

Title (en)

SOLID FUEL MANUFACTURING METHOD AND MANUFACTURING DEVICE

Title (de)

FESTBRENNSTOFFHERSTELLUNGSVERFAHREN UND -HERSTELLUNGSVORRICHTUNG

Title (fr)

PROCÉDÉ DE FABRICATION ET DISPOSITIF DE FABRICATION DE COMBUSTIBLE SOLIDE

Publication

EP 3012313 A1 20160427 (EN)

Application

EP 14813034 A 20140402

Priority

- JP 2013128778 A 20130619
- JP 2014059767 W 20140402

Abstract (en)

A drying step is executed in a stable state regardless of the increase or decrease in the conveyance amount of porous coal. A disclosed method includes: a mixing step of mixing porous coal with a mixture oil containing solvent oil and heavy oil, to obtain material slurry; an evaporation step of heating the material slurry to promote dehydration of porous coal and impregnating the mixture oil into pores of porous coal, to obtain dehydrated slurry; a solid-liquid separation step of separating upgraded porous coal and the mixture oil from the dehydrated slurry; and the drying step of drying the upgraded porous coal by heating and conveying it while supplying carrier gas. The method includes: setting a target value of the circulation amount of carrier gas and a target value of the pressure of carrier gas at the drying step; calculating control outputs, based on deviations between the target values and measured values corresponding respectively thereto; and adjusting the supply amount of carrier gas, based on a smaller value between the control outputs obtained.

IPC 8 full level

C10L 5/04 (2006.01); **C10L 9/10** (2006.01); **F26B 21/04** (2006.01); **F26B 21/10** (2006.01); **F26B 21/12** (2006.01)

CPC (source: EP RU US)

C10L 5/00 (2013.01 - RU); **C10L 9/00** (2013.01 - RU); **C10L 9/02** (2013.01 - EP US); **C10L 9/08** (2013.01 - US); **C10L 9/10** (2013.01 - EP US); **F26B 11/0477** (2013.01 - EP US); **F26B 21/04** (2013.01 - EP RU US); **F26B 21/08** (2013.01 - EP US); **F26B 23/02** (2013.01 - EP US); **C10L 2290/06** (2013.01 - US); **C10L 2290/08** (2013.01 - US); **C10L 2290/24** (2013.01 - US); **C10L 2290/58** (2013.01 - US)

Cited by

CN111550979A; CN110849104A

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 3012313 A1 20160427; **EP 3012313 A4 20170301**; AU 2014282553 A1 20160107; AU 2014282553 B2 20160714; CN 105308160 A 20160203; CN 105308160 B 20171114; JP 2015003956 A 20150108; JP 6023665 B2 20161109; RU 2015154278 A 20170724; RU 2629935 C2 20170905; US 2016122675 A1 20160505; WO 2014203591 A1 20141224

DOCDB simple family (application)

EP 14813034 A 20140402; AU 2014282553 A 20140402; CN 201480034105 A 20140402; JP 2013128778 A 20130619; JP 2014059767 W 20140402; RU 2015154278 A 20140402; US 201414892151 A 20140402