Title (en)

Broadband phased array transducer design with frequency controlled two dimension capability and methods for manufacture thereof

Title (de)

Entwurf eines Breitbandigen phasengesteuerten Gruppenwandlers mit frequenzkontrollierter zwei-dimensionale Fähigkeit und Verfahren zu seiner Produktion

Title (fr)

Conception d'un ensemble de transducteurs à commande de phase capable d'émission bidirectionelle contrôlée par fréquence et procédé pour sa production

Publication

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Application

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- US 11786993 A 19930907

Abstract (en)

[origin: EP0641606A2] There is provided a transducer array with a plurality of piezoelectric elements having a minimum and maximum thickness. In one embodiment, the maximum thickness is less than or equal to 140 percent of the minimum thickness. In an alternate embodiment, the maximum thickness is greater than 140 percent of the minimum thickness and the transducer array is capable of simulating the excitation of a wider aperture twodimensional transducer array. One or more matching layers may be used to further increase bandwidth performance. In addition, a two crystal transducer element as well as a composite transducer structure may be formed using the principles of this invention.

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B06B 1/06; G10K 11/34

IPC 8 full level

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CPC (source: EP)

B06B 1/0622 (2013.01); **B06B 1/0644** (2013.01); **G10K 11/32** (2013.01); H04R 17/08 (2013.01)

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EP 0397961 A2 19901122 - HEWLETT PACKARD CO [US]

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