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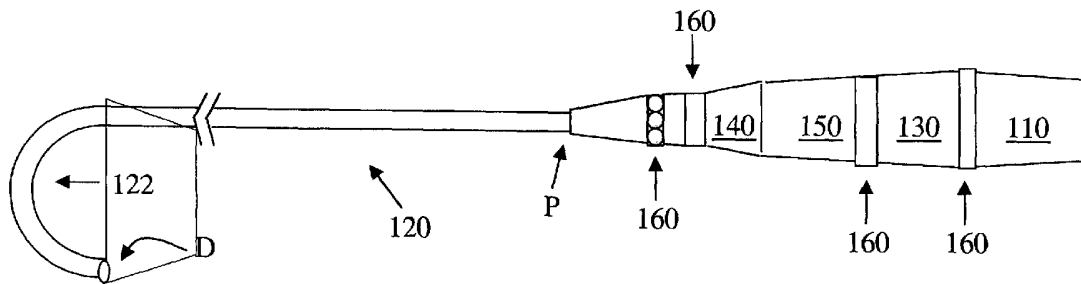
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(54) Title: A NON-TETHERED MACRO-TO-MICRO ENDOSCOPE



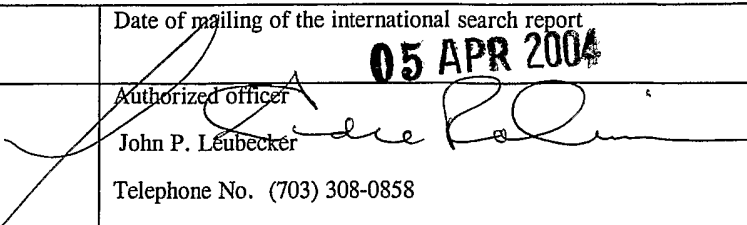
(57) Abstract: An endoscope to perform non-tethered macroscopy and microscopy at the same time is provided. An electromagnetic source (110) is used to deliver electromagnetic energy through a first optical pathway to a tissue inside a body. An image detector (130) is used to detect the reflected electromagnetic energy from the tissue through a second optical pathway as realtime images. A macro-to-micro lens (150) set is used to change the magnification of the reflected electromagnetic energy before it reaches the image detector with two or more different magnification levels. A filter set (140) is used to filter the reflected electromagnetic energy before it reaches the image detector. Furthermore, the endoscope includes a flexible shaft (120). The distal end of the shaft includes a spread and spot means (410) to spread and spot the electromagnetic energy at the tissue. A processing means (640) is also included for processing the detected images.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER		
IPC(7) : A61B 1/04		
US CL : 600/160		
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. : 600/160, 168,112,118,109,181,172,173,177,178; 348/72-75		
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) Please See Continuation Sheet		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 5,836,869 A (KUDO et al) 17 November 1998, column 16, line 1 to column 18, line 62.	1-6,8,9,11-20,22,24-34,36,37,39-48,50,52-57 ----- 10,23,38,51
Y	US 4,736,734 A (MATSUURA et al) 12 April 1988, column 4, lines 5-17 and lines 56-66 and Figs. 3A and 3B.	10,38
Y	US 6,141,037 A (UPTON et al) 31 October 2000, col.4, lines 8-18 and 51-56.	23,51
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.		
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"P" document published prior to the international filing date but later than the priority date claimed		
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