

Title (en)

ACTIVATION, REFINING, AND USE OF OIL SHALE

Title (de)

AKTIVIERUNG, VERFEINERUNG UND VERWENDUNG VON ÖLSCHIEFER

Title (fr)

ACTIVATION, RAFFINAGE, ET UTILISATION DE SCHISTES BITUMINEUX

Publication

EP 2046494 A2 20090415 (EN)

Application

EP 07815028 A 20070719

Priority

- ZA 2007000043 W 20070719
- ZA 200606169 A 20060726

Abstract (en)

[origin: WO2008014526A2] The invention provides the activation, refining and stabilization of oil shale. The stabilization may be performed by recirculative extraction, the activation by electromagnetic irradiation, steam, or by an inorganic base, and the refining by ion beam irradiation. The thus processed oil shale may be used to adsorb organic and inorganic contaminants from a variety of materials including materials of vegetable origin.

IPC 8 full level

B01J 20/24 (2006.01); **B01J 20/30** (2006.01)

CPC (source: EP US)

B01J 20/20 (2013.01 - EP US); **B01J 20/22** (2013.01 - EP US); **B01J 20/24** (2013.01 - EP US); **C10G 1/047** (2013.01 - EP US)

Citation (search report)

See references of WO 2008014526A2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

WO 2008014526 A2 20080131; WO 2008014526 A3 20080619; AU 2007278836 A1 20080131; AU 2007278836 B2 20120405;
CA 2658841 A1 20080131; CA 2658841 C 20151124; CN 101516495 A 20090826; CN 101516495 B 20130410; EP 2046494 A2 20090415;
IL 196597 A0 20091118; IL 196597 A 20131128; MA 30646 B1 20090803; RU 2009103556 A 20100910; RU 2443468 C2 20120227;
US 2009308793 A1 20091217; US 2014202930 A1 20140724; ZA 200900587 B 20100224

DOCDB simple family (application)

ZA 2007000043 W 20070719; AU 2007278836 A 20070719; CA 2658841 A 20070719; CN 200780035413 A 20070719;
EP 07815028 A 20070719; IL 19659709 A 20090119; MA 31639 A 20090213; RU 2009103556 A 20070719; US 201414220649 A 20140320;
US 37515607 A 20070719; ZA 200900587 A 20090126