

Title (en)
STARTING REACTOR FOR COAL HYDROGENATION

Publication
EP 0053697 A3 19830112 (DE)

Application
EP 81108814 A 19811023

Priority
DE 3046275 A 19801209

Abstract (en)
[origin: EP0053697A2] A starting reactor for the hydrogenation of coal paste, having a pressure vessel for pressures up to 700 bar, preferably up to 350 bar, bottom-end feed lines for the coal paste and hydrogen gas at temperatures from 400 to 484 DEG C, lateral lance inlet lines for hydrogen cooling gas and a top-end discharge line for the desired product in the form of vapour, the bottom product as a liquid phase and the unconverted hydrogen gas, has the following features: a) A circulation pipe (2) which is arranged centrally in the pressure vessel (1) and through which the coal paste is recycled from the top into the vicinity of the bottom-end feed lines (6, 7) for paste and gas, the feed lines (6, 7) being designed as nozzles and being in a circular arrangement around the circulation pipe (2); b) the circulation pipe (2) has a cross-section which amounts to 5 to 15% of the reactor cross-section; c) the circulation pipe (2) has a widening (3) at the top. <IMAGE>

IPC 1-7
C10G 1/06; B01J 3/04

IPC 8 full level
C10G 1/08 (2006.01); **C10G 1/06** (2006.01)

CPC (source: EP)
C10G 1/065 (2013.01)

Citation (search report)
• [Y] DE 2916695 A1 19800117 - HYDROCARBON RESEARCH INC
• [Y] DE 2204539 A1 19730823 - INST DE CERCETARI PENTRU CHIMI

Designated contracting state (EPC)
AT BE CH DE FR GB IT LI NL SE

DOCDB simple family (publication)
EP 0053697 A2 19820616; **EP 0053697 A3 19830112**; AU 7836281 A 19820617; DE 3046275 A1 19820715; JP S57121091 A 19820728; ZA 818493 B 19821124

DOCDB simple family (application)
EP 81108814 A 19811023; AU 7836281 A 19811208; DE 3046275 A 19801209; JP 19465881 A 19811204; ZA 818493 A 19811208