

Title (en)

METHODS OF DEPOSITING DISCRETE HYDROXYAPATITE REGIONS ON MEDICAL IMPLANTS

Title (de)

VERFAHREN ZUR AUFTRAGUNG VON EINZELNEN HYDROXYAPATITREGIONEN AUF MEDIZINISCHE IMPLANTATE

Title (fr)

PROCÉDÉS DE DÉPÔT DE RÉGIONS INDIVIDUELLES D'HYDROXYAPATITE SUR DES IMPLANTS MÉDICAUX

Publication

**EP 2491167 B1 20190710 (EN)**

Application

**EP 10773461 A 20101019**

Priority

- US 58148309 A 20091019
- US 2010053138 W 20101019

Abstract (en)

[origin: US2011089041A1] A method for electrochemically depositing discrete regions of calcium phosphate onto a medical implant. The method includes providing an implant including at least one area having a metallic surface. At least a portion of the metallic surface is contacted with an electrolyte solution comprising calcium ions and phosphate ions. The metallic surface is used as a cathode, and an electrical potential is applied between the cathode and the electrolyte solution. The electrical potential is applied with a constant current density of from about 10 to about 50 mA/cm<sup>2</sup> for a period of time of from about 1 to about 20 minutes. A plurality of discrete regions of needle-shaped hydroxyapatite crystals are electrochemically deposited onto the metallic surface.

IPC 8 full level

**C25D 5/18** (2006.01); **C25D 5/48** (2006.01); **C25D 9/08** (2006.01)

CPC (source: EP US)

**C25D 5/18** (2013.01 - EP US); **C25D 5/48** (2013.01 - EP US); **C25D 5/617** (2020.08 - EP US); **C25D 9/08** (2013.01 - EP US)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**US 2011089041 A1 20110421**; EP 2491167 A2 20120829; EP 2491167 B1 20190710; WO 2011049915 A2 20110428;  
WO 2011049915 A3 20130103

DOCDB simple family (application)

**US 58148309 A 20091019**; EP 10773461 A 20101019; US 2010053138 W 20101019