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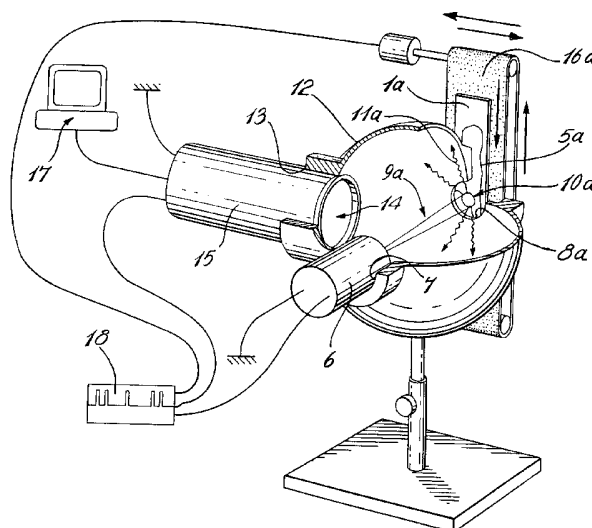
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[Continued on next page]

(54) Title: METHOD AND SYSTEM FOR ENDOVASCULAR RADIATION DETECTION



(57) Abstract: A photostimulable material is introduced in a blood vessel or body cavity, within an animal or human body, where a radioactive agent (comprising for example beta-emitting <sup>32</sup>P atoms) has been locally delivered and where radiation measurements have to be taken in order to control the delivery efficiency. The photostimulable material is exposed to radiation, carrying image information of the beta-emitting source of radiation, and a latent image is stored into the photostimulable material. Then the photostimulable material is exposed to stimulating light, which causes the photostimulable material to emit light in proportion of the amount of energy stored during radiation exposure, hence in proportion of the amount of radioactive agent present in the region of interest. The emitted light is collected by a light collection system and measured by a photoelectric device. Therefore, a two-dimensional image signal, representing the distribution of the radioactive agent in the blood vessel or body cavity, is obtained.



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*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

INTERNATIONAL SEARCH REPORT

International Application No

PCT/CA 02/01025

A. CLASSIFICATION OF SUBJECT MATTER  
 IPC 7 A61B6/00 G03C5/17 H05G1/64 G01T1/29

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)  
 IPC 7 A61B G03C H05G G01T

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, WPI Data, BIOSIS, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, X	WO 02 39898 A (ANGIOGENE INC.) 23 May 2002 (2002-05-23) abstract page 10, line 23 -page 13, line 27; figures 1-3	1, 11
P, X	PATT B. E. ET AL.: "Intravascular Probe For Detection Of Vulnerable Plaque" INTERNATIONAL SOCIETY FOR OPTICAL ENGINEERING, 2001, PENETRATING RADIATION SYSTEMS AND APPLICATIONS III, vol. 4508, 1 - 2 August 2001, pages 88-98, XP002226083 San Diego, CA, USA the whole document	1, 11

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

° Special categories of cited documents :

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- \*E\* earlier document but published on or after the international filing date
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- \*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

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## INTERNATIONAL SEARCH REPORT

International Application No

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 94 16623 A (MOORMAN, JACK, WILSON) 4 August 1994 (1994-08-04) abstract page 4, line 9-20 page 6, line 19 -page 9, line 24 page 15, line 22 -page 17, line 14; figures 1-3,5 ---	1, 11
A	US 4 236 078 A (KOTERA ET AL.) 25 November 1980 (1980-11-25) cited in the application the whole document -----	18

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

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