Title (en)

DEVICE AND PRINTING MACHINE FOR PRODUCING A SECURITY ELEMENT ON A SUBSTRATE

Title (de)

VORRICHTUNG UND DRUCKMASCHINE ZUR HERSTELLUNG EINES SICHERHEITSELEMENTES AUF EINEM SUBSTRAT

Title (fr)

DISPOSITIF ET MACHINE D'IMPRESSION POUR PRODUIRE UN ELEMENT DE SECURITE SUR UN SUBSTRAT

Publication

EP 3877182 B1 20220907 (DE)

Application

EP 19783236 A 20190926

Priority

- DE 102018127936 A 20181108
- EP 2019076088 W 20190926

Abstract (en)

[origin: WO2020094291A1] The invention relates to a device for producing security elements (03) on a substrate (02), comprising a first printing unit (21; 22), by means of which a substrate (02) being conveyed along a transport path can be printed and/or is printed with a plurality of mutually spaced first printed image elements (12) using a first magnetic particle-containing coating agent (11), comprising a first magnet cylinder (41) which is arranged downstream of the first printing unit (21; 22) in the transport path and which comprises magnetic elements (43) on the cylinder circumference, comprising a second magnet cylinder (42) which is arranged downstream of the first magnet cylinder (41) in the transport path and which likewise comprises magnetic elements (43) on the cylinder circumference, and comprising a drying and/or curing device (52) which is paired with the second magnet cylinder (42) or is arranged downstream thereof in the transport path and by means of which at least the coating agent (13) of a plurality of mutually spaced second printed image elements (14) printed onto the substrate (02) is and/or can be partly dried and/or cured at least on the surface and/or at least in part. A second printing unit (31; 32) is provided in the transport path between the first and second magnet cylinder (41; 42), said printing unit being used to print the substrate (02) with the mutually spaced second printed image elements (14; 12) using the second magnetic particle-containing coating agent (13), and a drying and/or curing device (51) arranged upstream of the second printing unit (31; 32) is paired with the first magnet cylinder (41) or is arranged downstream thereof in the transport path, said drying and/or curing device being used to dry and/or cure the magnetic particle-containing coating agent (11) of the first printed image elements (12) printed by means of the first printing unit (21; 22) at least on the surface and/or at least in part.

IPC 8 full level

B41F 11/02 (2006.01); **B42D 25/369** (2014.01); **B42D 25/405** (2014.01)

CPC (source: EP US)

B41F 11/02 (2013.01 - EP US); **B41F 13/08** (2013.01 - US); **B41F 23/0443** (2013.01 - US); **B42D 25/369** (2014.10 - EP US); **B42D 25/405** (2014.10 - EP); **B42D 25/41** (2014.10 - US); B05D 3/067 (2013.01 - EP); B05D 3/207 (2013.01 - EP); B05D 5/065 (2013.01 - EP); B41F 23/00 (2013.01 - EP); B42D 25/41 (2014.10 - EP)

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

DOCDB simple family (publication)

DE 102018127936 A1 20200514; CN 113490597 A 20211008; CN 113490597 B 20220729; EP 3877182 A1 20210915; EP 3877182 B1 20220907; JP 2021529692 A 20211104; JP 6991394 B2 20220112; US 11214052 B2 20220104; US 2021316545 A1 20211014; WO 2020094291 A1 20200514

DOCDB simple family (application)

DE 102018127936 A 20181108; CN 201980061825 A 20190926; EP 19783236 A 20190926; EP 2019076088 W 20190926; JP 2021515651 A 20190926; US 201917277066 A 20190926