Recent patents in tissue engineering

Patent #	Subject	Assignee	Inventor(s)	Priority application date	Publication date
WO 200207785	A treated animal tissue for incorporation in bioprosthetic medical devices, obtained by perfusing fresh tissue with super-critical fluid solvent containing carbon dioxide to remove undesired agents in the tissue. The method provides anti-calcification treatment of animal tissue, simplified solvent recovery, and decontamination.	Sulzer Carbomedics (Austin, TX)	Chinn JA, Moore M, Pathak CP, Thoma R	7/20/2000	1/31/2002
EP 1167517	A method of producing tissue of predetermined type <i>in vitro</i> by perfusing the culture medium containing the cells of the tissue into a vessel provided with an inlet and an outlet for culture medium, and culturing the cells.	Isotis (Bilthoven, The Nether- lands)	de Bruijn JD, Peters WHL, van Apeldoorn AA	6/22/2000	1/2/2002
WO 200192322	The use of collagen from aquatic animals, particularly from the skin of teleost fishes, as carriers for tissue engineering; suitable, for example, in skin replacement and in screening for antiaging drugs.	Coletica (Lyon, France)	Abdul MN, Andre V, Huc A	7/14/2000	12/6/2001
FR 2809314	The use of crosslinked collagen from teleostean fishes to prepare supports for artificial skin for <i>in vitro</i> testing of dermatological products. The preparation is simple and economical, with a low risk of contamination, especially from prions.	Coletica (Lyon, France)	Abdul MN, Andre V, Huc A	5/26/2000	11/30/2001
US 6323022	A cell-cultivating device comprising a driving device that circulates the culture medium between the culture tank and buffer tank. The culture tank has a tissue-engineering scaffold with a plate consisting of polystyrene, polycarbonate, polyester, polypropylene, polyvinyl acetate, polyvinylidene chloride, polybutadiene, polyfluorocarbons, or fibrous materials.	Industrial Technology Research Institute (Hsin-Chu, Taiwan, ROC)	Chang K, Chen C, Chiang S, Jean L, Liu Y	7/1/1999	11/27/2001
US 6316581	A bioresorbable copolymer that includes products of a reaction between a first comonomer (a cyclic carbonate, a (thio)lactone, a lactide, a lactam, or a (non)functionalized cyclic carbonate) and a second, functionalized, cyclic carbonate comonomer which is a ring structure containing a functional group between a comonomer (cyclic carbonate, a (thio)lactone, lactide, or lactam) and a functionalized, cyclic carbonate comonomer; used for implantables in living organisms, drug carrier systems, and tissue engineering.	Gross RA; Kumar R	Gross RA, Kumar R	2/9/2001	11/13/2001
WO 200182828	A tissue-engineered testicular prosthesis comprising a biodegradable polymer scaffold that is seeded with disassociated chondrocytes; used for implanting into patients suffering from testicular dysfunction.	Atala A; Children's Hospital (Boston, MA)	Atala A	4/28/2000	11/8/2001
CN 1319436	A method and composition for the preparation of a novel compound collagen base for use as a tissue-engineering scaffold. The product possesses good biological compatibility, can promote cell adhesion and multiplication, and is not costly.	Inst. of Biomedical Eng., Chinese Acad. Med. Sci. (Beijing)	Yang H, Zhang Q	2/28/2001	10/31/2001
WO 200178805	An <i>in vivo</i> plasmapheresis or <i>in vivo</i> ultrafiltration membrane that includes elongated hollow fibers. The membrane is defined by an inner wall surface. The fiber wall has a higher mass density adjacent to the outer wall surface and a lower mass density adjacent to the inner wall surface.	Transvivo (Napa, CA)	Gorsuch R, Grage H	4/13/2000	10/25/2001
WO 200178906	A method for making a substrate biocompatible by bringing at least a portion of a charged substrate into contact with an oppositely charged starting material, and constructing a multilayered film of molecular layers of alternating charge on the substrate by electrostatic self-assembly; useful for tubing used in dialysis or in heart-lung machines, bandaging material, artificial hips, pacemakers, catheters, or stents.	Claus RO; Spillman WB; Virginia Tech Intellectual Properties (Blacksburg, VA); Wang Y	Claus RO, Spillman WB, Wang Y	4/14/2000	10/25/2001

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