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(88) Date of publication of the international search report:

25 November 2010

(54) Title: COATINGS FOR PROMOTING ENDOTHELIALIZATION OF MEDICAL DEVICES

Restenosis Cascade

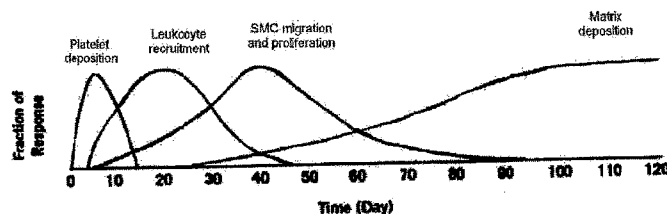


Figure 1

(57) Abstract: Coatings are provided for promoting tissue encapsulation of medical devices, especially before antiproliferative drug therapy within a body of a patient in order to prevent excessive restenosis and while avoiding thrombosis (including late stage/stent thrombosis). Coatings of one or more layer that provide an aligned scaffolding (i.e. via aligned fibers or aligned grooves) may be used to encourage tissue deposition and/or to delay elution of drug(s) stored beneath or within. The delay phase prior to degradation, erosion, and/or absorption of the coating to release an active drug should last until an optimal amount of controlled restenosis has provided a thin endothelial layer to encapsulate the device.

INTERNATIONAL SEARCH REPORT

International application No

PCT/IB2009/005883

A. CLASSIFICATION OF SUBJECT MATTER

INV. A61L31/10 A61L31/16

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

A61L A61M A61F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, EMBASE, INSPEC, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2006/188486 A1 (CARPENTER KENNETH W [US] ET AL) 24 August 2006 (2006-08-24) page 5, paragraph 41 page 6, paragraph 47 page 8, paragraph 53 page 20, paragraph 153 page 22, paragraphs 163, 164 page 25, paragraph 198 -----	1-12, 17, 29, 31-45



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

16 July 2010

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/IB2009/005883

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-12, 17, 29, 31-45

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-12, 17, 29, 31-45

Provision of an alternative coating comprising a combination of an hydrophilic barrier and an hydrophobic barrier

2. claims: 13-16, 18-28, 30, 46

Provision of a coating which promotes the growth of endothelial cells in a uniform direction

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/IB2009/005883

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2006188486	A1	24-08-2006	NONE