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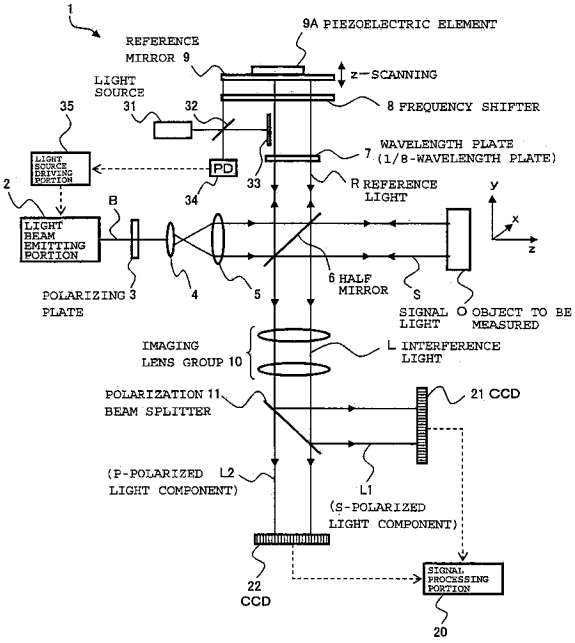
(54) Optical image measuring apparatus

(57) An optical image measuring apparatus forming an image expressing functional information on a living tissue. The optical image measuring apparatus includes a light emitting portion (2) outputting light (B1 and B2(B)) having different wavelengths intensity-modulating the light periodically, a polarizing plate (3) converting a light (B) to linearly polarized light, a half mirror (6) dividing the light (B) into signal light (S) and reference light (R), a wavelength plate (7) converting a polarization characteristic of the reference light (R), a frequency shifter (8) shifting a frequency of the reference light (R), the half mirror (6) superimposing the signal light (S) and the reference light (R) on each other to produce interference light (L), a polarization beam splitter (11) extracting a polarized light from the interference light (L), CCDs (21 and 22) detecting the extracted polarized interference light (L), and a signal processing portion (20) forming an image of an object to be measured (O) based on the polarized interference light (L) related to each of the light (B1 and B2), detected by the CCDs (21 and 22).

FIG. 1



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EUROPEAN SEARCH REPORT

Application Number
EP 05 02 0937

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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A	AKIBA M ET AL: "Full-field optical coherence tomography by two-dimensional heterodyne detection with a pair of CCD cameras" OPTICS LETTERS, OSA, OPTICAL SOCIETY OF AMERICA, WASHINGTON, DC, US, vol. 28, no. 10, 15 May 2003 (2003-05-15), pages 816-818, XP002340831 ISSN: 0146-9592 * the whole document *	1	A61B5/00 G01B9/02
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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
Munich	31 August 2007	Duijs, Eric

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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TECHNICAL FIELDS SEARCHED (IPC)

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

专利名称(译)	光学图像测量设备		
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当前申请(专利权)人(译)	株式会社拓普康		
[标]发明人	CHAN KINPUI AKIBA MASAHIRO		
发明人	CHAN, KINPUI AKIBA, MASAHIRO		
IPC分类号	G01N21/21 G01N21/47 G01N21/31 A61B5/00 G01B9/02		
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代理机构(译)	法思博事务所		
优先权	2004291243 2004-10-04 JP		
其他公开文献	EP1643236B1 EP1643236A2		
外部链接	Espacenet		

摘要(译)

一种光学图像测量设备，形成表示活组织上的功能信息的图像。光学图像测量装置包括：发光部分（2），其输出具有不同波长的光（B1和B2（B）），周期性地强度调制光，偏振板（3）将光（B）转换为线性偏振光，半反射镜（6）将光（B）分成信号光（S）和参考光（R），波长板（7）转换参考光（R）的偏振特性，移频器（8）移位参考光（R）的频率，半反射镜（6）将信号光（S）和参考光（R）相互叠加以产生干涉光（L），偏振分束器（11）提取a来自干涉光（L）的偏振光，检测所提取的偏振干涉光（L）的CCD（21和22），以及基于偏振形成待测物体（O）的图像的信号处理部分（20）由t检测到的与每个光（B1和B2）相关的干涉光（L）他是CCD（21和22）。