

Title (en)

PROCESS FOR THE HEAT TREATMENT OF A MATERIAL AND HEAT TREATMENT UNIT EMPLOYING SUCH A PROCESS

Title (de)

VERFAHREN ZUR WÄRMEBEHANDLUNG EINES MATERIALS UND SOLCH EIN VERFAHREN EINSETZENDE  
WÄRMEBEHANDLUNGSEINHEIT

Title (fr)

PROCEDE DE TRAITEMENT THERMIQUE D'UN MATERIAU ET UNITE DE TRAITEMENT THERMIQUE METTANT EN UVRE UN TEL  
PROCEDE

Publication

**EP 2142871 A2 20100113 (FR)**

Application

**EP 07866416 A 20071022**

Priority

- FR 2007001739 W 20071022
- FR 0609357 A 20061025

Abstract (en)

[origin: FR2907884A1] The process for thermally treating an organic material such as wood in a furnace (4) using combustion gas supplied by burner (5) associated with a hearth (6), comprises condensing the combustion gas between exit of the hearth and the furnace for eliminating a part of dust contained in the combustion gas, and overheating the combustion gas using a hot gas generator (17) to obtain a desired temperature for heat treatment. The second phase of condensation takes place in an exit of the furnace followed by a separation step between solid and/or liquid fraction and combustion gas. The process for thermally treating an organic material such as wood in a furnace (4) using combustion gas supplied by burner (5) associated with a hearth (6), comprises condensing the combustion gas between exit of the hearth and the furnace for eliminating a part of dust contained in the combustion gas, and overheating the combustion gas using a hot gas generator (17) to obtain a desired temperature for heat treatment. The second phase of condensation takes place in an exit of the furnace followed by a separation step between solid and/or liquid fraction and combustion gas. The combustion gas is redirected at the exit of the separation step towards the burner and/or the hearth by mixing step for ensuring a mixture of gas with air, where the mixture is measured according to a rate of combustible compound included in the combustion gas. The condensation is conducted using an absorption refrigerating unit (14). An independent claim is included for a unit for thermally treating an organic material such as wood.

IPC 8 full level

**F26B 23/02** (2006.01); **F26B 21/08** (2006.01); **F26B 25/00** (2006.01)

CPC (source: EP US)

**F26B 21/086** (2013.01 - EP US); **F26B 23/02** (2013.01 - EP US); **F26B 25/005** (2013.01 - EP US); **F26B 2210/16** (2013.01 - EP US)

Citation (search report)

See references of WO 2008056044A2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

**FR 2907884 A1 20080502**; **FR 2907884 B1 20121221**; BR PI0718159 A2 20131126; CA 2667333 A1 20080515; EP 2142871 A2 20100113; RU 2009119434 A 20101127; RU 2442086 C2 20120210; US 2010043251 A1 20100225; WO 2008056044 A2 20080515; WO 2008056044 A3 20081113

DOCDB simple family (application)

**FR 0609357 A 20061025**; BR PI0718159 A 20071022; CA 2667333 A 20071022; EP 07866416 A 20071022; FR 2007001739 W 20071022; RU 2009119434 A 20071022; US 31179907 A 20071022