

Title (en)

OBJECT PRODUCED BY A MOLDING PROCESS AND MARKED BY A DIFFRACTION GRATING, AND METHOD FOR THE PRODUCTION THEREOF

Title (de)

DURCH EIN URFORMVERFAHREN HERGESTELLTER, MIT EINEM BEUGUNGSGITTER MARKIERTER GEGENSTAND UND VERFAHREN ZU DESSEN HERSTELLUNG

Title (fr)

OBJET FABRIQUÉ SELON UN PROCÉDÉ DE MOULAGE ET MARQUÉ AVEC UNE GRILLE DE DIFFRACTION, ET SON PROCÉDÉ DE FABRICATION

Publication

EP 2561408 A1 20130227 (DE)

Application

EP 11711912 A 20110404

Priority

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Abstract (en)

[origin: WO2011131475A1] The invention relates to a method for marking an object (1) during the production thereof, comprising the molding of at least one grating structure (10) on or in the surface of the object (1). To this end, said grating structure has a grating constant which permits observation by the naked eye of the diffraction structures which can be generated by visible light. The at least one grating structure (10) is generated by a molding process of the object (1), in which the mold used is equipped with a negative version of said grating structure. The object (1) at least partially consists of a soft polymer, in particular PVC-P, wherein the molding process is carried out as an injection molding process using an open mold. To this end, as a result of the injection molding process, the grating structure (10) comprises at least two regions (21, 22, 23), wherein the respective grating lines (31, 32, 33) of different regions (21, 22, 23) are phase-shifted and/or angularly displaced in relation to each other and the diffraction pattern is partially canceled so that the diffraction structures can be recognized by the naked eye only with suitable lighting.

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

See references of WO 2011131475A1

Citation (examination)

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