

Title (en)

Process and apparatus for the catalytic cracking in two successive reaction zones

Title (de)

Verfahren und Einrichtung zum katalytischen Kracken in zwei aufeinanderfolgenden Reaktionszonen

Title (fr)

Procédé et dispositif de craquage catalytique dans deux zones réactionnelles successives

Publication

EP 0573316 B1 19980722 (FR)

Application

EP 93401080 A 19930426

Priority

FR 9205714 A 19920507

Abstract (en)

[origin: US5498326A] The invention relates to a process for catalytic cracking and the associated apparatus in which the cracking reaction takes place in two substantially vertical and successive reaction zones, the loads being introduced into the first zone where it circulates from the top downwards, then at least a part of the product obtained is introduced into a second reaction zone in which it circulates in an ascending fashion. A supplementary hydrocarbonated phase is advantageously introduced into the product entering the second zone. The invention applies particularly to heavy loads, with a U-shaped apparatus.

IPC 1-7

C10G 11/18; **C10G 51/02**

IPC 8 full level

B01J 23/88 (2006.01); **C07B 61/00** (2006.01); **C10G 11/16** (2006.01); **C10G 11/18** (2006.01); **C10G 51/02** (2006.01); **C10G 51/04** (2006.01)

CPC (source: EP KR US)

C10G 11/00 (2013.01 - KR); **C10G 11/18** (2013.01 - EP US); **C10G 51/026** (2013.01 - EP US)

Cited by

FR2785907A1; EP1170355A1; FR2811327A1; US7153478B2; US6641715B1; WO0029508A1; US6767451B2; US7544333B2

Designated contracting state (EPC)

DE ES GB IT

DOCDB simple family (publication)

FR 2690922 A1 19931112; **FR 2690922 B1 19940722**; CA 2095794 A1 19931108; CA 2095794 C 20031007; DE 69319800 D1 19980827; DE 69319800 T2 19981126; EP 0573316 A1 19931208; EP 0573316 B1 19980722; ES 2120487 T3 19981101; JP 3345690 B2 20021118; JP H0633073 A 19940208; KR 100251425 B1 20000415; KR 930023442 A 19931218; US 5498326 A 19960312

DOCDB simple family (application)

FR 9205714 A 19920507; CA 2095794 A 19930507; DE 69319800 T 19930426; EP 93401080 A 19930426; ES 93401080 T 19930426; JP 10691093 A 19930507; KR 930007799 A 19930507; US 5779593 A 19930507