

Title (en)
METHOD FOR PRODUCING COMPONENTS FOR ENGINE FUELS

Title (de)
VERFAHREN ZUR HERSTELLUNG VON KOMPONENTEN FÜR VERBRENNUNGSMOTOREN

Title (fr)
PROCEDE DE PRODUCTION DE COMPOSANTS POUR CARBURANTS POUR MOTEURS

Publication
EP 1201730 A1 20020502 (EN)

Application
EP 00925772 A 20000424

Priority
• RU 0000145 W 20000424
• RU 99111847 A 19990601

Abstract (en)
The present invention relates to the production of high octane components of motor fuels, aromatic hydrocarbons, and hydrogen from gasoline fractions of petroleum and gas condensate origin and C1-C4 hydrocarbon gases. The invention may be useful in petroleum processing and gas processing industries. The present invention solves the problem of raising the effectiveness of the process by increasing the yield of a high octane component to 95-98 percent by weight as calculated for the amount of gasoline fraction fed for processing, by reducing substantially the conversion of the feedstock into inferior hydrocarbon gases. Gasoline fractions are processed under typical conditions of catalytic reforming. The products are separated into gaseous products (hydrogen and C1-C4 hydrocarbon gases) and liquid high octane products. Gaseous products are directed for separation to a zone of hydrogenation of aromatic hydrocarbons, wherein binding of hydrogen is effected through the incorporation thereof into the composition of forming hydrocarbons of the cyclohexane series, and separation from C1-C4 hydrocarbon gases. C1-C4 hydrocarbon gases continuously circulate from the hydrogenation zone to the reforming zone and back, with the hydrogen concentration and pressure being constant, and are not removed from the process. Cyclohexane hydrocarbons are directed to a catalytic dehydrogenation reaction vessel to produce: pure hydrogen which is removed from the process as a target product, and aromatic hydrocarbons which are recycled to the hydrogenation reaction vessel for blending with gaseous reforming products. <IMAGE>

IPC 1-7
C10G 63/02; **C10G 59/02**

IPC 8 full level
C10G 63/02 (2006.01); **C10G 49/00** (2006.01); **C10G 59/02** (2006.01); **C10G 69/08** (2006.01)

CPC (source: EP)
C10G 49/007 (2013.01); **C10G 69/08** (2013.01)

Cited by
US8598395B2; US8702971B2; US8563795B2; US8609917B2; US8753503B2; US8889937B2

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
WO 0073401 A1 20001207; AU 4441100 A 20001218; EA 002641 B1 20020829; EA 200101118 A1 20020425; EP 1201730 A1 20020502; EP 1201730 A4 20030625; RU 2144056 C1 20000110

DOCDB simple family (application)
RU 0000145 W 20000424; AU 4441100 A 20000424; EA 200101118 A 20000424; EP 00925772 A 20000424; RU 99111847 A 19990601