Title (en)

METHOD FOR PRINTING ON A SURFACE OF A NONABSORBENT SUBSTRATE WITH AN INK TO BE APPLIED BY AN INKJET PRINTING DEVICE, AND DIGITAL PRINTING MACHINE FOR CARRYING OUT SAID METHOD

Title (de)

VERFAHREN ZUM BEDRUCKEN EINER OBERFLÄCHE EINES NICHTSAUGENDEN SUBSTRATES MIT EINER VON EINER TINTENSTRAHLDRUCKEINRICHTUNG AUFZUBRINGENDEN TINTE UND DIGITALDRUCKMASCHINE ZUR AUSFÜHRUNG DIESES VERFAHRENS

Title (fr)

PROCÉDÉ D'IMPRESSION D'UNE SURFACE D'UN SUBSTRAT NON ABSORBANT AU MOYEN D'UNE ENCRE À APPLIQUER PAR UN DISPOSITIF D'IMPRESSION À JET D'ENCRE, ET IMPRIMANTE NUMÉRIQUE PERMETTANT LA MISE EN OEUVRE DUDIT PROCÉDÉ

Publication

EP 3867076 A1 20210825 (DE)

Application

EP 19761852 A 20190829

Priority

- DE 102018125750 A 20181017
- EP 2019073110 W 20190829

Abstract (en)

[origin: WO2020078606A1] The invention relates to a method for printing on a surface of a nonabsorbent substrate (01) with an ink to be applied by an inkjet printing device (02), wherein: an ink containing water as a solvent is used to print on the substrate (01), an ink having a water proportion of at least 70% being used; the substrate (01) to be printed on is supported by a workpiece support (04) and is moved relative to the inkjet printing device (02); during this relative movement, ink is applied by the inkjet printing device (02) to the surface of the substrate (01) to be printed on; the ink applied to the surface of the substrate (01) is heated to a temperature that lies above the temperature of the air surrounding the substrate (01) and below the boiling temperature of the of the solvent contained in the ink; a vapor layer consisting of the solvent contained in the ink is formed above a liquid phase of the ink; the vapor layer formed above the liquid phase of the ink is transported away by means of an air flow discharged from at least one blowing nozzle unit (06; 07); the air output by the blowing nozzle unit (06; 07) in question is heated and/or dehumidified beforehand. The invention further relates to a digital printing machine for carrying out said method.

IPC 8 full level

B41M 5/00 (2006.01); **B41J 11/00** (2006.01); **B41M 7/00** (2006.01)

CPC (source: EP US)

B41J 2/205 (2013.01 - US); **B41J 3/407** (2013.01 - EP US); **B41J 11/0015** (2013.01 - EP US); **B41J 11/00216** (2021.01 - EP US); **B41J 11/00222** (2021.01 - EP US); **B41J 11/06** (2013.01 - EP); **B41M 5/0047** (2013.01 - EP); **B41M 7/00** (2013.01 - EP); **B41M 7/009** (2013.01 - EP); B41J 2/01 (2013.01 - US); B41M 5/0011 (2013.01 - EP); B41M 5/0058 (2013.01 - EP); B41M 5/0064 (2013.01 - EP); B41M 5/0076 (2013.01 - EP); B41M 5/0088 (2013.01 - EP)

Citation (search report)

See references of WO 2020078606A1

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 2020078606 A1 20200423; DE 102018125750 A1 20200423; EP 3867076 A1 20210825; EP 3867076 B1 20220907; ES 2929486 T3 20221129; US 11207895 B2 20211228; US 2021309019 A1 20211007

DOCDB simple family (application)

EP 2019073110 W 20190829; DE 102018125750 A 20181017; EP 19761852 A 20190829; ES 19761852 T 20190829; US 201917281619 A 20190829