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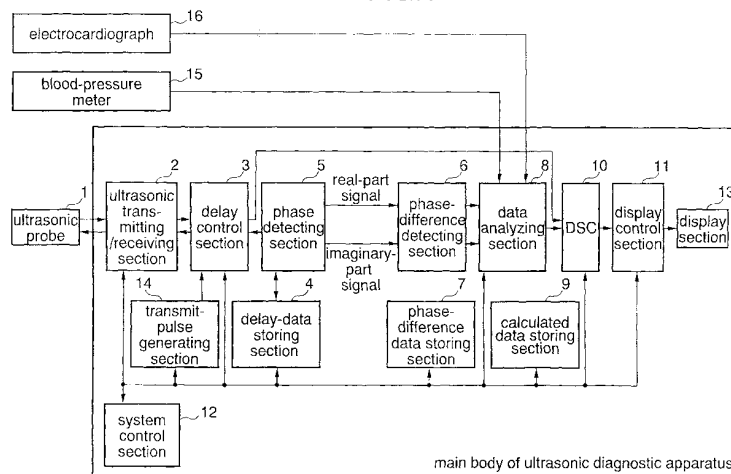
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(54) **Ultrasonic diagnostic apparatus**

(57) The present invention provides an ultrasonic diagnostic apparatus. The ultrasonic diagnostic apparatus comprises an ultrasonic probe (1) for transmitting ultrasonic pulses into a living body and receiving ultrasonic reflected waves from the living body, a phase-detecting section (5) for detecting each phase of the ultrasonic reflected waves, and a phase-difference detecting section (6) for determining a phase difference in the repetition period of the ultrasonic transmitting/receiving operation according to the detected phase signals. The ul-

trasonic diagnostic apparatus further includes a data analyzing section (7) for calculating the movement velocity of the living body tissue and the blood flow velocity according to the phase difference of the ultrasonic reflected waves and tracking the movements of the living body tissue and the blood according to the movement values calculated by the velocities, and a display section (13) for displaying the tracked results and the movement value and velocity waveform of the living body tissue and the blood simultaneously through a display control section (10).

FIG.1





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Y	* column 2, line 3 - column 2, line 27 * * column 3, line 15 - column 3, line 52 * * column 5, line 47 - column 5, line 52 * * figure 1 *	2-12	
Y	EP 1 079 242 A (MATSUSHITA ELECTRIC IND CO LTD) 28 February 2001 (2001-02-28) * column 7, line 39 - column 8, line 3 * * column 9, line 1 - column 9, line 18 * * column 12, line 37 - column 13, line 52 * * column 15, line 1 - column 15, line 28 * * figure 1 *	2-12	
X	US 5 522 392 A (SUORSA VEIJO ET AL) 4 June 1996 (1996-06-04) * column 1, line 59 - column 2, line 16 * * column 3, line 17 - column 3, line 45; figure 1 * * column 4, line 21 - column 4, line 54; figure 3 *	1	TECHNICAL FIELDS SEARCHED (Int.Cl.7) A61B
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The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 21 January 2003	Examiner Lommel, A
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ----- & : member of the same patent family, corresponding document	

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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

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外部链接	Espacenet		

摘要(译)

本发明提供一种超声波诊断装置。超声波诊断装置包括：超声波探头（1），用于将超声波脉冲发送到生物体内并接收来自生物体的超声波反射波；相位检测部分（5），用于检测超声波反射波的每个相位；以及相位-差分检测部分（6），用于根据检测到的相位信号确定超声波发送/接收操作的重复周期中的相位差。超声波诊断装置还包括数据分析部分（7），用于根据超声波反射波的相位差计算活体组织的运动速度和血流速度，并跟踪活体组织和血液的运动。根据由速度计算的运动值，以及用于通过显示控制部分（10）同时显示跟踪结果以及活体组织和血液的运动值和速度波形的显示部分（13）。

