

Title (en)

RESIDUAL OIL CRACKING PROCESS USING DRY GAS AS LIFT GAS INITIALLY IN RISER REACTOR

Publication

EP 0171460 B1 19880817 (EN)

Application

EP 84112717 A 19841217

Priority

US 62019684 A 19840613

Abstract (en)

[origin: EP0171460A1] 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 gasing 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

C10G 11/02 (2006.01); **B01J 23/00** (2006.01); **B01J 29/00** (2006.01); **C10G 11/00** (2006.01); **C10G 11/05** (2006.01); **C10G 11/18** (2006.01); **C10G 47/30** (2006.01)

CPC (source: EP)

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

Cited by

US8608944B2; US4802971A; EP1046696A3; US4853105A; US7678342B1; FR2628436A1; US5506365A; EP0323297A1; FR2625509A1; US4863585A; EP0280724A4; US4957617A; US4826586A; EP0259156A1; US4752375A; US4966681A; US11286429B2; US8951406B2; US8263008B2; US9157037B2; WO2007149921A1; WO2021262639A1; WO2024059600A1

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EP 0171460 A1 19860219; **EP 0171460 B1 19880817**; AT E36554 T1 19880915; AU 4311185 A 19851219; AU 588528 B2 19890921; CA 1265464 A 19900206; DE 3473473 D1 19880922; IN 162877 B 19880716; JP H0226663 B2 19900612; JP S614785 A 19860110; MX 165471 B 19921112; RU 2091433 C1 19970927

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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