

Title (en)

MARINE SCAFFOLDS FOR HUMAN TISSUE GENERATION

Title (de)

MEERESGERÜSTE ZUR ERZEUGUNG VON MENSCHLICHEM GEWEBE

Title (fr)

ÉCHAFAUDAGES MARINS POUR LA GÉNÉRATION DE TISSU HUMAIN

Publication

EP 4319827 A1 20240214 (EN)

Application

EP 22721770 A 20220408

Priority

- EP 21167738 A 20210409
- EP 2022059530 W 20220408

Abstract (en)

[origin: EP4070824A1] The present invention relates to a method for generation of personalized tissue-engineered human grafts. The method comprising the following steps in the order named: a) providing a body part taken from a marine invertebrate, the body part comprising at least two biologically interconnected tissues selected from the group consisting of connective tissue, muscle tissue, epithelia tissue, and nervous system tissue; b) washing the body part with distilled water; c) decellularizing the washed body part to remove cells and DNA, to provide a decellularized 3D-scaffold with extracellular matrix (ECM) proteins, and, optionally, d) recellularizing the decellularized 3D-scaffold by: inoculating human stem cells into the decellularized 3D-scaffold, and in vitro culturing the human stem cells in the inoculated 3D-scaffold.

IPC 8 full level

A61L 27/36 (2006.01); **A61L 27/38** (2006.01); **B33Y 70/00** (2020.01)

CPC (source: EP)

A61L 27/3604 (2013.01); **A61L 27/3683** (2013.01); **A61L 27/3834** (2013.01); **A61L 27/3847** (2013.01); **A61L 27/3852** (2013.01); **B33Y 70/00** (2014.12); **A61L 2430/02** (2013.01); **A61L 2430/06** (2013.01); **A61L 2430/40** (2013.01)

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

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

EP 4070824 A1 20221012; EP 4319827 A1 20240214; WO 2022214693 A1 20221013

DOCDB simple family (application)

EP 21167738 A 20210409; EP 2022059530 W 20220408; EP 22721770 A 20220408