

Title (en)
PROCESS FOR THE HYDROGENATION OF COAL

Publication
EP 0123161 B1 19870304 (DE)

Application
EP 84103345 A 19840327

Priority
DE 3311552 A 19830330

Abstract (en)
1. Process for the hydrogenation of coal, in which finely ground coal is pasted with pasting oil which consists of hydrocarbon mixtures extraneous to the process and, for the remainder, of oil originating from the process, and is hydrogenated at pressures of 100 to 700 bar, preferably 250 to 350 bar, and temperatures of 350 to 520 degrees C, preferably 440 to 490 degrees C, with hydrogen, optionally in the presence of catalysts, in a bottom phase, the products which are liquid and solid at these pressures and temperatures are separated off, and gaseous product, if appropriate after intermediate condensation, is further hydrogenated without pressure release in a gas phase over fixed catalysts and liquid product is isolated by fractional condensation, characterized in that the pasting oil consists to the extent of 30 to 100% by weight, preferably 50-95% by weight, of hydrocarbon mixtures, extraneous to the process, from the group of petroleum-derived top residue and/or vacuum residue, heavy oil or very heavy oil or oil from low temperature carbonization of oil shale and/or tar sand, having a boiling range such that boiling commences above 200 degrees C and preferably above 300 degrees C, with the remainder consisting of oil originating from the process and having a boiling range such that boiling commences above 200 degrees C, preferably above 300 degrees C.

IPC 1-7
C10G 1/06

IPC 8 full level
C10G 1/00 (2006.01); **C10G 1/06** (2006.01); **C10G 1/08** (2006.01)

CPC (source: EP US)
C10G 1/002 (2013.01 - EP US); **C10G 1/065** (2013.01 - EP US); **C10G 1/083** (2013.01 - EP US)

Cited by
EP0209665A1; EP0177676A3

Designated contracting state (EPC)
BE DE FR GB LU

DOCDB simple family (publication)
DE 3311552 A1 19841004; CA 1231657 A 19880119; DD 224863 A5 19850717; DE 3462520 D1 19870409; EP 0123161 A1 19841031; EP 0123161 B1 19870304; US 4944866 A 19900731

DOCDB simple family (application)
DE 3311552 A 19830330; CA 449889 A 19840319; DD 26138984 A 19840329; DE 3462520 T 19840327; EP 84103345 A 19840327; US 85239186 A 19860415