

## Title (en)

Thermal or catalytic cracking process for hydrocarbon feedstocks and corresponding system

## Title (de)

Thermisches oder katalytisches Spaltverfahren für Kohlenwasserstoffeinsätze und entsprechendes System

## Title (fr)

Procédé de craquage thermique ou catalytique de charges hydrocarbures et système correspondant

## Publication

**EP 1707614 A1 20061004 (EN)**

## Application

**EP 05460034 A 20051206**

## Priority

PL 37156404 A 20041206

## Abstract (en)

The process of cracking is conducted within the reaction system embracing the first reaction zone and the second reaction zone; hydrocarbons feedstock in a liquid state is introduced into the first reaction zone where such a temperature is maintained which enables running of cracking reaction. The liquid reaction mixture from the lower part of the first zone flows into the lower part of the mentioned second zone, where the reaction mixture flowing in from below is divided in numerous streams flowing upwards. Into every of such liquid streams, a stream of gas is introduced from below which, along with the reaction mixture, forms a liquid-gas mixture which is heated when flowing upwards by indirect exchange of heat with the heating medium and then the heated mixture flowing out up above from the mentioned second zone is turned back into the first reaction zone. Cracking products are carried away from the upper part of the first zone. The system for hydrocarbons feedstock processing contains the tank-type reactor (1) and the tubular reactor ( 5 ). The tubular reactor is provided with the parallel tubes ( 6 ) mounted in the casing and directed from below to the top. The tank-type reactor is connected with the tubular space of the tubular reactor by the means of bottom pipe ( 4 ) and upper pipe (12) . Each tube ( 6 ) has a small tube ( 7 ) installed on its lower end, with an inlet directed in principal coaxially to the tube's (6)

## IPC 8 full level

**C10G 1/10** (2006.01); **C10B 53/07** (2006.01); **C10G 9/00** (2006.01); **C10G 11/00** (2006.01)

## CPC (source: EP)

**C10G 1/10** (2013.01); **C10G 9/00** (2013.01); **C10G 11/00** (2013.01); **C10G 47/00** (2013.01); **C10G 47/22** (2013.01)

## Citation (search report)

- [DY] DE 10049377 A1 20020418 - EVK DR OBERLAENDER GMBH & CO K [DE]
- [Y] US 3108048 A 19631022 - MCDONALD GERALD W G
- [A] DE 4112977 A1 19921022 - GFK KOHLEVERFLUESSIGUNG GMBH [DE]
- [A] FR 2675499 A1 19921023 - INST FRANCAIS DU PETROLE [FR]

## Cited by

EP2135923A1; US2024010940A1; CN114460057A; US8664458B2; WO2010106399A3; WO2009065271A1; US10723858B2; US10472487B2; US11072693B2; US11739191B2; US10000715B2; US10457886B2; US8680349B2; US9376632B2; US10597507B2; US11279811B2; US8020499B2; US11072676B2; US11859036B2; US10870739B2; US11987672B2

## Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

## DOCDB simple family (publication)

**EP 1707614 A1 20061004**; PL 205461 B1 20100430; PL 371564 A1 20060612

## DOCDB simple family (application)

**EP 05460034 A 20051206**; PL 37156404 A 20041206