

Title (en)
SELECTIVE ADSORPTION PROCESS FOR RESID UPGRADING

Title (de)
SELEKTIVES ADSORPTIONSVERFAHREN ZUR RÜCKSTANDSAUFBEREITUNG

Title (fr)
PROCEDE D'ADSORPTION SELECTIVE DESTINE A UNE VALORISATION DE RESIDUS

Publication
EP 1062296 A4 20030122 (EN)

Application
EP 98963928 A 19981215

Priority
• US 9826608 W 19981215
• US 99127997 A 19971216

Abstract (en)
[origin: WO9931199A1] The present invention is a process to remove a major portion of metals and coke precursors from a hydrocarbon stream. The steps of the process include contacting the feedstream with a hydrocarbon insoluble adsorbent, recovering the oil which does not adsorb and removing the metals and coke precursors from the adsorbent.

IPC 1-7
C10G 25/00; **C10G 25/02**; **C10G 25/05**

IPC 8 full level
C10G 25/00 (2006.01)

CPC (source: EP)
C10G 25/00 (2013.01); **C10G 25/003** (2013.01)

Citation (search report)
• [X] US 4414098 A 19831108 - ZANDONA OLIVER J [US], et al
• [X] US 4719003 A 19880112 - SHIHABI DAVID S [US]
• [X] US 3839187 A 19741001 - VANVENROOY J
• [A] US 4412914 A 19831101 - HETTINGER JR WILLIAM P [US], et al
• [A] US 4243514 A 19810106 - BARTHOLIC DAVID B
• [A] EP 0175799 A1 19860402 - ASHLAND OIL INC [US]
• [A] US 4116820 A 19780926 - BLYTAS GEORGE C
• [L] US 6245223 B1 20010612 - GORBATY MARTIN L [US], et al
• See references of WO 9931199A1

Designated contracting state (EPC)
BE FR GB IT NL

DOCDB simple family (publication)
WO 9931199 A1 19990624; CA 2313217 A1 19990624; EP 1062296 A1 20001227; EP 1062296 A4 20030122

DOCDB simple family (application)
US 9826608 W 19981215; CA 2313217 A 19981215; EP 98963928 A 19981215