

Title (en)
Method and apparatus for the focalisation of acoustic waves

Title (de)
Verfahren und Anordnung zur Fokussierung acoustischer Wellen

Title (fr)
Procédé et dispositif de focalisation d'ondes acoustiques

Publication
EP 0944035 A3 20010418 (FR)

Application
EP 99111417 A 19960711

Priority
• EP 96925774 A 19960711
• FR 9508543 A 19950713

Abstract (en)
[origin: WO9703438A1] A method for making public announcements in a space (101) using n speakers (102) after having determined the impulse response $h_{ij}(t)$ between a plurality of calibration points j belonging to said space and each speaker i. To transmit an information-bearing acoustic signal S(t) through at least one target area (114, 115, 123) in the space in which announcements are to be made, each speaker i is made to transmit a signal (a), where j is an index representing calibration points in the target area.

IPC 1-7
G10K 11/34

IPC 8 full level
H04R 1/40 (2006.01); **G10K 11/34** (2006.01); **H04R 27/00** (2006.01)

CPC (source: EP US)
G10K 11/346 (2013.01 - EP US); **H04R 27/00** (2013.01 - EP US)

Citation (search report)
• [PX] US 5438624 A 19950801 - LEWINER JACQUES [FR], et al
• [A] US 5092336 A 19920303 - FINK MATHIAS [FR]
• [A] US 5428999 A 19950704 - FINK MATHIAS [FR]
• [X] FINK M: "TIME REVERSAL OF ULTRASONIC FIELDS-. ÖPART I: BASIC PRINCIPLES", IEEE TRANSACTIONS ON ULTRASONICS, FERROELECTRICS AND FREQUENCY CONTROL,US,IEEE INC. NEW.YORK, vol. 39, no. 5, 1 September 1992 (1992-09-01), pages 555 - 566, XP000306730, ISSN: 0885-3010
• [A] FINK M ET AL: "PHASE ABERRATION CORRECTION WITH ULTRASONIC TIME REVERSAL MIRRORS", PROCEEDINGS OF THE ULTRASONICS SYMPOSIUM,US,NEW YORK, IEEE, 1 November 1994 (1994-11-01), pages 1629 - 1638, XP000525109, ISBN: 0-7803-2013-1

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Designated contracting state (EPC)
DE FR GB IT

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WO 9703438 A1 19970130; DE 69606179 D1 20000217; DE 69606179 T2 20000817; DE 69638347 D1 20110512; EP 0842508 A1 19980520; EP 0842508 B1 20000112; EP 0944035 A2 19990922; EP 0944035 A3 20010418; EP 0944035 B1 20110330; JP 2000501896 A 20000215; JP 3675836 B2 20050727; US 2001001603 A1 20010524; US 6198829 B1 20010306; US 6978028 B2 20051220

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FR 9601083 W 19960711; DE 69606179 T 19960711; DE 69638347 T 19960711; EP 96925774 A 19960711; EP 99111417 A 19960711; JP 50556897 A 19960711; US 492798 A 19980109; US 73719400 A 20001213