

Title (en)

Method and device for extracting hydrocarbons from oil sand

Title (de)

Verfahren und Vorrichtungen zur Extraktion von Kohlenwasserstoffen aus Ölsand

Title (fr)

Procédés et dispositifs d'extraction d'hydrocarbures de sable oléagineux

Publication

EP 2366759 A1 20110921 (DE)

Application

EP 10156735 A 20100317

Priority

EP 10156735 A 20100317

Abstract (en)

The method involves producing suspension (3) from oil sand (1) and organic extraction agent (2a), and conveying the suspension into a filtering apparatus (25) for separating filterable particles of the suspension from main portion in an extracting phase (5), where the particles contains filter cakes. Filter residues (25b') are driven out from the filter cakes in the phase, and extracted hydrocarbon are discharged and merged, where the hydrocarbon contains the main portion and the residues of the phase. The extraction agent contains carbon atoms e.g. cycloalkane, naphthenic acid and asphaltene. An independent claim is also included for a device for extracting hydrocarbon from oil sand comprising a dosing device for supplying extraction agent to the oil sand.

Abstract (de)

Die Erfindung betrifft unter anderem ein Verfahren zur Extraktion von Kohlenwasserstoffen aus Ölsand, umfassend die Schritte: a) Herstellen einer Suspension aus Ölsand und einem organischen ersten Extraktionsmittel; b) Überführen der Suspension in mindestens eine Filterapparatur, mittels welcher ein Filterkuchen umfassend filtrierbare Partikel der Suspension von einer Hauptmenge an Extraktphase umfassend eine erste Menge an Kohlenwasserstoffen abgetrennt wird; c) Austreiben einer Restmenge an Extraktphase aus dem Filterkuchen; und d) Zusammenführen der Hauptmenge und der Restmenge der Extraktphase enthaltend die extrahierten Kohlenwasserstoffe.

IPC 8 full level

C10G 1/04 (2006.01)

CPC (source: EP US)

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Citation (applicant)

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