

Title (en)

METHOD FOR THE ONLINE QUALITY CONTROL OF DECORATIVE PRINTS ON SUBSTRATE MATERIALS

Title (de)

VERFAHREN ZUR ONLINE-QUALITÄTSKONTROLLE VON DEKORDRUCKEN AUF TRÄGERMATERIALIEN

Title (fr)

PROCÉDÉ DE CONTRÔLE DE QUALITÉ EN LIGNE D'IMPRESSIONS DÉCORATIVES SUR DES MATÉRIAUX SUPPORTS

Publication

EP 3807607 A1 20210421 (DE)

Application

EP 19732918 A 20190606

Priority

- EP 18176271 A 20180606
- EP 2019064777 W 20190606

Abstract (en)

[origin: CA3099949A1] The invention relates to a method for the online quality control of decorative prints on substrate materials, comprising the similarity comparison of an actual image and a target image of the print decorations and the adjusting of the decorative print if deviations of the color values of the actual image from the color values of the target image are detected during the production of a batch of substrate materials with a decorative layer, wherein a) at least one hyperspectral digital image of a print decoration is produced; b) the print decoration is calibrated by means of the at least one hyperspectral digital image; characterized in that the method also comprises the steps: c) producing and storing a digital target image of the print decoration with a resolution in the range of 4 to 36 megapixels, more particularly in the form of a digital photograph; d) creating at least one first print decoration on at least one first substrate material; e) producing and storing at least one digital actual image of the printed decoration on the at least one first substrate material with a resolution in the range of 4 to 36 megapixels, more particularly in the form of a digital photograph; f) determining color deviations between the digital target image and the digital actual image by means of a computer program; g) printing on at least one side of further substrate materials so as to form a decorative layer, in such a way that color deviations between the digital target image and digital actual images of the printed decorations on the further substrate materials occur only below a predefined target value or within a predefined tolerance range. The invention also relates to a device for carrying out the method for the online quality control of decorative prints on substrate materials.

IPC 8 full level

G01J 3/46 (2006.01); **B41F 33/00** (2006.01); **G01J 3/28** (2006.01); **H04N 1/00** (2006.01)

CPC (source: EP KR US)

B41F 23/08 (2013.01 - KR); **B41F 33/0009** (2013.01 - KR); **B41F 33/0036** (2013.01 - EP KR US); **B41J 3/46** (2013.01 - KR); **B41J 11/0015** (2013.01 - KR); **B41J 29/38** (2013.01 - KR); **G01J 3/463** (2013.01 - EP KR US); **G06T 3/4023** (2013.01 - US); **H04N 1/00005** (2013.01 - KR); **H04N 1/6036** (2013.01 - EP); **H04N 1/6047** (2013.01 - EP); **H04N 25/44** (2023.01 - US); **G01J 2003/2826** (2013.01 - EP KR US); **G06T 2207/10036** (2013.01 - US); **G06T 2207/20216** (2013.01 - US)

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)

EP 3578939 A1 20191211; **EP 3578939 B1 20200930**; AU 2019283408 A1 20201210; AU 2019283408 B2 20210204; BR 112020024133 A2 20210217; BR 112020024133 B1 20211026; CA 3099949 A1 20191212; CA 3099949 C 20211228; CL 2020003067 A1 20210507; CN 112243491 A 20210119; CN 112243491 B 20220412; EA 039645 B1 20220221; EA 202092697 A1 20210114; EP 3807607 A1 20210421; ES 2833523 T3 20210615; HU E052890 T2 20210528; JP 2021520504 A 20210819; JP 7046232 B2 20220401; KR 102312246 B1 20211013; KR 20210009384 A 20210126; LT 3578939 T 20201228; MX 2020013235 A 20220106; PT 3578939 T 20201124; SI 3578939 T1 20210226; UA 125740 C2 20220525; US 11548274 B2 20230110; US 2021245493 A1 20210812; WO 2019234147 A1 20191212

DOCDB simple family (application)

EP 18176271 A 20180606; AU 2019283408 A 20190606; BR 112020024133 A 20190606; CA 3099949 A 20190606; CL 2020003067 A 20201126; CN 201980038119 A 20190606; EA 202092697 A 20190606; EP 19732918 A 20190606; EP 2019064777 W 20190606; ES 18176271 T 20180606; HU E18176271 A 20180606; JP 2020567783 A 20190606; KR 20207037846 A 20190606; LT 18176271 T 20180606; MX 2020013235 A 20190606; PT 18176271 T 20180606; SI 201830177 T 20180606; UA A202007857 A 20190606; US 201916972140 A 20190606