Title (en)
PROCESS FOR THE PRODUCTION OF SYNTHESIS GAS

Publication
EP 0153235 B1 19890118 (FR)

Application
EP 85400229 A 19850212

Priority
FR 8402331 A 19840216

Abstract (en)
[origin: EP0153235A1] 1. A process for the production of synthesis gas, wherein a hydrocarbon substance of vegetable origin, such as a biomass product, is first gasified in a first reactor (1) at a moderate temperature lower than the melting temperature of the ash, with the production, in addition to usable carbon monoxide and hydrogen, of "inevitable" species such as unconverted carbon, hydrocarbons and tars, whereafter the inevitable species are converted at high temperature in a second reactor (2) into hydrogen and carbon monoxide, characterized in that an increase to the conversion temperature in the second reactor (2) is obtained by blowing in a gas flow previously heated to a temperature of between 3000 and 5000 degrees C by passing such gas through a plasma torch (4) disposed at the outlet of a circuit (3) via which gas is blown into the conversion reactor (2), the flow rate of the blown-in gas being controlled in dependence on the temperature and proportions of carbon monoxide and hydrogen already existing in the mixture leaving the first gasification reactor (1).

IPC 1-7
C10J 3/46; C10J 3/54; C10J 3/56

IPC 8 full level
C10J 3/46 (2006.01); **C10J 3/54** (2006.01); **C10J 3/66** (2006.01)

CPC (source: EP)
C10J 3/00 (2013.01); **C10J 3/463** (2013.01); **C10J 3/54** (2013.01); **C10J 3/66** (2013.01); C10J 2300/1238 (2013.01)

Cited by
DE102016214242A1; US5922090A; EP0648829A1; EP0270226A3; FR2921384A1; EP0676465A1; EP0801218A1; EP0776962A3; EP0803562A1; US5900224A; US6063355A; US5980858A; FR2587717A1; AT396366B; US8070863B2; US8128728B2; US6455011B1; WO2009037339A1; WO9847985A1; WO9640843A1; WO03018467A3; US6190429B1; US6676716B2; US6902711B1; WO2018024404A1; DE102016214242B4

Designated contracting state (EPC)
DE FR IT SE

DOCDB simple family (publication)
EP 0153235 A1 19850828; **EP 0153235 B1 19890118**; AU 3893285 A 19850822; AU 578660 B2 19881103; BR 8500707 A 19851008; DE 3567672 D1 19890223; ES 540309 A0 19851201; ES 8602916 A1 19851201; FR 2559776 A1 19850823; FR 2559776 B1 19870717; PT 79952 A 19850301; PT 79952 B 19870603

DOCDB simple family (application)
EP 85400229 A 19850212; AU 3893285 A 19850218; BR 8500707 A 19850214; DE 3567672 T 19850212; ES 540309 A 19850212; FR 8402331 A 19840216; PT 7995285 A 19850212