Title (en)

A catalytic conversion process for producing isobutane and isoparaffin-enriched gasoline

Title (de)

Verfahren zur katalytischen Umwandlung zum Herstellen von mit Isobutan und Isoparaffinen angereichertem Benzin

Title (fr)

Procédé de conversion catalytique pour la production d'essence enrichie en isobutane et en isoparaffines

Publication

EP 1046696 A3 20010103 (EN)

Application

EP 00108032 A 20000420

Priority

- CN 99105904 A 19990423
- CN 99109193 A 19990623

Abstract (en)

[origin: EP1046696A2] A process for catalytic conversion of hydrocarbon feedstock to produce isobutane and isoparaffin-enriched gasoline which comprises two different reactions, the preheated feedstock is contacted with hot regenerated catalyst in the lower part of a reactor with the result that catalytic cracking reaction takes place, and the mixture of vapors and the coke deposited catalyst are up-flowed and enter into a suitable reaction environment with the result that isomerization and hydrogen transfer reaction take place. The produced LPG has an isobutane content of about 20wt % to about 40wt% and the produced gasoline contains isoparaffin content of about 30wt% to about 45wt% and olefin content of less than 30wt%. RON and MON of the gasoline are 90 SIMILAR 93 and 80 SIMILAR 84 respectively. <IMAGE>

[origin: EP1046696A2] A catalytic transform process for reducing the content of olefin in liquefied gas and gasoline features that in the complex reactor composed of lifting tube or lifting tube and fluidized bed, preheated raw oil comes into lifting tube from its lower end and is contacted with catalyst, the oily gas generated after reaction is lifted up to middle or top of lifting tube, where it is in contact with cooled catalyst for continuous reaction, the resultant flowing out after reaction comes into settler, the reaction resultant is separated. The catalyst is divided into two portions after stripped and regenerated, one coming into lower end of lifting tube and another into middle or top of lifting tube. With said process, the butylene in liquefied gas is decreased to 17.5 wt.% and the isobutane in it is increased to 37.04 wt.%, and the olefin in gasoline is decreased to 12.32 wt.% and the isoparaffin in it is increased to 41.83 wt.%.

IPC 1-7

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IPC 8 full level

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CPC (source: EP)

C10G 11/18 (2013.01)

Citation (search report)

- [XY] EP 0369536 A1 19900523 - STONE & WEBSTER ENG CORP [US]
- [X] EP 0208609 A1 19870114 - RAFFINAGE CIE FRANCAISE [FR]
- [X] EP 0323297 A1 19890705 - TOTAL FRANCE [FR]
- [A] EP 0272973 A1 19880629 - INST FRANCAIS DU PETROLE [FR]
- [X] US 4764268 A 19880816 - LANE PHILIP A [US]
- [A] EP 0171460 A1 19860219 - ASHLAND OIL INC [US]
- [Y] EP 0398557 A1 19901122 - ENGELHARD CORP [US]
- [Y] WO 9300674 A1 19930107 - MOBIL OIL CORP [US]

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