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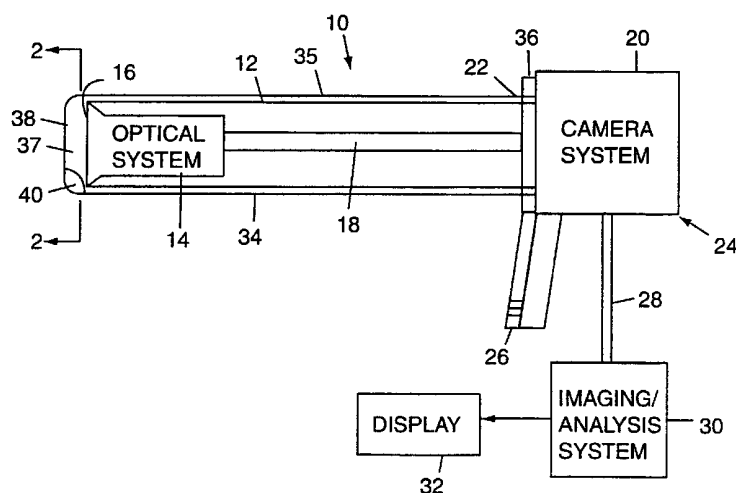
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60/128,151 **7 April 1999 (07.04.1999)** **US**
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(54) Title: IDENTIFICATION OF PROTECTIVE COVERS FOR MEDICAL IMAGING DEVICES



(57) Abstract: A protective cover (34) for medical imaging devices of the type having a probe (12) with an optical system (14) at a distal end, includes a sheath (35) of plastic material formed to enclose at least a portion of the probe, and a transparent head (37) secured to the sheath at a distal end of the cover. The transparent head provides a transparent window at the distal end of the probe to allow light to enter the probe, and be imaged in a normal manner. Indicia (42) are formed on the transparent head, and are imaged by the medical imaging device. The image is then analyzed to determine if the indicia as shown in the image correspond to a preselected pattern, which may be one of a group of patterns which provide indications concerning the nature of the cover. If a pattern is recognized, the information corresponding to that pattern can be provided to an operator; and if no pattern is recognized or if the pattern corresponds to an improper cover for the particular imaging device, a warning can be provided to the operator or the device disabled. The protective cover can be disposed after use with a patient, and a new cover applied to enclose the portions of the probe that will contact another patient, thereby minimizing potential spread of infection.



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/US00/09431**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(7) :A61B 1/00

US CL :600/121

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)

U.S. : 600/114, 117, 118, 121, 176

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 practicable, search terms used)

EAST

Search Terms: pattern or markings or indicia; sheath; window

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,820,547 A (STROBL et al.) 13 October, 1998, col.2 lines 37-65.	1-5, 7, 9

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:	"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
"A" document defining the general state of the art which is not considered to be of particular relevance	"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
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