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[Continued on next page]

(54) Title: METHOD OF DISPLAYING OPTICAL COHERENCE TOMOGRAPHY IMAGES OF A LUMEN

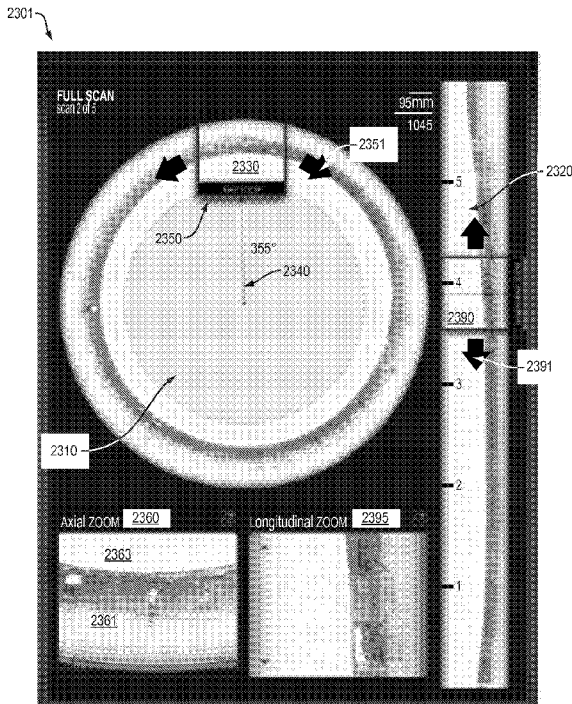


FIG. 14A

(57) Abstract: The present disclosure provides an OCT imaging system having a variety of advantages. In particular, the OCT system of the present disclosure may provide a more intuitive interface, more efficient usage of controls, and a greater ability to view OCT imaging data.





MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK,
SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
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INTERNATIONAL SEARCH REPORT

International application No
PCT/US2014/038346

A. CLASSIFICATION OF SUBJECT MATTER
INV. G01B9/02
ADD.
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)
G01B
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)
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	S. Schlachter, P. MacCarthy: "Advanced OCT: Next-gen OCT for the esophagus", 5 January 2013 (2013-01-05), XP002728705, Retrieved from the Internet: URL:http://www.bioopticsworld.com/articles/print/volume-6/issue-3/features/optical-coherence-tomography-gastroenterology--advanced-oct--nex.html [retrieved on 2014-08-19]	1-4,7,8, 17,18
A	the whole document ----- -/--	5,6

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
- "E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "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

"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

"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

"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

22 August 2014

Date of mailing of the international search report

20/11/2014

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INTERNATIONAL SEARCH REPORT

International application No

PCT/US2014/038346

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	SEOK H YUN ET AL: "Comprehensive volumetric optical microscopy in vivo", NATURE MEDICINE, vol. 12, no. 12, 1 January 2007 (2007-01-01), pages 1429-1433, XP055046386, ISSN: 1078-8956, DOI: 10.1038/nm1450	1-4,7,8,17,18
A	the whole document	5,6
X	MICHALINA J GORA ET AL: "Tethered capsule endomicroscopy enables less invasive imaging of gastrointestinal tract microstructure", NATURE MEDICINE, vol. 19, no. 2, 13 January 2013 (2013-01-13), pages 238-240, XP055135461, ISSN: 1078-8956, DOI: 10.1038/nm.3052 the whole document	1,7,17
X	US 7 538 859 B2 (TEARNEY GUILLERMO J [US] ET AL) 26 May 2009 (2009-05-26) abstract; figure 2 column 9, line 54 - column 10, line 16	1,7,17

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2014/038346

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.

2. As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.

3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-8, 17, 18

Remark on Protest

- The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-8, 17, 18

a method of displaying images of an axial slice and of a zoom region of the axial slice of a lumen and corresponding machine-readable storage medium to control a computer to execute the corresponding method steps, further comprising:

- overlaying a first window on a portion of the axial scan region;
- overlaying a second window on a portion of the longitudinal scan region;
- adjusting the position of the second window based on the movement of the first window or the position of the first window based on the movement of the second window.

2. claims: 9-16

method of displaying images of an axial slice and of a zoom region of the axial slice of a lumen, further comprising:

- reconstructing a first and a second image;
- determining a position of a main peak in each image;
- determining a scale and a sampling factor to adjust the scales of the images.

3. claims: 19-22

method of displaying images of an axial slice and of a zoom region of the axial slice of a lumen, further comprising:

- acquiring a calibration image of the lumen;
- detecting a position of a fixed pattern in the calibration image;
- adjusting the position of the reference mirror based on the position of the fixed pattern.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2014/038346

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 7538859	B2	26-05-2009	
		EP 1986545 A2	05-11-2008
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		EP 2659852 A2	06-11-2013
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		US 2013338510 A1	19-12-2013
		WO 2007149603 A2	27-12-2007
