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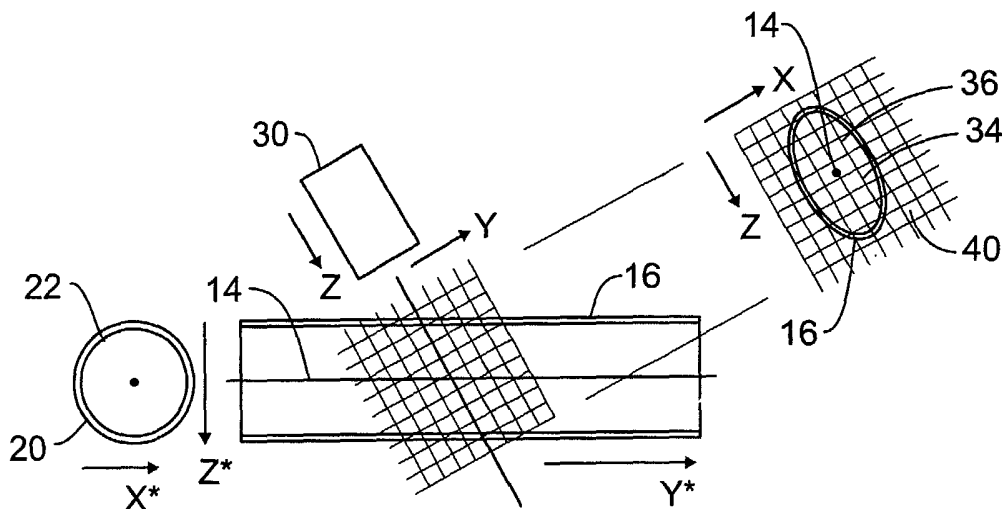
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(54) Title: METHOD AND APPARATUS FOR DETERMINING AN ULTRASOUND FLUID FLOW CENTERLINE



(57) Abstract: A method and associated apparatus (64) are disclosed for determining the location of an effective center of fluid flow in a vessel using an ultrasound apparatus (64). Ultrasound energy (30) is propagated along an axis of propagation (32) and projects upon the vessel (16). A Doppler-shifted signal (12) reflected from the fluid (8) in the vessel is received and a set of quantities expressed as a density is derived from the Doppler-shifted signal (12) for each of a set of coordinates, the density being a function of the Doppler shift in frequency associated with each of the coordinates. One of a mean, mode or median is calculated for each of the dimensions of the set of coordinates in conjunction with the density associated therewith. This calculation is repeated throughout the field of view (18) of the vessel (16) to define a centerline (14).

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B. FIELDS SEARCHED
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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 practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5,148,810 A (MASLAK ET AL.) 22 September 1992, see entire document.	
A	US 5,261,408 A (MASLAK ET AL.) 16 November 1993, see entire document.	
A	US 6,148,095 A (PRAUSE ET AL.) 14 November 2000, see entire document.	
A	US 5,623,930 A (WRIGHT ET AL.) 29 April 1997, see entire document.	

Further documents are listed in the continuation of Box C. See patent family annex.

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"O" document referring to an oral disclosure, use, exhibition or other means		
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