

Title (en)
Laminated piezoelectric transducer and method of manufacturing the same

Title (de)
Laminierter piezoelektrischer Wandler und Verfahren zur Herstellung desselben

Title (fr)
Transducteur piézoélectrique stratifié et son procédé de fabrication

Publication
EP 1799009 A1 20070620 (EN)

Application
EP 05027342 A 20051214

Priority
EP 05027342 A 20051214

Abstract (en)
The invention is illustrated as an underwater acoustic transducer comprising an active acoustic element for transducing sound and electrical signals; a front and rear housing element disposed on each side of the active acoustic element to define a corresponding front and rear acoustic chamber on each side of the active acoustic element; and a rear cover disposed on the rear housing element to provide tuning of the corresponding rear acoustic chamber. The method of manufacturing an underwater acoustic transducer, includes the step of selecting a port diameter and/or thickness of the front and rear housing elements according to an empirically tuned acoustic performance of the underwater acoustic transducer in combination with the facemask, helmet or headgear in or on which the underwater acoustic transducer is mounted.

IPC 8 full level
H04R 1/44 (2006.01)

CPC (source: EP)
H04R 1/44 (2013.01); **H04R 17/00** (2013.01)

Citation (search report)

- [XA] US 5812496 A 19980922 - PECK JEROME [US]
- [XA] GB 1546521 A 19790523 - FRANCE ARMED FORCES
- [XA] US 3909529 A 19750930 - MORROW CHARLES T, et al
- [YA] US 2003123692 A1 20030703 - UEKI MASATAKA [JP]
- [YA] US 6693849 B1 20040217 - EBERL ADOLF [CA], et al
- [YA] WO 9521512 A1 19950810 - KNOWLES ELECTRONICS INC [US]
- [Y] US 4454927 A 19840619 - SEEBINGER FREDERICK L [US]
- [Y] EP 0317167 A1 19890524 - BRITISH TELECOMM [GB]
- [A] US 6545948 B1 20030408 - JIANG GEJING [US]
- [A] US 5117403 A 19920526 - EBERL ADOLF [CA], et al
- [A] EP 0669169 A2 19950830 - KUREHA CHEMICAL IND CO LTD [JP]
- [A] WO 2005112503 A1 20051124 - DIVER ENTERTAINMENT SYTSEMS IN [US], et al

Cited by
DE102008009284A1; DE102008009284B4; EP2091269A3; US8144907B2

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