

Title (en)

Method of desulphurating hydrocarbon fractions from steam cracking effluent

Title (de)

Entschwefelungsverfahren von Kohlenwasserstofffraktionen, die aus dampfgecrackten Abgasen stammen

Title (fr)

Procédé de désulfuration de fractions hydrocarbonées issues d'effluents de vapocraquage

Publication

**EP 1972678 B1 20100428 (FR)**

Application

**EP 08290204 A 20080227**

Priority

FR 0701896 A 20070314

Abstract (en)

[origin: EP1972678A1] Treating charge of pyrolysis gasoline comprises: at least selective hydrogenation of charge called HD1; fractionating of hydrogenation effluent in more distillation columns to produce light cut C5, C6 intermediate cut or C6-C7 or C6-C8, and heavy cut C7+ or C8+ or C9+; hydrodesulfurization and deep hydrogenation of intermediate cut called HD2; at least alkylation of heavy cut C7+, C8+ and C9+ comprising treatment on acid catalyst; and distillation of alkylation effluent to produce light fraction of low sulfur content and heavy fraction C11+ or C12+ rich in sulfur content. Treating a charge of pyrolysis gasoline comprises: at least selective hydrogenation of the charge called HD1; fractionating of hydrogenation effluent in more distillation columns to produce at least a light cut C5, C6 intermediate cut or C6-C7 or C6-C8 intended to produce of aromatics, and a heavy cut C7+ or C8+ or C9+ intended to produce gasoline; hydrodesulfurization and deep hydrogenation of the intermediate cut called HD2; at least alkylation of heavy cut C7+, C8+ and C9+ comprising a treatment on acid catalyst which causes a heaviness of sulfur compounds; and at least distillation of the alkylation effluent to produce a light fraction of low sulfur content directly used as gasoline base, and a heavy fraction C11+ or C12+ rich in sulfur content used as a medium distillate or fuel.

IPC 8 full level

**C10G 29/20** (2006.01); **C10G 45/32** (2006.01); **C10G 45/40** (2006.01); **C10G 69/12** (2006.01); **C10G 69/14** (2006.01)

CPC (source: EP KR US)

**C10G 29/205** (2013.01 - EP US); **C10G 45/32** (2013.01 - EP US); **C10G 45/40** (2013.01 - EP US); **C10G 67/08** (2013.01 - KR); **C10G 69/123** (2013.01 - EP US); **C10G 69/14** (2013.01 - EP US); **C10G 2400/02** (2013.01 - EP US)

Cited by

CN102234540A

Designated contracting state (EPC)

BE DE ES GB IT NL

DOCDB simple family (publication)

**EP 1972678 A1 20080924**; **EP 1972678 B1 20100428**; BR PI0800628 A 20081104; BR PI0800628 B1 20170314; CN 101265421 A 20080917; CN 101265421 B 20130327; DE 602008001068 D1 20100610; ES 2343289 T3 20100727; FR 2913692 A1 20080919; FR 2913692 B1 20101015; JP 2008223027 A 20080925; JP 5412044 B2 20140212; KR 101453091 B1 20141027; KR 20080084746 A 20080919; SG 146554 A1 20081030; TW 200902702 A 20090116; TW I452129 B 20140911; US 2008223753 A1 20080918; US 7947166 B2 20110524

DOCDB simple family (application)

**EP 08290204 A 20080227**; BR PI0800628 A 20080311; CN 200810092087 A 20080314; DE 602008001068 T 20080227; ES 08290204 T 20080227; FR 0701896 A 20070314; JP 2008065006 A 20080314; KR 20080023984 A 20080314; SG 2008019788 A 20080310; TW 97108568 A 20080311; US 4763108 A 20080313