

Title (en)

PROCESS CARRIED OUT BY HEAT RECUPERATION FOR SUSPENSION HYDROGENATION WITH INTEGRATED GAS PHASE HYDROGENATION

Publication

**EP 0177676 B1 19920304 (DE)**

Application

**EP 85107962 A 19850627**

Priority

DE 3433625 A 19840913

Abstract (en)

[origin: US4636300A] Process for sump-phase hydrogenation with integrated gas-phase hydrogenation relevant parameters being adjusted so that an economical heat recovery for the entire system is achieved, despite increasing incrustation of the mash heat exchanger and the increasing deactivation of the gas-phase catalyst. The process-relevant temperatures of the intermediate precipitator and of the gas-phase reactor are precisely adjusted by the use of head coolers which follow the sump-phase hydrogenator, and by head coolers which precede the intermediate precipitator. The procedure is such that the waste heat from the sump-phase products is partially recovered by using it to heat the raw materials constituting the gas phase and by feeding it back again to the mash heater.

IPC 1-7

**C10G 1/00**

IPC 8 full level

**C10G 65/02** (2006.01); **C10G 1/00** (2006.01)

CPC (source: EP US)

**C10G 1/002** (2013.01 - EP US)

Cited by

EP0318694A3; DE102018108989A1; WO2019201847A1; US11939226B2

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**EP 0177676 A2 19860416; EP 0177676 A3 19880302; EP 0177676 B1 19920304;** AU 4485485 A 19860320; AU 586430 B2 19890713; CA 1251753 A 19890328; DE 3585485 D1 19920409; JP H0569157 B2 19930930; JP S6172097 A 19860414; PL 255319 A1 19860812; US 4636300 A 19870113; ZA 856989 B 19860430

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