Title (en)

Electrodynamic ultrasound transducer.

Title (de)

Elektrodynamischer Ultraschallwandler.

Title (fr)

Transducteur électrodynamique à ultrasons.

Publication

EP 0486119 B1 19950111 (DE)

Application

EP 91250296 A 19911029

Priority

DE 4035592 A 19901106

Abstract (en)

[origin: EP0486119A2] The invention relates to an electrodynamic ultrasonic transducer having a permanent magnet arrangement that is to be placed on a workpiece surface to be tested, in which magnets with the pole faces of the same polarity are arranged facing one another via an interposed concentrator member, and having a transducer coil arranged on the side of the concentrator member pointing towards the workpiece surface. In order for such a transducer to be able to produce at low cost on the workpiece surface to be tested a substantial increase in the magnetic field density that can be used for ultrasonic testing, it is proposed according to the invention that the cross-sectional area of the concentrator member (3) that is parallel to the pole faces (1', 2') of the permanent magnets (1, 2) is constructed to be smaller than that of the pole faces (1', 2') of the permanent magnets (1, 2), and that the concentrator member (3) is arranged displaced towards the workpiece surface (6) and the space remaining around the concentrator member (3) between the pole faces (1', 2') is filled by an appropriately shaped non-ferromagnetic member (4). <IMAGE>

IPC 1-7

B06B 1/04; G01N 29/24

IPC 8 full level

B06B 1/04 (2006.01); **G01N 29/24** (2006.01)

CPC (source: EP US)

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Cited by

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EP 0486119 A2 19920520; **EP 0486119 A3 19930120**; **EP 0486119 B1 19950111**; DE 4035592 C1 19920416; DE 59104242 D1 19950223; US 5148414 A 19920915

DOCDB simple family (application)

EP 91250296 A 19911029; DE 4035592 A 19901106; DE 59104242 T 19911029; US 78625491 A 19911101