

Title (en)

DEVICE AND METHOD FOR REAL-TIME 3D SONOGRAPHY

Title (de)

VORRICHTUNG UND VERFAHREN FÜR DIE 3D-ECHTZEITSONOGRAPHIE

Title (fr)

PROCEDE ET DISPOSITIF D'ECHOGRAPHIE 3D EN TEMPS REEL

Publication

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Application

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Abstract (en)

[origin: DE19915583A1] The invention relates to a device and a method for real-time 3D sonography. The inventive device comprises an ultrasound head, a signal processor and a display. The ultrasound head consists of at least one transmitter and at least three receivers independent therefrom. The positions of the receivers to the transmitters is known. The inventive device is characterised in that a signal processor consists of a signal generator for producing a transmission signal with any modulation function. The signal processor also consists of a correlator on each receiver which is connected to the signal generator respectively, a calculating unit for determining the paths of the transmission signal via the reflecting structure and to the receivers on each correlator and a calculating unit for determining the space co-ordinates of the reflecting structure, whereby each calculating unit is connected to the space co-ordinates for determining the paths of the transmission signal via the reflecting structure and to the receivers.

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