

Title (en)

METHOD AND MIXTURE FOR IN-VIVO PHOTOCHEMICAL CROSS-LINKING OF COLLAGEN

Title (de)

VERFAHREN UND MISCHUNG FÜR PHOTOCHEMISCHE IN-VIVO-VERNETZUNG VON KOLLAGEN

Title (fr)

PROCÉDÉ ET MÉLANGE POUR LA RÉTICULATION PHOTOCHIMIQUE IN VIVO DU COLLAGÈNE

Publication

EP 2068622 A4 20121010 (EN)

Application

EP 07810866 A 20070727

Priority

- US 2007016952 W 20070727
- US 83405906 P 20060728
- US 88097307 A 20070725

Abstract (en)

[origin: WO2008013962A2] A method and a composition for photochemical cross linking of collagen by photoactive agent in-vivo are presented. The method includes a non-toxic photoactive formulation of the composition with collagen, which is administered to treatment area locally; followed by irradiation with suitable wavelength. In one of the embodiment liposomal formulated mTHPC is added to the collagen and is irradiated with a 652 nm laser, resulting in producing efficient collagen scaffolds with strengthen and stabilized microstructure, thus improving the physiochemical properties of the collagen scaffold. It improves the thermostability, mechanical property and swelling ratio of newly formed scaffold. Photochemical cross-linked collagens shows antimicrobial effect, when irradiated with suitable wavelength it disinfects the treatment site and curbs microbial growth.

IPC 8 full level

A01N 25/00 (2006.01); **A61K 31/409** (2006.01); **A61K 38/39** (2006.01); **A61L 27/24** (2006.01); **C07K 14/78** (2006.01)

CPC (source: EP)

A61K 31/409 (2013.01); **A61K 38/39** (2013.01); **A61L 27/24** (2013.01); **C07K 14/78** (2013.01)

Citation (search report)

- [XI] WO 2006029571 A1 20060323 - UNIV HONG KONG [CN]
- [A] US 5552452 A 19960903 - KHADEM JOHN [US], et al
- [A] US 6818018 B1 20041116 - SAWHNEY AMARPREET S [US]
- See references of WO 2008013962A2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2008013962 A2 20080131; WO 2008013962 A3 20081218; WO 2008013962 A9 20080327; EP 2068622 A2 20090617;
EP 2068622 A4 20121010

DOCDB simple family (application)

US 2007016952 W 20070727; EP 07810866 A 20070727