

Title (en)

METHOD FOR PROVIDING MATRICES FOR EMBOSsing POLYMERIC FILMS AND THE LIKE, PARTICULARLY FOR IMPRINTING MICROSCOPIC IDENTIFICATION STRINGS AND IMAGES, MATRIX ACCORDING TO THE METHOD, AND POLYMERIC FILM EMBOSSED BY MEANS OF THE MATRIX

Title (de)

VERFAHREN ZUR BEREITSTELLUNG VON MATRIZEN ZUM PRÄGEN VON POLYMERFILMEN UND DERGLEICHEN INSbesondere ZUM AUFDRUCKEN VON MIKROSKOPISCHEN IDENTIFIKATIONSZEICHENKETTEN UND -BILDERN, MATRIX GEMÄß DEM VERFAHREN UND MITTELS DER MATRIX GEPRÄGTER POLYMERFILM

Title (fr)

PROCÉDÉ DE PRODUCTION DE MATRICES POUR GAUFRER DES FILMS POLYMÈRES ET SIMILAIRES, EN PARTICULIER POUR IMPRIMER DES RESSORTS D'IDENTIFICATION MICROSCOPIQUES ET DES IMAGES, MATRICE SELON LE PROCÉDÉ ET FILM POLYMÈRE GAUFRÉ AU MOYEN DE LA MATRICE

Publication

EP 2250536 A1 20101117 (EN)

Application

EP 08872273 A 20081112

Priority

- EP 2008065368 W 20081112
- IT BO20080089 A 20080211

Abstract (en)

[origin: WO2009100784A1] A method (1) for providing matrices (2) for embossing polymeric films (3) and the like, particularly for imprinting microscopic identification strings and images (4), consisting of the following steps: A) providing a uniform background diffraction grating (5) on a flat plate (6) by means of a standard holographic technique; B) subjecting the flat plate (6) to at least one pulsed and localized energy beam by means of a procedure comprised among ablation, vaporization and melting of portion of material that constitutes the plate (6) in the neighborhood of the at least one point of incidence of the beam; C) repeating the exposure (B) to pulsed and localized energy beams according to a sequence of consecutive dots arranged in the configuration of the image of the element to be imprinted (4).

IPC 8 full level

G03H 1/18 (2006.01); **G03H 1/02** (2006.01)

CPC (source: EP)

B65D 15/14 (2013.01); **B65D 15/24** (2013.01); **B65D 43/0279** (2013.01); **B65D 43/0281** (2013.01); **B65D 2543/00092** (2013.01);
B65D 2543/00296 (2013.01); **B65D 2543/00462** (2013.01); **B65D 2543/00472** (2013.01); **B65D 2543/00518** (2013.01);
B65D 2543/00564 (2013.01)

Citation (search report)

See references of WO 2009100784A1

Citation (examination)

- US 2004207892 A1 20041021 - MENZ IRINA [DE], et al
- US 6954293 B2 20051011 - HECKENKAMP CHRISTOPH [DE], et al

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

WO 2009100784 A1 20090820; EP 2250536 A1 20101117; IT BO20080089 A1 20090812

DOCDB simple family (application)

EP 2008065368 W 20081112; EP 08872273 A 20081112; IT BO20080089 A 20080211