

Title (en)

Ultrasonic diagnostic transducer array with elevation focus

Title (de)

Diagnoseultraschallwandleranordnung mit Elevationsfokus

Title (fr)

Réseau de transducteur ultrasonores de diagnostic avec focalisation en élévation

Publication

**EP 0689187 B1 20020102 (EN)**

Application

**EP 95304427 A 19950623**

Priority

US 26516994 A 19940624

Abstract (en)

[origin: EP0689187A1] An ultrasonic diagnostic transducer array (16) is provided for providing electronic focusing in the longitudinal plane (L) and elevational (E) focusing. Elements (e1,e2...) of the array (16) are subdiced in the elevational direction (E) to provide subelements (1-2,2-2,3-2...) with aspect ratios varying in proportion to their distance to the central longitudinal axis of the array. Such variation affords varying electro-mechanical coupling coefficients to the subelements such that the intensity of the transmitted energy is centered about the central longitudinal axis. In a second embodiment (not represented) elements exhibit extensions in the elevational direction which vary in proportion to their displacement from the longitudinal center of the array. The extended elements are acoustically separated into subelements in the elevational direction to provide elevational focusing or spatial compounding of the transmitted acoustic energy. <IMAGE>

IPC 1-7

**G10K 11/32**; **B06B 1/06**

IPC 8 full level

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CPC (source: EP)

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Cited by

WO2012131212A1; EP1524519A1; JP2005121660A; FR2973550A1; CN103650031A; DE19840375A1; DE19840375C2; US2013289410A1; US9532767B2; US7263888B2; US6170603B1; US9936969B2

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