

Title (en)

METHOD AND DRYING PLANT FOR DRYING MATERIAL AND UTILISING HEAT FROM THE DRYING PLANT

Title (de)

VERFAHREN UND TROCKNUNGSANLAGE ZUM TROCKNEN VON MATERIAL UND VERWENDUNG VON WÄRME AUS DER TROCKNUNGSANLAGE

Title (fr)

PROCÉDÉ ET INSTALLATION DE SÉCHAGE DE MATÉRIAU ET UTILISATION DE LA CHALEUR DE L'INSTALLATION DE SÉCHAGE

Publication

EP 3115722 B1 20181226 (EN)

Application

EP 16178225 A 20160706

Priority

DK PA201570447 A 20150706

Abstract (en)

[origin: EP3115722A1] A method and a plant for utilising heat from a drying plant for drying material in the form of particulate material, e.g. wood chips, shavings, sawdust, straw, wood pellets or bedding, including bedding that has been used in a stable. The method and the plant include a drying step for drying the particulate material, which is heated by hot oil. A boiler for heating the oil is connected with means for supplying at least a partial stream of the material to the boiler for burning the material in the boiler. In addition, the boiler has means for transmitting the combustion heat from flue gas to the oil before the oil is returned to the drying chamber. The plant also includes a heat exchanger by which a partial stream of the hot oil from the boiler is heating a circulating heating medium, such as water, from a heating conduit of the heating part of a central heating system for heating and/or hot water production for one or more buildings. In front of the heat exchanger there is preferably provided a condenser condensing vapour in the drying air and transmitting the heat to the heating medium for preheating and utilisation of the heat from the drying air.

IPC 8 full level

F26B 3/20 (2006.01); **F26B 3/22** (2006.01); **F26B 17/20** (2006.01); **F26B 23/10** (2006.01)

CPC (source: EP)

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Citation (examination)

MÜNTER C ET AL: "EXERGY STEAM DRYING AND ITS ENERGY INTEGRATION", INTERNATIONAL NORDIC BIOENERGY CONFERENCE, 1 - 5 SEPTEMBER 2003,, 1 September 2003 (2003-09-01), pages 271 - 273, XP001562268

Cited by

CN113217919A; CN105716387A; CN105841452A; CN109536231A; KR102174727B1

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