

Title (en)

METHODS, SYSTEMS AND DEVICES FOR THREE-DIMENSIONAL OBJECT GENERATION AND PHYSICAL MASK CURING

Title (de)

VERFAHREN, SYSTEME UND VORRICHTUNGEN FÜR DREIDIMENSIONALE OBJEKTGENERIERUNG UND PHYSIKALISCHE MASKENHÄRTUNG

Title (fr)

PROCÉDÉS, SYSTÈMES ET DISPOSITIFS POUR LA GÉNÉRATION D'OBJETS EN TROIS DIMENSIONS ET LE DURCISSEMENT DE MASQUE PHYSIQUE

Publication

**EP 3946906 A4 20221228 (EN)**

Application

**EP 20784937 A 20200402**

Priority

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- US 2019043764 W 20190726
- US 2020026288 W 20200402

Abstract (en)

[origin: WO2020206053A1] Systems, apparatus, and methods are described for additive manufacturing or three dimensional (3D) printing of objects using a set of physical masks and a flexible base vessel. An additive manufacturing device can include a light source configured to emit light; a vessel including: a receptacle configured to contain a volume of print material; and a transparent base through which light can be received to cure a portion of the volume of print material, which is not taut prior to photopolymer installation; a set of masks defining a set of patterns; and a mask carrier configured to support the set of masks between the light source and the transparent base to control a pattern of the light that is received through the transparent base, the mask carrier movable along the transparent base to cure portions of the volume of print material to form a layer of an object while releasing cured portions from the flexible base via a combination of forces.

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

- [IA] JP H04301431 A 19921026 - JAPAN SYNTHETIC RUBBER CO LTD
- [A] WO 2018170544 A1 20180927 - ELSEY JUSTIN [AU]
- [A] US 2017217052 A1 20170803 - WU LI-HAN [TW]
- See references of WO 2020206053A1

Designated contracting state (EPC)

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