

Title (en)

Sector scanner head for an ultrasonic imaging system.

Title (de)

Sektoren-Abtastkopf für ein Ultraschall-Abbildungssystem.

Title (fr)

Tête de balayage par secteur pour un système de formation d'images ultrasonores.

Publication

**EP 0047070 A1 19820310 (EN)**

Application

**EP 81303555 A 19810804**

Priority

- US 17848280 A 19800815
- US 17848880 A 19800815

Abstract (en)

For the purpose of producing a real time image of a given sector of a plane in a subject, a curved faced, disc shaped transducer (100) and an oppositely facing, circular angularly disposed mirror (106) form the transmission and reception path of a mechanical sector scan imaging system. The transducer (100) and a mirror (106) are mounted on a common axis (121), and a shaft (113) upon which the mirror (106) is affixed oscillates about that axis (121). Energy is deflected from the mirror (106) into the patient, the echoes are reflected back at the mirror (106) and in turn along the axis (12) towards the transducer (100). Through a belt drive mechanism, a motor provides the oscillating motion, in turn scanning the ultrasound beams through the subject by virtue of the mirror motion. An optical encoder records positional information from the motor, for coordination of the mirror oscillation with transducer signals, and thereby for the assembly of a composite image.

IPC 1-7

**G10K 11/20**; **G10K 11/00**

IPC 8 full level

**G10K 11/20** (2006.01); **G10K 11/35** (2006.01)

CPC (source: EP)

**G10K 11/20** (2013.01); **G10K 11/357** (2013.01)

Citation (search report)

- FR 1100914 A 19550926 - ACEC
- FR 2410276 A1 19790622 - CGR ULTRASONIC [FR]
- SU 184000 A1 19660709
- EP 0019793 A2 19801210 - NEW YORK INST TECHN [US]

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