

Title (en)

Process for cracking a hydrocarbon feedstock to obtain gasoline and olefins and upgrading the olefins to improve the total gasoline yield.

Title (de)

Verfahren zur Spaltung von Kohlenwasserstoffeinsätzen für die Herstellung von Benzin und Olefinen und die Aufarbeitung der Olefine für die Verbesserung der totalen Benzinausbeute.

Title (fr)

Procédé pour le craquage d'une charge hydrocarbonée pour l'obtention d'essence et d'oléfines et valorisation des oléfines pour améliorer le rendement total en essence.

Publication

EP 0311375 A1 19890412 (EN)

Application

EP 88309278 A 19881005

Priority

- US 10583187 A 19871008
- US 14594688 A 19880120

Abstract (en)

Improved processes are disclosed for increasing gasoline yield from a gas oil at a constant riser top temperature by introducing a quench fluid, such as liquid water, butane, or lighter hydrocarbons or an alcohol or ether into a riser downstream of the site where the gas oil and/or catalyst are injected. In another embodiment of the invention the introduction of quench fluid, acting as a heat sink, can be used to increase octane number while avoiding significant formation of wet gas as is observed when higher octane number is achieved by generally increasing the overall riser temperature. This invention further provides an integrated process wherein the C4- product from an FCC riser unit which is limited to a predetermined top temperature maintained by injecting a quench fluid intermediate the inlet and outlet of the FCC riser is combined and contacted with a zeolite catalyst in a turbulent fluid bed under conditions of severity to upgrade the light olefin-containing gas to heavier hydrocarbons, especially gasoline.

IPC 1-7

C10G 11/18; C10G 57/02

IPC 8 full level

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CPC (source: EP)

C10G 11/18 (2013.01); **C10G 57/02** (2013.01)

Citation (search report)

- [X] EP 0208609 A1 19870114 - RAFFINAGE CIE FRANCAISE [FR]
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