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Device for Conformal Coating of 3D Devices with Biological Materials

Tech ID: 24797 / UC Case 2015-224-0

BRIEF DESCRIPTION

It is difficult to produce a conformal coating of complex 3D surfaces. Especially challenging is the problem of depositing biologically active layers such as cell-laden collagen that cannot be sprayed (shear stress damages the cells) or brushed across a surface (the collagen layer will not coat the surface uniformly). Additionally, other techniques do not ensure a smooth surface with uniform layer thickness.

Researchers at the University of California, Irvine, Drs. Kheradvar and Kulinsky, have developed a device and method that allows for conformal coating of complex 3-dimensional surfaces. In particular, this device and method promote the coating of cells and biological materials like collagen onto surfaces for biomedical applications and tissue engineering.

SUGGESTED USES

This is a mask-free technology that may be used to coat scaffolds used for tissue or organ engineering.

PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Issued Patent	10,245,614	04/02/2019	2015-224

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OTHER INFORMATION

CATEGORIZED AS

- » **Medical**
- » Devices
- » **Engineering**
- » Other

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