

Title (en)
METHOD AND DEVICE FOR PRODUCING COLOUR IMAGES BY WAY OF A UV LASER ON PIGMENTED SUBSTRATES, AND PRODUCTS PRODUCED AS A RESULT

Title (de)
VERFAHREN UND VORRICHTUNG ZUR ERZEUGUNG VON FARBBILDERN MIT EINEM UV-LASER AUF PIGMENTIERTEN SUBSTRATEN UND DADURCH HERGESTELLTE PRODUKTE

Title (fr)
PROCÉDÉ ET DISPOSITIF POUR GÉNÉRER DES IMAGES COULEUR AVEC UN LASER UV SUR DES SUBSTRATS PIGMENTÉS ET PRODUITS FABRIQUÉS AINSI

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Abstract (en)
[origin: WO2012062505A1] A method is described for producing a character, pattern, symbol and/or image (8) on a substrate (2) by way of pigment particles (1) which are arranged thereon and lose their colour effect under the action of a laser (23), wherein different pigment particles (1) with at least three different colour effects are arranged on and/or in the substrate (2). The invention is distinguished by the following method steps: (a) production of a colour chart (14), in which the individual colour effect of individual pigment particles (1) or individual clusters of pigment particles is contained as a function of their spatial coordinate on and/or in the substrate (2); (b) spatially resolved irradiation, which changes the colour effect of only individual pigment particles (1) or individual clusters of pigment particles, by way of a laser (23) at a single frequency on the basis of the colour chart (14) in order to produce a resulting colour effect. Furthermore, the present invention relates to substrates, in particular security documents, produced using a method of this type, and devices for carrying out methods of this type.

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