

Title (en)
METHOD AND DEVICE FOR PRODUCING COLOUR IMAGES ON SUBSTRATES CONTAINING PIGMENTS AND PRODUCTS PRODUCED ACCORDINGLY

Title (de)
VERFAHREN UND VORRICHTUNG ZUR ERZEUGUNG VON FARBBILDERN AUF FARBKÖRPER ENTHALTENDEN SUBSTRATEN UND DADURCH HERGESTELLTE PRODUKTE

Title (fr)
PROCÉDÉ ET DISPOSITIF DE PRODUCTION D'IMAGES COLORÉES SUR DES SUBSTRATS COMPORTANT DES CORPS COLORÉS ET PRODUITS AINSI FABRIQUÉS

Publication
EP 2603385 A1 20130619 (DE)

Application
EP 12756506 A 20120912

Priority
• EP 11182071 A 20110920
• EP 2012067769 W 20120912
• EP 12756506 A 20120912

Abstract (en)
[origin: WO2013041415A1] The invention relates to a method for producing a sign, pattern, symbol and/or image (8) on a substrate (2) by means of color bodies arranged on said substrate, which color bodies consist of dyes or pigments comprised in capsules (1) and loose the color effect under the influence of a laser (23), wherein different color bodies (1) having at least three different color effects respectively are arranged in the substrate (2). The invention is characterized by the following method steps: (a) producing a color chart (14), in which the individual color effect of individual color bodies (1) from dyes or pigment particles are comprised in the substrate (2) respectively as a function of their spatial coordinate; (b) spatially resolved radiation, which opens only individual capsules of color bodies (1) in the color effect thereof by means of an excitation beam of a laser (23) and releases said dyes in a single frequency on the basis of the color chart (14) for producing a resulting color effect. The invention further relates to substrates, in particular security documents, produced using such a method, and to devices for carrying out such methods.

IPC 8 full level
B41M 3/14 (2006.01); **B41M 5/28** (2006.01); **B41M 5/34** (2006.01); **B42D 25/23** (2014.01); **B42D 25/309** (2014.01); **B42D 25/378** (2014.01); **B42D 25/41** (2014.01)

CPC (source: EP US)
B41J 2/435 (2013.01 - US); **B41M 3/14** (2013.01 - EP US); **B41M 5/287** (2013.01 - EP US); **B41M 5/34** (2013.01 - EP US); **B42D 25/00** (2014.10 - EP US); **B42D 25/41** (2014.10 - EP US); **B42D 2035/06** (2022.01 - EP); **B42D 2035/34** (2022.01 - EP)

Citation (search report)
See references of WO 2013041415A1

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)
WO 2013041415 A1 20130328; CN 103492189 A 20140101; CN 103492189 B 20150916; EP 2603385 A1 20130619; EP 2603385 B1 20140319; ES 2463991 T3 20140529; JP 2014519991 A 20140821; JP 5520424 B1 20140611; US 2014160220 A1 20140612; US 8953008 B2 20150210

DOCDB simple family (application)
EP 2012067769 W 20120912; CN 201280018663 A 20120912; EP 12756506 A 20120912; ES 12756506 T 20120912; JP 2014505680 A 20120912; US 201213988930 A 20120912