Title (en)

HYDROGENATION OF AROMATIC COMPOUNDS

Title (de)

HYDRIERUNG VON AROMATISCHEN VERBINDUNGEN

Title (fr)

HYDROGÉNATION DE COMPOSÉS AROMATIQUES

Publication

EP 3649100 A1 20200513 (DE)

Application

EP 18740917 A 20180717

Priority

- EP 17179827 A 20170705
- IB 2018055292 W 20180717

Abstract (en)

[origin: WO2019008561A1] Process for hydrogenating aromatic compounds over a solid catalyst in the presence of a hydrogen-containing gas comprising a first reactor operated in loop mode, a second reactor operated in straight pass, at least a part of the output of the first reactor is supplied to the second reactor, characterized in that the first reactor is configured as a trickle bed reactor and is operated in trickle bed mode and the second reactor is operated such that the catalyst present therein is partially flooded.

IPC 8 full level

C07C 67/303 (2006.01); **C07B 35/04** (2006.01)

CPC (source: EP US)

B01J 19/1837 (2013.01 - US); **B01J 19/1843** (2013.01 - US); **B01J 19/32** (2013.01 - US); **C07C 67/303** (2013.01 - EP US); **C07C 69/78** (2013.01 - US); **C07C 69/82** (2013.01 - US); B01J 2219/00162 (2013.01 - US); B01J 2219/185 (2013.01 - US); C07C 69/74 (2013.01 - US); C07C 69/75 (2013.01 - US); C07C 69/753 (2013.01 - US); C07C 2523/46 (2013.01 - US); C07C 2601/14 (2017.04 - EP US)

Citation (search report)

See references of WO 2019008561A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3424901 A1 20190109; **EP 3424901 B1 20200610**; CN 110914232 A 20200324; CN 110914232 B 20230314; EP 3649100 A1 20200513; ES 2814342 T3 20210326; PL 3424901 T3 20210111; RU 2018126735 A 20200120; TW 201906810 A 20190216; TW I788378 B 20230101; US 11203566 B2 20211221; US 2021032189 A1 20210204; WO 2019008561 A1 20190110

DOCDB simple family (application)

EP 17179827 A 20170705; CN 201880044552 A 20180717; EP 18740917 A 20180717; ES 17179827 T 20170705; IB 2018055292 W 20180717; PL 17179827 T 20170705; RU 2018126735 A 20180720; TW 107122968 A 20180703; US 201816624338 A 20180717