

Title (en)

SECURITY ELEMENT HAVING A LIGHT-GUIDING STRUCTURE THAT IS LOCALLY MODIFIED IN RESPECT OF THE LIGHT PROPAGATION PROPERTIES AND METHOD FOR PRODUCING SUCH A SECURITY ELEMENT

Title (de)

SICHERHEITSELEMENT MIT EINER LOKAL HINSICHTLICH IHRER LICHTAUSBREITUNGSEIGENSCHAFTEN MODIFIZIERTEN LICHTLEITENDEN STRUKTUR UND VERFAHREN ZUR HERSTELLUNG EINES SOLCHEN SICHERHEITSELEMENTS

Title (fr)

ÉLÉMENT DE SÉCURITÉ DOTÉ D'UNE STRUCTURE DE GUIDAGE DE LUMIÈRE LOCALEMENT MODIFIÉE POUR CE QUI EST DE SES PROPRIÉTÉS DE PROPAGATION DE LA LUMIÈRE ET PROCÉDÉ DE FABRICATION D'UN TEL ÉLÉMENT DE SÉCURITÉ

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Application

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Abstract (en)

[origin: WO2011141227A1] The invention relates to a method for producing a security element (1) and to a security element (1), in particular for a value or security document, comprising a light-guiding structure, wherein the light-guiding structure comprises a transparent core (2) and a likewise transparent cladding (7), and wherein the refractive index of the core (2) is greater than the refractive index of the cladding such that a total reflection for light wave guidance can take place at the interface between core (2) and cladding (7) and thus a light wave guidance to an exit surface (75) of the core (2) is possible. A volume transmission property of the core (2) is locally modified such that during light guidance in the light-guiding structure an intensity pattern of the emerging light, which is dependent on the exit location and is caused by the locally modified volume transmission property can be observed at the exit surface (75).

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