XYI] LANGE CARBOGNANI ET AL.: "CHARACTERIZATION OF ATHABASCA VACUUM RESIDUE AND ITS VISBROKEN PRODUCTS. STABILITY AND FAST HYDROCARBON GROUP-TYPE DISTRIBUTIONS", ENERGY AND FUEL, vol. 21, 31 December 2007 (2007-12-31), XP002657021
    • [Y] KATJA THEUERKORN ET AL.: "A REPRODUCIBL AND LINEAR METHOD FOR SEPARATING ASPHALTENES FROM CRUDE OIL", ORGANIC GEOCHEMISTRY, vol. 39, 10 March 2008 (2008-03-10), pages 929 - 934, XP002657017
    • [Y] P.M. SPIECKER ET AL.: "AGGREGATION AND SOLUBILITY BEHAVIOR OF ASPHALTENES AND THEIR SUBFRACTIONS", JOURNAL OF COLLOID AND INTERFACE SCIENCE, vol. 267, 31 December 2003 (2003-12-31), pages 178 - 193, XP002657018
    • [Y] KATSUMORI TANABE ET AL.: "ROLE OF FINE SOLIDS IN THE COKING OF RESIDUES", ENERGY AND FUELS, vol. 11, no. 5, 31 December 1997 (1997-12-31), pages 1040 - 1043, XP002657019
    • See references of WO 2009111871A1

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 MK MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)
    AL RS

DOCDB simple family (publication)
    WO 2009111871 A1 20090917; EA 021729 B1 20150831; EA 201071060 A1 20110429; EA 201401282 A1 20150331; EP 2260089 A1 20101215; EP 2260089 A4 20111005; US 2013277275 A1 20131024

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