

Title (en)  
ULTRASONIC TEST HEAD

Publication  
**EP 0401643 A3 19920325 (DE)**

Application  
**EP 90110153 A 19900529**

Priority  
DE 8906992 U 19890607

Abstract (en)  
[origin: EP0401643A2] An ultrasonic test head, suitable for transmission and reception, having a relatively broadband frequency spectrum and relatively short sound pulses for the contact-free testing of components in a fluid, especially for the volumetric testing of metallic components in liquid sodium up to 250 DEG C. This test head has a housing (1) which can be immersed in the fluid and, coupled therein in terms of sound, a piezoelement (7), a damping body (8) and a transformation layer, adjacent to the fluid, consisting of a film (6) which is soft with respect to sound and a film (4) which is hard with respect to sound and is supported externally on one or more webs (5) or on a grid formed from these webs (5).  
<IMAGE>

IPC 1-7  
**B06B 1/06**

IPC 8 full level  
**B06B 1/06** (2006.01)

CPC (source: EP)  
**B06B 1/0662** (2013.01)

Citation (search report)  
• [A] US 3935484 A 19760127 - LESCHEK WALTER C, et al  
• [A] DE 3303412 A1 19840802 - KRAUTKRAEMER GMBH [DE]  
• [AD] STAATLICHE MATERIALPRÜFUNGSANSTALT UNIVERSITÄT STUTTGART, 12. MPA-Seminar, 9.-10. Oktober 1986, Band 1, Seiten 21.1 - 21.25; K. MATTHIES et al.: "Ultraschallprüfung von Komponenten und Anlagen bei Temperaturen bis 250 Grade Celsius"  
• [A] BRITISH JOURNAL OF NON-DESTRUCTIVE TESTING, Band 31, Nr. 5, Mai 1989, Seiten 259-264, Northampton, GB; J.R. FOTHERGILL et al.: "Development of high-temperature ultrasonic transducers for under-sodium viewing applications"

Cited by  
US6127770A; US2016341703A1; EP0679874A3; EP0974814A1; DE4119147A1; CN106471366A; DE4240719C1; US10598634B2; WO2015180941A1; WO9726513A1

Designated contracting state (EPC)  
BE DE FR GB IT

DOCDB simple family (publication)  
**EP 0401643 A2 19901212; EP 0401643 A3 19920325; DE 8906992 U1 19901004**

DOCDB simple family (application)  
**EP 90110153 A 19900529; DE 8906992 U 19890607**