

Title (en)

METHOD AND SYSTEM FOR COMBINED DRYING OF BIOMASS AND CAPTURE OF CARBON DIOXIDE

Title (de)

VERFAHREN UND SYSTEM ZUR KOMBINIERTEN TROCKNUNG VON BIOMASSE UND ABSCHIEDUNG VON KOHLENDIOXID

Title (fr)

PROCÉDÉ ET SYSTÈME POUR LE SÉCHAGE DE LA BIOMASSE COMBINÉ AU PIÉGEAGE DU DIOXYDE DE CARBONE

Publication

EP 4105302 A1 20221221 (EN)

Application

EP 22179147 A 20220615

Priority

NL 1044066 A 20210615

Abstract (en)

Method and system for drying biomass, said method comprising the steps: supplying a first biomass as fuel to a thermal boiler, which is arranged for heating a thermal medium by combustion of the first biomass supplied; drying a second biomass in a dryer by evaporation of water from the second biomass, wherein the dryer is heated by the heated thermal medium from the thermal boiler, and wherein the cooled thermal medium is returned to the thermal boiler; supplying combustion gases, coming from the thermal boiler, to a CO₂ capture module, configured to capture the CO₂ in the combustion gases and form a stream of CO₂ by means of energy released from the dryer in the stream of evaporated water obtained from the second biomass.

IPC 8 full level

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CPC (source: EP)

C10L 5/363 (2013.01); **C10L 5/442** (2013.01); **C10L 2290/02** (2013.01); **C10L 2290/06** (2013.01); **C10L 2290/08** (2013.01); **C10L 2290/30** (2013.01); **C10L 2290/541** (2013.01)

Citation (search report)

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- [A] WO 2016118067 A1 20160728 - BIOENDEV AB [SE]
- [A] WO 2019093938 A1 20190516 - VALMET OY [SE]
- [A] KR 20200083880 A 20200709 - THE INDUSTRY & ACADEMIC COOPERATION IN CHUNGNAM NATIONAL UNIV (IAC) [KR]
- [A] TEN ASBROEK NICK: "Frames Renewable Energy Solutions Introduction", 1 March 2019 (2019-03-01), pages 1 - 26, XP055898134, Retrieved from the Internet <URL:https://blueterra.nl/wp-content/uploads/2019/03/Frames-CO2-capture-from-biomass-combustion.pdf> [retrieved on 20220302]

Designated contracting state (EPC)

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