

Title (en)

Residual oil cracking process using dry gas as lift gas initially in riser reactor.

Title (de)

Verfahren zur katalytischen Spaltung von Residualölen mit Trockengas als Auftriebgas in einem Steigrohrreaktor.

Title (fr)

Procédé de craquage d'huile résiduelle en utilisant du gaz sec tel que le gaz d'entraînement dans un réacteur à colonne montante.

Publication

EP 0171460 A1 19860219 (EN)

Application

EP 84112717 A 19841217

Priority

US 62019684 A 19840613

Abstract (en)

Dry gas (containing little C3+ and almost no C5+) is substituted for wet gas (generally containing C3+ and C5+) and used as the lift gas for transporting catalyst through a hydrocarbon conversion riser e.g. metal removal system, fluid catalytic cracker, and RCC<sm> heavy oil cracking process. Preferably the hydrocarbon feed contact the catalyst-lift gas mixture after some period of acceleration and mixing and passivation of contaminants on the catalyst surface. Advantages include lower gassing and lower coke-make as well as better product selectivity. Preferred catalyst-lift gas contact times are from about 0.01 to 2, more preferably 0.05 to 1.5, and most preferably 0.15 to 1 second. Preferred lift gas hydrogen contents are at least about 10, more preferably 15 and most preferably 20 mol percent hydrogen.

IPC 1-7

C10G 11/18; C10G 47/30

IPC 8 full level

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CPC (source: EP)

C10G 11/18 (2013.01); **C10G 47/30** (2013.01)

Citation (search report)

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EP 84112717 A 19841217; AT 84112717 T 19841217; AU 4311185 A 19850529; CA 466631 A 19841030; DE 3473473 T 19841217; IN 827DE1984 A 19841025; JP 3364985 A 19850221; MX 20556285 A 19850606; SU 3911820 A 19850612