HIGH FIDELITY 3D PRINTING THROUGH COMPUTED AXIAL LITHOGRAPHY

Tech ID: 32285 / UC Case 2021-107-0

PATENT STATUS

Country	Type	Number	Dated	Case
Patent Cooperation Treaty	Reference for National Filings	WO 2023/081404	05/11/2023	2021-107

Patent Pending

BRIEF DESCRIPTION

The inventor has developed novel algorithms and metrology methodologies, including real-time in-situ imaging of part formation, in computed axial lithography printing (CALP). CALP is a form of continuous 3D roll-based additive manufacturing which is distinct from roll-based micro/nanomanufacturing methods such as imprint lithography, gravure printing, and photo-roll lithography because it enables production of high aspect ratio reentrant features and voids in a single step that are difficult or even impossible with the existing methods.

SUGGESTED USES

The invention has applications in mechanical metamaterials, microfluidics, 3D tissue culturing, and desalination.

ADVANTAGES

This technology enables production of high aspect ratio reentrant features and voids in a single step that are difficult or even impossible with the existing methods

RELATED MATERIALS

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OTHER INFORMATION

KEYWORDS

3D Printing

CATEGORIZED AS

» **Environment**

  » Other

  » Remediation

» **Engineering**

  » Engineering

» **Materials & Chemicals**

  » Other

» **Medical**

  » Other

RELATED CASES

2021-107-0

ADDITIONAL TECHNOLOGIES BY THESE INVENTORS

▸ Computed Axial Lithography (CAL) For 3D Additive Manufacturing

▸ Roll-To-Roll Based 3D Printing Through Computed Axial Lithography

▸ System And Method For Tomographic Fluorescence Imaging For Material Monitoring