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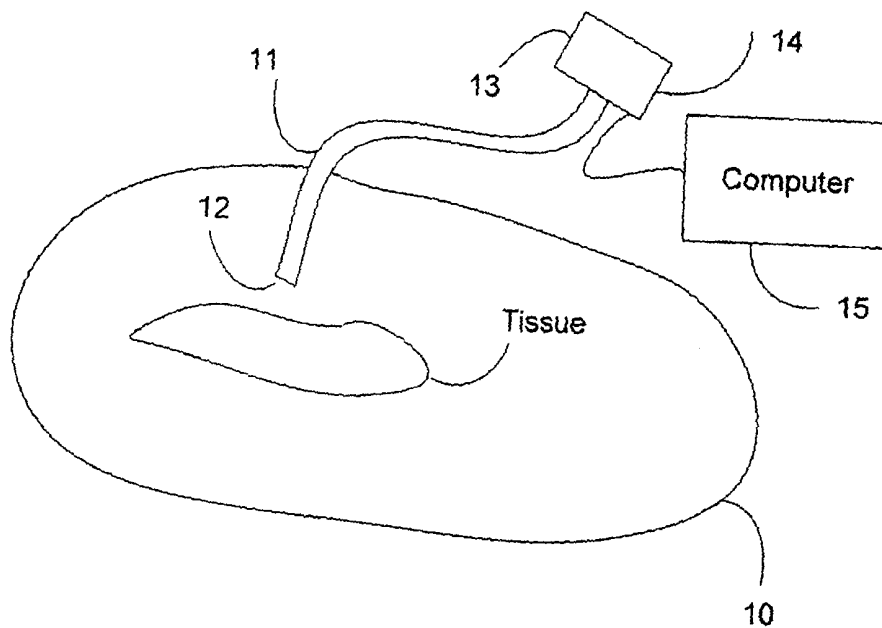
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(54) Title: MULTISPECTRAL IMAGING AND CHARACTERIZATION OF INTERNAL BIOLOGICAL TISSUE



(57) Abstract: A light image is conveyed from internal biological tissue through a flexible optical system (13) to an image receiver (14), where it is converted to a form which may be entered into a computer (15). The computer segments the image by generating a segmentation mask defining the boundary of a region of interest in at least one spectral band, estimates at least one rotationally and translationally invariant statistical measure of coefficient distributions of the multiscale wavelet maxima representations of the digital images in at least one spectral band, characterizes the condition of the tissue based on the estimated values and outputs the characterization of the condition of the tissue.



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INTERNATIONAL SEARCH REPORT

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 US CL : 382/128, 132, 173, 248, 276; 128/922; 600/101, 104, 118; 348/45; 385/115, 117
 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)
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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, IEEE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5,799,100 A (CLARK et al) 25 August 1998 (25.08.1998), figures 2 and 3, column 11, lines 14-67, column 12, lines 1-46.	1-15
A	US 5,784,162 A (CABIB et al) 21 July 1998 (21.07.1998), column 58, lines 18-48.	1-15
A	US 5,515,449 A (TSURUOKA et al) 07 May 1996 (07.05.1996), figures 2, 4(a), and 4(b), column 7, lines 33-49.	9, 13
A	US 5,408,996 A (SALB) 25 April 1995 (25.04.1995), figures 1 and 3, column 6, lines 49-67, column 4, lines 1-16.	9, 13
A	US 6,081,612 A (GUTKOWICZ-KRUSIN et al) 27 June 2000 (27.06.2000), figures 3a and 3b, column 12, lines 66-67, column 13, lines 1-47.	1-15

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

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"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	"&" document member of the same patent family

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