

Title (en)

DRYING UNIT FOR DRYING PRINTED SUBSTRATES

Title (de)

TROCKNUNGSEINHEIT ZUM TROCKNEN BEDRUCKTER SUBSTRATE

Title (fr)

UNITÉ DE SÉCHAGE POUR SÉCHER DES SUBSTRATS IMPRIMÉS

Publication

EP 3887164 A1 20211006 (DE)

Application

EP 19795139 A 20191022

Priority

- DE 102018130280 A 20181129
- EP 2019078622 W 20191022

Abstract (en)

[origin: WO2020108864A1] The invention relates to a drying unit (22) for drying printed substrates (21), comprising a chamber (23) with a gaseous medium which is oxygen-reduced by means of an inert gas, wherein the substrates (21) are guided through the chamber (23) or at least can be guided through the chamber, and the chamber (23) has an entrance for the substrates (21) to be guided into the chamber (23) in the transport direction (T) of the substrates (21). The entrance for the substrates (21) to be guided into the chamber (23) is formed by two cylinders (04; 06) which are positioned against each other longitudinally. The cylinders (04; 06) positioned against each other at the entrance of the chamber (23) form a printing unit (03). One of the cylinders (04) is designed as a printing cylinder (04), and the other cylinder (06) is designed as a cylinder (06) which interacts with the printing cylinder (04) and applies a printed image onto the affected substrates (21). The two cylinders (04; 06) which are positioned against each other under pressure at the entrance of the chamber (23) form a seal which runs axially to the cylinders (04; 06) for preventing the oxygen-reduced gaseous medium from leaking out of the chamber (23) and/or for preventing oxygen from the ambient air from entering the chamber (23). The printing unit (03) arranged at the entrance of the chamber (23) is designed as a printing unit (03) for an intaglio printing process.

IPC 8 full level

B41F 9/02 (2006.01); **B41F 23/04** (2006.01)

CPC (source: EP US)

B41F 9/021 (2013.01 - EP US); **B41F 23/045** (2013.01 - EP); **B41F 23/0453** (2013.01 - US); **B41F 23/0486** (2013.01 - EP US)

Citation (search report)

See references of WO 2020108864A1

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)

WO 2020108864 A1 20200604; CN 112703113 A 20210423; CN 112703113 B 20220322; DE 102018130280 A1 20200604;
EP 3887164 A1 20211006; EP 3887164 B1 20221012; JP 2021526991 A 20211011; JP 7029023 B2 20220302; US 11220101 B2 20220111;
US 2021323300 A1 20211021

DOCDB simple family (application)

EP 2019078622 W 20191022; CN 201980060594 A 20191022; DE 102018130280 A 20181129; EP 19795139 A 20191022;
JP 2021514361 A 20191022; US 201917276552 A 20191022