

Title (en)

Mounting arrangement of an ultrasound transducer onto a washing tank.

Title (de)

Vorrichtung zum Montieren eines Ultraschallwandlers auf einen Waschkasten.

Title (fr)

Dispositif pour le montage d'un transducteur d'ultrason sur un bain de lavage.

Publication

EP 0479070 A2 19920408 (EN)

Application

EP 91116058 A 19910920

Priority

IT 2179990 U 19900921

Abstract (en)

Mounting arrangement of an ultrasound transducer onto the wall plate of an ultrasound washing tank, wherein the transducer consists of a pair of piezoelectric ceramic disks (2,3), subjected to an electric field variable with an ultrasonic frequency, and of a pair of metallic resonance bodies (4,5) positioned to the sides of said piezoelectric disks (2,3). A first resonance body (5) and two piezoelectric disks (2,3) are mounted externally to the wall plate (1) of the washing tank, while a second resonance body (4) is mounted on the inner side of said wall plate (1), and a bolt (9) axially crosses said bodies (4,5) and disks (2,3) as well as a hole in said wall plate of the washing tank, so as to fix these elements together and onto the wall plate of the tank. A sealing and vibration damping ring gasket (10) is interposed between the inner surface of the wall plate (1) of the washing tank and the surface of the inner resonance body adhering thereto. The size and shape of the resonance bodies are determined so that a central, nodal, vibration plane substantially coincides with the wall plate of the washing tank. <IMAGE>

IPC 1-7

B06B 1/06; **B08B 3/12**

IPC 8 full level

B06B 1/06 (2006.01); **B08B 3/12** (2006.01)

CPC (source: EP)

B06B 1/0618 (2013.01); **B08B 3/12** (2013.01)

Cited by

CN103331251A; CN103041977A; CN109277364A; CN103230866A; EP1679196A1; US7156506B2; ES2110341A1; WO2016107521A1

Designated contracting state (EPC)

DE ES FR GB IT SE

DOCDB simple family (publication)

EP 0479070 A2 19920408; **EP 0479070 A3 19920415**; **EP 0479070 B1 19940727**; DE 69103113 D1 19940901; DE 69103113 T2 19941208; ES 2057698 T3 19941016; IT 220168 Z2 19930624; IT 9021799 U1 19920321; IT 9021799 V0 19900921

DOCDB simple family (application)

EP 91116058 A 19910920; DE 69103113 T 19910920; ES 91116058 T 19910920; IT 2179990 U 19900921