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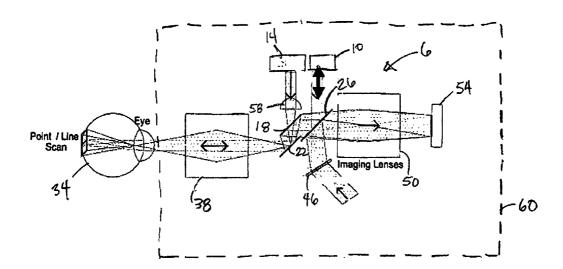
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(54) Title: HYBRID SPECTRAL DOMAIN OPTICAL COHERENCE TOMOGRAPHY LINE SCANNING LASER OPHTHAL-MOSCOPE



(57) Abstract: An apparatus for imaging an eye includes a housing and a system of optical components disposed in the housing. The apparatus is capable of operating in a line scanning laser ophthalmoscope (LSLO) mode and an optical coherence tomography (OCT) mode. The system of optical components can include a first source to provide a first beam of light for the OCT mode and a second source to provide a second beam of light for the LSLO mode. In the OCT mode, a first optic is used that (i) scans, using a first surface of the first optic, the first beam of light along a retina of an eye in a first dimension, and (ii) descans, using the first surface, a first light returning from the eye in the first dimension to a detection system in the OCT mode. In the LSLO mode, the first optic is used where the second beam of light passes through a second surface of the first optic.



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A. CLASSIFICATION OF SUBJECT MATTER INV. A6183/12 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) A61B 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 Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. Category JP 11 253403 A (KOWA CO) 1,5,8,10 Υ 21 September 1999 (1999-09-21) abstract; figure 1 13, 19, 21,22,25 US 2003/231285 A1 (FERGUSON R DANIEL [US]) 1,5,8,10 18 December 2003 (2003-12-18) paragraph [0037] PODOLEANU A GH ET AL: "Combined optical 1,13,22, coherence tomograph and scanning laser ophthalmoscope" ELECTRONICS LETTERS, IEE STEVENAGE, GB, vol. 34, no. 11, 28 May 1998 (1998-05-28), pages 1088-1090, XP006009833 ISSN: 0013-5194 abstract; figure 1 See patent family annex Further documents are listed in the continuation of Box C. 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 "A" document defining the general state of the art which is not cited to understand the principle or theory underlying the considered to be of particular relevance invention "E" earlier document but published on or after the international "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 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) "Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the "O" document referring to an oral disclosure, use, exhibition or document is combined with one or more other such docu ments, such combination being obvious to a person skilled other means document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 17 April 2008 28/04/2008 Name and mailing address of the ISA/ Authorized officer European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Knüpling, Moritz Fax: (+31-70) 340-3016

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