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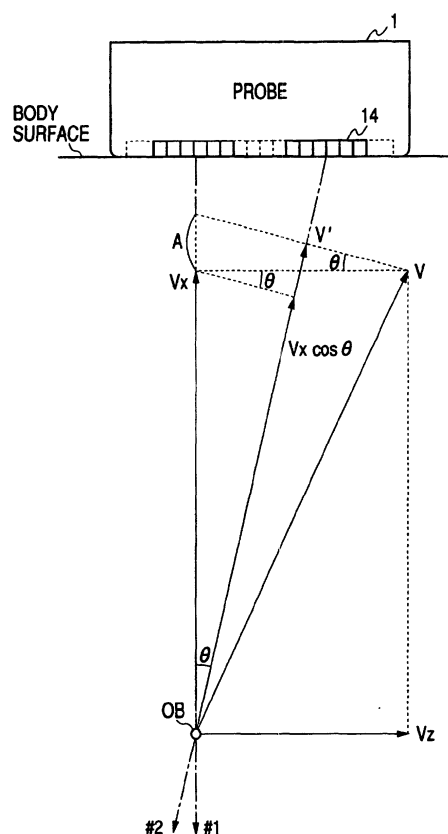
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(54) **Ultrasound diagnostic apparatus**

(57) An ultrasound diagnostic apparatus includes a transmitting device having an ultrasound probe. The transmitting device operates for transmitting a ultrasound pulse beam from the ultrasound probe into a body. A receiving device includes the ultrasound probe. The receiving device operates for receiving an ultrasound echo beam caused in the body, and converting the received ultrasound echo beam into a corresponding electric echo signal via the ultrasound probe. A delay controlling device is operative for controlling an acoustic line direction of transmission and reception of the ultrasound pulse beam and the ultrasound echo beam. A phase detection device is operative for subjecting the electric echo signal to phase detection to generate a phase-detection result signal. A tissue velocity calculating device operates for calculating a velocity of a tissue in the body from the phase-detection result signal. A display device is operative for indicating the calculated velocity of the tissue. The delay controlling device is operative for changing the acoustic line direction of transmission and reception of the ultrasound pulse beam and the ultrasound echo beam with respect to a same object.

FIG. 2





European Patent
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EUROPEAN SEARCH REPORT

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			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
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The present search report has been drawn up for all claims			
Place of search MUNICH		Date of completion of the search 29 October 2003	Examiner Kaleve, 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
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摘要(译)

超声诊断设备包括具有超声探头的发送设备。发射装置用于将超声脉冲束从超声探头发射到身体中。接收设备包括超声探头。接收装置用于接收在体内引起的超声回波束，并通过超声探头将接收的超声回波束转换成相应的电回波信号。延迟控制装置用于控制超声脉冲束和超声回波束的发送和接收的声线方向。相位检测装置用于对电回波信号进行相位检测以产生相位检测结果信号。组织速度计算装置用于根据相位检测结果信号计算体内组织的速度。显示装置可操作用于指示计算的组织速度。延迟控制装置用于改变超声波脉冲束和超声波回波束相对于同一物体的发送和接收的声线方向。

