

Title (en)
WIDE-BAND MULTIFREQUENCY ACOUSTIC TRANSDUCER

Title (de)
AKUSTISCHER BREITBANDWANDLER FÜR MEHRERE FREQUENZEN

Title (fr)
TRANSDUCTEUR ACOUSTIQUE MULTIFREQUENCES A BANDES LARGES

Publication
EP 0769988 A1 19970502 (FR)

Application
EP 95923401 A 19950616

Priority

- FR 9500800 W 19950616
- FR 9408474 A 19940708

Abstract (en)
[origin: US5706252A] PCT No. PCT/FR95/00800 Sec. 371 Date Jan. 6, 1997 Sec. 102(e) Date Jan. 6, 1997 PCT Filed Jun. 16, 1995 PCT Pub. No. WO96/01702 PCT Pub. Date Jan. 25, 1996The invention relates to multifrequency acoustic transducers exhibiting a wide band around each resonant frequency. It consists in inserting between a $\lambda/2$ active emitter plate (201) and the soft reflector (203) which supports it a rear plate (202) resonating in $\lambda/4$ mode and in placing on this active plate two marcher plates (204, 205) whose impedances are designed so as to best match the two frequencies obtained by inserting this rear plate. Thicknesses of these marcher plates are optimized with the aid of a model of for example Mason type starting from a value close to $\lambda/4$ for the frequency to be matched. It makes is possible to construct sonar transducers which operate equally well in detection mode and in classification mode.

IPC 1-7
B06B 1/06; **G10K 11/02**

IPC 8 full level
G01N 29/24 (2006.01); **A61B 8/00** (2006.01); **B06B 1/06** (2006.01); **G01S 7/521** (2006.01); **H04R 17/00** (2006.01)

CPC (source: EP US)
B06B 1/0614 (2013.01 - EP US); **B06B 1/0644** (2013.01 - EP US)

Citation (search report)
See references of WO 9601702A1

Designated contracting state (EPC)
DE DK GB NL

DOCDB simple family (publication)
US 5706252 A 19980106; CA 2194605 A1 19960125; CA 2194605 C 20050823; DE 69504986 D1 19981029; DE 69504986 T2 19990218; DK 0769988 T3 19990614; EP 0769988 A1 19970502; EP 0769988 B1 19980923; FR 2722358 A1 19960112; FR 2722358 B1 19960814; JP 3321172 B2 20020903; JP H10502510 A 19980303; WO 9601702 A1 19960125

DOCDB simple family (application)
US 75086297 A 19970106; CA 2194605 A 19950616; DE 69504986 T 19950616; DK 95923401 T 19950616; EP 95923401 A 19950616; FR 9408474 A 19940708; FR 9500800 W 19950616; JP 50414296 A 19950616