

Title (en)
Combined process for hydrotreating and hydroisomerization.

Title (de)
Kombiniertes Verfahren für Hydrotreating und Hydroisomerisierung.

Title (fr)
Procédé combiné d'hydrotreatment et d'hydroisomérisation.

Publication
EP 0245124 A1 19871111 (FR)

Application
EP 87400645 A 19870324

Priority
FR 8605568 A 19860416

Abstract (en)
[origin: EP0245124B1] 1. A combined process for heavy naphtha hydrotreating and light naphtha hydroisomerization, wherein a first charge, consisting in major part of a heavy naphtha, is fed, through at least one heating zone, to at least two catalytic hydroforming zones arranged in series, the effluent from each hydrotreating zone, except the effluent from the last reforming zone where through passes the charge, also circulating through at least one heating zone, the effluent from the last reforming zone being subjected to at least one fractionation so as to obtain a reformat and a hydrogen containing gas, a portion of said hydrogen being recycled to the hydrotreating zones, another portion of said hydrogen being admixed with a second charge consisting in major part of a light naphtha, the resultant mixture being preheated and then introduced into a catalytic hydroisomerization zone, the reformat and the effluent from the hydroisomerization zone being collected together and subjected to fractionation in the same stabilization column in order to obtain an improved isomerizate and reformat mixture, said process further comprising the use in the hydroisomerization zone of a catalyst containing at least one zeolite, the hydroisomerization being conducted without introduction of halogen or halogen compound into the hydroisomerization zone.

Abstract (fr)
L'invention concerne un procédé combiné d'hydrotreatment catalytique d'un naphta lourd dans au moins une zone de réaction (10) et d'hydroisomérisation catalytique d'un naphta léger dans au moins une zone de réaction (34). L'invention est caractérisée en ce que l'on utilise l'hydrogène produit par l'unité d'hydrotreatment (ligne (27)) pour isomériser le naphta léger, les reformats et isomérisats obtenus étant fractionnés de préférence ensemble dans une même colonne de stabilisation (51) sur la figure 1. Il en résulte une meilleure intégration thermique, une meilleure récupération des hydrocarbures légers, une baisse des utilités et investissement par rapport à deux unités fonctionnant séparément.

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IPC 8 full level
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CPC (source: EP US)
C10G 59/06 (2013.01 - EP US); **C10G 69/14** (2013.01 - EP US)

Citation (search report)
• [A] US 2946736 A 19600726 - MUFFAT DONALD L, et al
• [A] US 3785955 A 19740115 - DAVIS W
• [A] FR 2248314 A1 19750516 - INST FRANCAIS DU PETROLE [FR]

Cited by
US6207040B1; RU2487161C1; WO9803613A1

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EP 0245124 A1 19871111; **EP 0245124 B1 19900110**; AT E49417 T1 19900115; CA 1325990 C 19940111; DE 3761381 D1 19900215; DK 194487 A 19871016; DK 194487 D0 19870414; ES 2013764 B3 19900601; FR 2602784 A1 19880219; FR 2602784 B1 19881104; GR 3000274 T3 19910315; JP 2544922 B2 19961016; JP S62256889 A 19871109; US 4911822 A 19900327

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