Title (en)
METHOD FOR PRINTING A CURVED SURFACE, AND DEVICE FOR PRINTING THREE-DIMENSIONAL SURFACES

Title (de)
VERFAHREN ZUM BEDRUCKEN EINER GEKRÜMMTEN OBERFLÄCHE SOWIE VORRICHTUNG ZUM BEDRUCKEN DREIDIMENSIONALER OBERFLÄCHEN

Title (fr)
PROCÉDÉ POUR L'IMPRESSION D'UNE SURFACE COURBE, ET DISPOSITIF POUR L'IMPRESSION DE SURFACES TRIDIMENSIONNELLES

Publication
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Application
EP 18733855 A 20180622

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Abstract (en)
[origin: WO2019002153A1] Method for printing a curved surface (10) by means of a digital printing method, in the case of which method defined liquid quantities are ejected from a plurality of individually actuable outlet openings (16) which are arranged on a planar outlet surface (14) of a print head (12), which liquid quantities impact on the curved surface (10) as liquid droplets, in the case of which method the curved surface (10) and the outlet surface (14) are oriented with respect to one another in such a way that a region of the curved surface (10) is directed parallel to the outlet surface (14), wherein said region is at a minimum spacing B from the outlet surface (14) in the case of a convex curvature of the surface (10) and is at a maximum spacing C from the outlet surface (14) in the case of a concave curvature of the surface (10), wherein, during printing, only outlet openings (16) are actuated for outputting a liquid quantity, the spacing of which from the impact point of the liquid droplet which is output by them from the curved surface (10) lies between the minimum spacing B and the maximum spacing C, wherein the minimum spacing B is given by the clear distance which the liquid quantity which is ejected from the outlet opening (16) requires in order to form a liquid droplet, and the maximum spacing C exceeds the minimum spacing by a predefined distance t, along which a liquid droplet does not degenerate and the path of which liquid droplet runs in a rectilinear manner, as a result of which, in the case of a relative movement between the outlet surface (14) and the surface (10) perpendicularly with respect to the curvature of the surface (10), the surface can be printed with a web, the width X of which corresponds, in the case of a convex curvature of the surface (10), to the distance between the outlet openings (10) which are spaced apart in the direction of the curvature of the surface (10) with a maximum spacing C and, in the case of a concave curvature of the surface (10), corresponds to the distance between the outlet openings (10) which are spaced apart in the direction of the curvature of the surface (10) with a minimum spacing B.

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