

Title (en)

SELF-EXPANDABLE BIODEGRADABLE STENT MADE OF CLAD RADIOPAQUE FIBERS COVERED WITH BIODEGRADABLE ELASTIC FOIL AND THERAPEUTIC AGENT AND METHOD OF PREPARATION THEREOF

Title (de)

BIOLOGISCH ABBAUBARER SELBSTEXPANDIERBARER STENT AUS RÖNTGENDICHT MIT EINER BIOLOGISCH ABBAUBAREN ELASTISCHEN FOLIE BESCHICHTETEN FASERN SOWIE HEILMITTEL UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

ENDOPROTHÈSE BIODÉGRADABLE AUTO-EXPANSIBLE FABRIQUÉE EN FIBRES RADIO-OPAQUES REVÊTUES RECOUVERTE D'UNE FEUILLE ÉLASTIQUE BIODÉGRADABLE ET D'UN AGENT THÉRAPEUTIQUE ET PROCÉDÉ POUR SA PRÉPARATION

Publication

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Application

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Priority

CZ 2011000079 W 20110826

Abstract (en)

[origin: WO2013029571A1] Self-expanding biodegradable stent comprising a base structure consisting of interlaced biodegradable fibres, characterized in that the core polymeric fibre containing an x-ray opaque filler is covered with an additional polymer, or the polymeric core fibre is provided with a uniformly dispersed x-ray opaque matter, or the polymeric core fibre is coated with a polymer in which an x-ray opaque matter is uniformly dispersed, the interlaced fibres forming the complete basic structure of the stent being also coated with a dispersion of an x-ray opaque filler and with a polymer, said coatings forming a biodegradable foil provided on the basic structure of the stent and encapsulating an active substance, said active substance being selected from the group of substances including medicaments; proteins, enzymes/genes; stem cells or radioactive substances used for the ideal treatment of tumors. 2. Method of manufacturing a self-expanding biodegradable stent having a base structure consisting of interlaced biodegradable fibres, characterized in that it comprises the steps of covering the core polymeric fibre containing an x-ray opaque filler with an additional polymer, or providing the polymeric core fibre with a uniformly dispersed x-ray opaque matter, or coating the polymeric core fibre with a polymer in which an x-ray opaque matter is uniformly dispersed, followed by the step of coating the interlaced fibres forming the complete basic structure of the stent with a dispersion of an x-ray opaque filler and with a polymer in order to provide a biodegradable foil on the basic structure of the stent, in which foil an active substance is encapsulated, in which step the stent provided with an x-ray opaque filler undergoes heat treatment and then it is coated with a biodegradable elastic foil made of x-ray opaque fibres containing a first medicament and after having been prepared in this manner the stent is subjected to heat treatment for the second time and recoated with a further, thinner biodegradable foil containing a second, different medicament.

IPC 8 full level

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CPC (source: EP KR)

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Citation (search report)

See references of WO 2013029571A1

Citation (examination)

US 2005288251 A1 20051229 - HALES CHARLES A [US], et al

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