

## Title (en)

APPARATUS AND METHOD FOR STERILIZING, SEEDING, CULTURING, STORING, SHIPPING AND TESTING TISSUE, SYNTHETIC OR NATIVE VASCULAR GRAFTS

## Title (de)

GERÄT UND VERFAHREN ZUM STERILISIEREN, AUSSÄEN, KULTIVIEREN, LAGERN, VERSENDEN UND TESTEN VON SYNTHETISCHEM ODER NATIVEM GEFÄSSGEWEBETRANSPLANTAT

## Title (fr)

APPAREIL ET PROCEDE POUR STERILISER, IMPLANTER, CULTIVER, TRANSPORTER ET TESTER DES GREFFONS TISSULAIRES, SYNTHETIQUES OU NATIFS

## Publication

**EP 0822978 A4 19990818 (EN)**

## Application

**EP 96911759 A 19960409**

## Priority

- US 9605151 W 19960409
- US 43076895 A 19950427

## Abstract (en)

[origin: WO9634090A1] An apparatus and method for sterilizing, seeding, culturing, storing, shipping, and testing vascular grafts is disclosed. Specifically, the present invention relates to an apparatus and method for seeding and culturing vascular grafts with human cells. The apparatus includes a fluid reservoir (10), a pump (12), an alternating pressure source (16), and at least one treatment chamber (14). By alternating pressure to a support structure (32) within the treatment chamber (14) upon which a vascular graft scaffold (26) is positioned, a varying radial stress is placed on the scaffold (26). This stress results in a tissue-engineered vascular graft with cells and their fibers oriented in a manner which is more likely to possess long term dimensional stability and the patency of native vessels with normal physiologic function.

## IPC 1-7

**C12N 5/08; C12M 3/00**

## IPC 8 full level

**A61F 2/06** (2006.01); **A61L 2/24** (2006.01); **A61L 27/50** (2006.01); **C12M 3/00** (2006.01); **C12N 5/06** (2006.01); **C12N 5/07** (2010.01); **C12N 5/071** (2010.01); **C12N 5/08** (2006.01)

## CPC (source: EP KR)

**A61F 2/062** (2013.01 - EP); **A61L 2/24** (2013.01 - EP); **A61L 27/507** (2013.01 - EP); **C12M 21/08** (2013.01 - EP); **C12M 23/06** (2013.01 - EP KR); **C12M 25/14** (2013.01 - EP); **C12M 35/04** (2013.01 - EP)

## Citation (search report)

- [XA] US 4990131 A 19910205 - DARDIK HERBERT [US], et al
- [XA] EP 0320441 A1 19890614 - SULZER AG [CH]
- [XA] EP 0393788 A2 19901024 - KOKEN KK [JP]
- [XA] EP 0265176 A2 19880427 - HERRING MALCOLM B
- See references of WO 9634090A1

## Cited by

EP1205541A1

## Designated contracting state (EPC)

AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

## DOCDB simple family (publication)

**WO 9634090 A1 19961031**; AU 5484396 A 19961118; AU 703117 B2 19990318; CA 2219202 A1 19961031; EP 0822978 A1 19980211; EP 0822978 A4 19990818; JP 4059301 B2 20080312; JP H11504216 A 19990420; KR 19990008070 A 19990125; NZ 306304 A 19990329

## DOCDB simple family (application)

**US 9605151 W 19960409**; AU 5484396 A 19960409; CA 2219202 A 19960409; EP 96911759 A 19960409; JP 53256996 A 19960409; KR 19970707594 A 19971027; NZ 30630496 A 19960409