

Title (en)

MARKING DEVICE AND METHOD FOR MARKING VALUABLE OR SECURITY DOCUMENTS WITH HIGH RESOLUTION

Title (de)

MARKIERUNGSVORRICHTUNG UND VERFAHREN ZUM MARKIEREN VON WERT- ODER SICHERHEITSDOKUMENTEN MIT HOHER AUFLÖSUNG

Title (fr)

DISPOSITIF DE MARQUAGE ET PROCÉDÉ DE MARQUAGE HAUTE RÉOLUTION DE DOCUMENTS DE VALEUR OU DE SÉCURITÉ

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Application

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Abstract (en)

[origin: WO2011104330A1] The invention relates to a marking device (1) for a valuable or security document (2), and to a method for permanently, more particularly individually, marking valuable and/or security documents (1). The method for permanently marking a valuable or security document (2) comprises the following steps: generating laser light (6) and guiding the laser light (6) by means of a light guiding device (8) such that laser light (6') emerging from the light guiding device (8) is positioned on the valuable or security document (2) and locally marks the valuable or security document (2), wherein the laser light (6) is generated in the form of laser light pulses having a pulse duration of less than 100 ps. As a result, it is possible to utilize non-linear interactions between the material of the valuable or security document (2) and the laser light (6') for marking purposes. Furthermore, given suitable guidance of the laser light (6'), it is possible to achieve improved focusing and, by means thereof, an improved resolution of the patterns produced by means of the marking.

IPC 8 full level

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