

Title (en)

Ultrasound generating method for non-destructive testing and test apparatus

Title (de)

Verfahren zum Erzeugen von Ultraschallwellen zur zerstörungsfreien Werkstoff-prüfung und Prüfvorrichtung

Title (fr)

Procédé de génération d'ultrason pour contrôle non-destructif et dispositif de contrôle

Publication

EP 0829309 A3 20001122 (DE)

Application

EP 97115124 A 19970901

Priority

DE 19637424 A 19960913

Abstract (en)

[origin: EP0829309A2] The method uses a tester (2) which generates the ultrasound waves (4) when applied to the material (24) under test. The four HF coils (12,14,16,18) are arranged in an essentially homogeneous magnetic field (26) produced by the three permanent magnets (6,8,10). The waves are generated due to the interaction between the eddy currents produced by the coils and the homogeneous magnetic field produced by the magnets, at right angles to the surface. The coils are arranged between the magnets. The irradiation angle alpha is dependent only on the delay time DELTA t of the drive between neighbouring coils.

IPC 1-7

B06B 1/04

IPC 8 full level

B06B 1/04 (2006.01)

CPC (source: EP US)

B06B 1/04 (2013.01 - EP US)

Citation (search report)

- [X] US 4127035 A 19781128 - VASILE CARMINE F
- [X] US 4471658 A 19840918 - MORIMOTO KAZUO [JP]
- [A] EP 0451375 B1 19950802 - MANNESMANN AG [DE]
- [A] US 5148414 A 19920915 - GRAFF ALFRED [DE], et al
- [DA] EP 0579255 B1 19960131 - FRAUNHOFER GES FORSCHUNG [DE]
- [A] DE 4301622 C1 19940224 - FRAUNHOFER GES FORSCHUNG [DE]
- [A] US 4380931 A 19830426 - FROST HAROLD M, et al

Designated contracting state (EPC)

AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

EP 0829309 A2 19980318; EP 0829309 A3 20001122; DE 19637424 A1 19980326; US 5936162 A 19990810

DOCDB simple family (application)

EP 97115124 A 19970901; DE 19637424 A 19960913; US 93121597 A 19970916