

Title (en)

METHOD FOR THE SERIAL REPRODUCTION OF RELIEF PATTERNS ON FLEXIBLE LAMINAR MATERIALS

Title (de)

VERFAHREN ZUR SERIELLEN REPRODUKTION VON RELIEFMUSTERN AUF FLEXIBLEN, FLÄCHIGEN MATERIALIEN

Title (fr)

MÉTHODE DE REPRODUCTION EN SÉRIE DE MOTIFS EN RELIEF SUR DES MATÉRIAUX LAMINAIRES FLEXIBLES

Publication

EP 4194221 A1 20230614 (EN)

Application

EP 22213163 A 20221213

Priority

IT 202100031211 A 20211213

Abstract (en)

A method for the serial reproduction of relief patterns on flexible laminar materials (P), e.g. natural and synthetic leather, regenerated leather, microfibres, synthetic coated and layered products, which method provides the steps of a) providing first digital data (3) of original patterns (N) having predetermined shape and size, b) three-dimensional printing of the original patterns (N) with UV ink on the outer surface (S₁) of a first sample (1) so as to obtain relief patterns (M), c) forming a first negative three-dimensional polymeric cast (7) of the first sample (1), d) anchoring the first cast (7) to a plate (10) to define a first printing plate (11), e) compressing the first printing plate (11) against a surface (S₂) of flexible laminar material (P) to transfer the negative patterns (O) of the first cast (7) thereon to obtain a first laminar product (13) with reproduced three-dimensional patterns (Q), and f) modifying said reproduced patterns (Q) obtained on said first product (13) so as to compensate possible deviations (Δ) in shape and size with respect to said original patterns (N), wherein said modifying step f) comprises a sub-step f1) of detecting the size and shape of the reproduced patterns (Q) to detect said deviations, and a sub-step f2) of modifying said first digital data (3) to eliminate said deviations and obtain second digital data (16) to obtain a second sample, a second cast, a second printing plate and a second modified laminar product.

IPC 8 full level

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CPC (source: EP)

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Citation (applicant)

TW 201125754 A 20110801 - CHEN SHOU-BIN [TW]

Citation (search report)

- [Y] WO 2008047127 A1 20080424 - FLOTEK INTERNAT LTD [GB], et al
- [Y] EP 3539792 A1 20190918 - SWISS KRONO TEC AG [CH]
- [A] US 2011159243 A1 20110630 - AHN KYOUNGSOO [KR], et al
- [AD] JP H07241909 A 19950919 - DAINIPPON PRINTING CO LTD

Designated contracting state (EPC)

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