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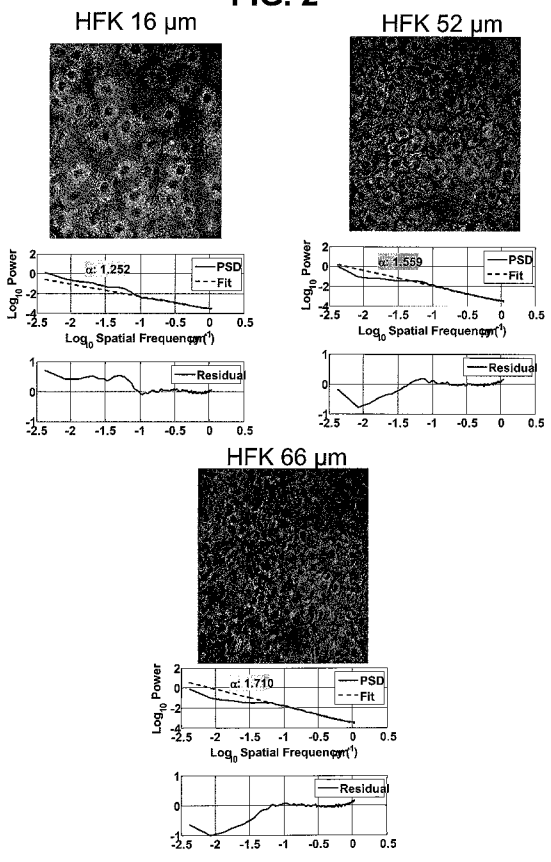
[Continued on next page]

(54) Title: ANALYSIS OF ENDOGENOUS FLUORESCENCE IMAGES TO EXTRACT MORPHOLOGICAL/ORGANIZATION INFORMATION ABOUT LIVING SAMPLES

FIG. 2



(57) Abstract: Methods and computer program products for analyzing tissue are provided. The tissue is exposed to light at the appropriate wavelengths for inducing fluorescence. Images of the fluorescing tissue are taken at two or more depths within the tissue. The PSD function is determined for each image at a different depth within the tissue. A characteristic of each PSD function determined is compared, and it is determined whether or not the tissue exhibits a pre-cancerous characteristic.

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A. CLASSIFICATION OF SUBJECT MATTER
INV. G06K9/00

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)
G06K G01N

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	Y. WU ET AL.: "Depth-resolved fluorescence of biological tissue" PROC. SPIE, vol. 5771, 2005, pages 252-255, XP002528480 Section 2. "Results and discussion", Fig. 1-3 -/--	1,2,5-7, 9-13,17, 18, 21-24, 26-29, 33,34, 37-39, 41-44, 48,49, 52-55, 57-60, 64,65, 68-70, 72-75, 79,80, 83-85, 87-90

[X] 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
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"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
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"&" document member of the same patent family

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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.
	abstract	
A	F. LIU: "Two-photon tomography" PROC. QUANTUM ELECTRONICS AND LASER SCIENCE CONFERENCE (QELS), 28 May 1999 (1999-05-28), XP002528481	3,4,8, 19,20, 25,35, 36,40, 50,51, 56,66, 67,71, 81,82,86
	the whole document	
X	Y. WU ET AL.: "Depth-resolved fluorescence spectroscopy of normal and dysplastic cervical tissue" OPTICS EXPRESS, vol. 13, no. 2, 24 January 2005 (2005-01-24), pages 382-388, XP002528482	1,2,5-7, 9-13,17, 18, 21-24, 26-29, 33,34, 37-39, 41-44, 48,49, 52-55, 57-60, 64,65, 68-70, 72-75, 79,80, 83-85, 87-90
	the whole document	
X	M.-A. MYCEK AND B. POGUE: "Handbook of biomedical fluorescence" 2003, MARCEL DEKKER , XP002528483 H.Zheng and C. MacAulay - Chapter 10:"Fluorescence spectroscopy and imaging for skin cancer detection and evaluation".	1,17,33, 48,64,79