

Title (en)
HEAVY OIL REFINING METHOD

Title (de)
SCHWERÖLRAFFINATIONSVERFAHREN

Title (fr)
PROCEDE DE RAFFINEMENT DE PETROLE LOURD

Publication
EP 1386954 A4 20050817 (EN)

Application
EP 02713282 A 20020402

Priority
• JP 0203298 W 20020402
• JP 2001107530 A 20010405

Abstract (en)
[origin: EP1386954A1] A refined oil is obtained by using a heavy oil having a hydrogen content of 12 wt% or less as a feed oil, and after carrying out a solvent extraction process such that the hydrogen content increases by 0.2 wt% over that of the feed oil, hydrotreating process is carried out such that the hydrogen content increases by 0.5 wt% over the extracted oil. Thereby, an inexpensive heavy oil can be used as a feedstock, and using a simple and reliable method, refined oil can be produced.

IPC 1-7
C10G 1/04; **C10G 49/04**; **C10G 67/04**; **C10G 69/06**

IPC 8 full level
C10G 1/04 (2006.01); **C10G 49/04** (2006.01); **C10G 67/04** (2006.01); **C10G 69/06** (2006.01)

CPC (source: EP KR US)
C10G 21/00 (2013.01 - KR); **C10G 67/04** (2013.01 - EP US); **C10G 67/0463** (2013.01 - EP US); **C10G 67/049** (2013.01 - EP US);
C10G 2400/20 (2013.01 - EP US)

Citation (search report)
• [X] WO 9919424 A1 19990422 - EQUISTAR CHEM LP [US]
• [A] US 4454023 A 19840612 - LUTZ IRVIN H [US]
• [A] US 3362901 A 19680109 - SZEPE STEPHEN L, et al
• See references of WO 02081594A1

Designated contracting state (EPC)
DE FR GB IT NL TR

DOCDB simple family (publication)
EP 1386954 A1 20040204; **EP 1386954 A4 20050817**; BR 0208623 A 20040309; JP 2002302680 A 20021018; KR 20030087047 A 20031112;
MX PA03008994 A 20040212; PL 353151 A1 20021007; RU 2003129450 A 20050327; RU 2273658 C2 20060410; TW I257423 B 20060701;
US 2004168956 A1 20040902; WO 02081594 A1 20021017

DOCDB simple family (application)
EP 02713282 A 20020402; BR 0208623 A 20020402; JP 0203298 W 20020402; JP 2001107530 A 20010405; KR 20037012895 A 20031001;
MX PA03008994 A 20020402; PL 35315102 A 20020403; RU 2003129450 A 20020402; TW 91106473 A 20020401; US 47343304 A 20040318