

Title (en)

METHOD AND SYSTEM FOR THE TORREFACTION OF LIGNOCELLULOSIC MATERIAL

Title (de)

VERFAHREN UND SYSTEM ZUR TORREFIZIERUNG VON LIGNOCELLULOSE MATERIAL

Title (fr)

PROCÉDÉ ET SYSTÈME POUR LA TORRÉFACTION DE MATÉRIAU LIGNOCELLULOSIQUE

Publication

EP 2606110 A1 20130626 (EN)

Application

EP 11750017 A 20110816

Priority

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- US 2011047949 W 20110816

Abstract (en)

[origin: US2012042567A1] A method for torrefaction of lignocellulosic biomass using a torrefaction reactor vessel having stacked trays, the method including: continuously feeding the biomass to an upper inlet of the torrefaction reactor vessel such that the biomass material is deposited on an upper tray of a plurality of trays stacked vertically within the reactor; as the biomass moves across an upper surface of each of the trays, heating and drying the biomass material with a gas injected into the vessel, wherein the gas is substantially non-oxidizing of the biomass, is under a pressure of at least 20 bar gauge and at a temperature of at least 200° C.; cascading the biomass down through the trays by passing the biomass through an opening in each of the trays to deposit the biomass on a lower tray; discharging torrefied biomass from a lower outlet of the torrefaction reactor vessel, and circulating gas extracted from a lower elevation of the reactor vessel to an upper region of the reactor vessel.

IPC 8 full level

C10L 5/44 (2006.01); **C10L 9/08** (2006.01)

CPC (source: EP US)

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See references of WO 2012024314A1

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