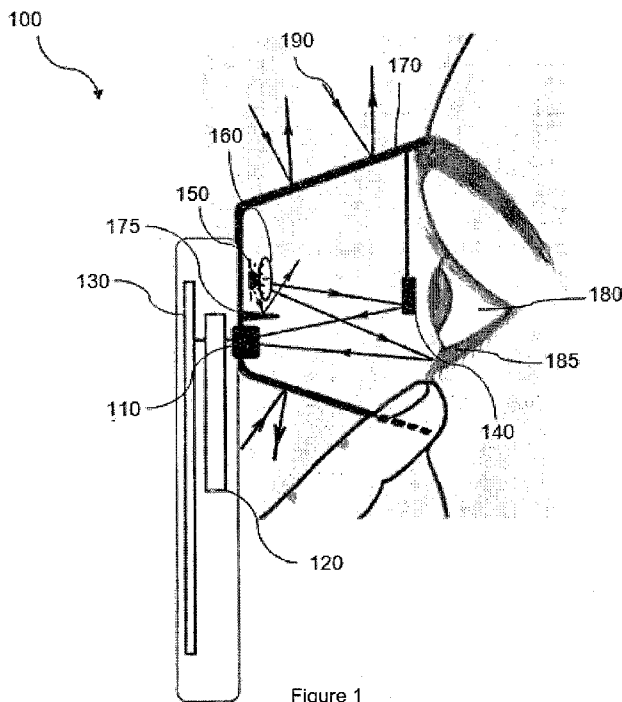




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(54) Title: METHOD AND SYSTEM FOR HAEMOGLOBIN MEASUREMENT



(57) Abstract: The present invention preferably provides a non-invasive system for haemoglobin measurement and method thereof. The system for haemoglobin measurement comprises an image capturing device for capturing an image of conjunctiva along with an image of colour mat for correcting the image of conjunctiva; a light source for providing light during imaging of conjunctiva; a diffuser adapted to the light source for providing uniform light during imaging of conjunctiva; an optical chamber for preventing external light from entering an eye during imaging of conjunctiva; a processing module, configured to receive and process the image captured from the image capturing device, for correcting the image of conjunctiva based on value of the image of colour mat, determining a RGB, HSV, or LAB value of the image of conjunctiva, and measuring the level of haemoglobin by comparing the RGB, HSV, or LAB value of the image of conjunctiva with a calibrated colour values of haemoglobin to retrieve a value which indicates the level of haemoglobin; and a display module, configured to display the measured level of haemoglobin from the processing module.





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<b>B. FIELDS SEARCHED</b> Minimum documentation searched (classification system followed by classification symbols) IPC(8) : A61B 3/14 (2015.01) CPC : A61B 3/145 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched IPC(8) : A61B 3/00, 3/10, 3/117, 3/12, 3/15, 5/00, 5/145, 5/1455 (2015.01) CPC: A61B 3/00, 3/10, 3/117, 3/12, 3/14, 3/15, 3/0008, 5/00, 5/145, 5/1455, 5/14551, 5/14555 Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) Patbase, Google Patent, Google Scholar: image, camera, photo, conjunctiva, eye, ocular, ophthalmic, fundus, hemoglobin, color, chart, reference, wheel, mat, scale, target, diffuser, light, source, cup, eyecup, shroud, chamber, white, balance, correct, colorimetry		
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2003/0149347 A1 (KAUFFMANN et al) 7 August 2003 (07.08.2003) see especially para [0053]-[0055], [0058], [0063]-[0066], [0068], [0091], fig 1, 2	1-15
Y	US 2003/0002722 A1 (JAY et al) 2 January 2003 (02.01.2003) see especially para [0021], [0022], [0023], [0026], [0039], fig 1	1-15
Y	WO 2013/162471 A2 (NANYANG TECHNOLOGICAL UNIVERSITY) 31 October 2013 (31.10.2013) see especially pg 5, ln 21 to pg 7, ln 25, fig 2a, 2b	6-7
A	US 2013/0226008 A1 (DANA et al) 29 August 2013 (29.08.2013) see whole document	1-15
A	US 2011/0234977 A1 (VERDOONER) 29 September 2011 (29.09.2011) see whole document	1-15
A	US 4,998,533 A (WINKELMAN) 12 March 1991 (12.03.1991) see whole document	1-15
A	WO 2014/091358 A1 (KONINKLIJKE PHILIPS .V.) 19 June 2014 (19.06.2014) see whole document	1-15
A	WO 2008/050234 A2 (HEMOHUE Ltd) 2 May 2008 (02.05.2008) see whole document and machine translation	1-15
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