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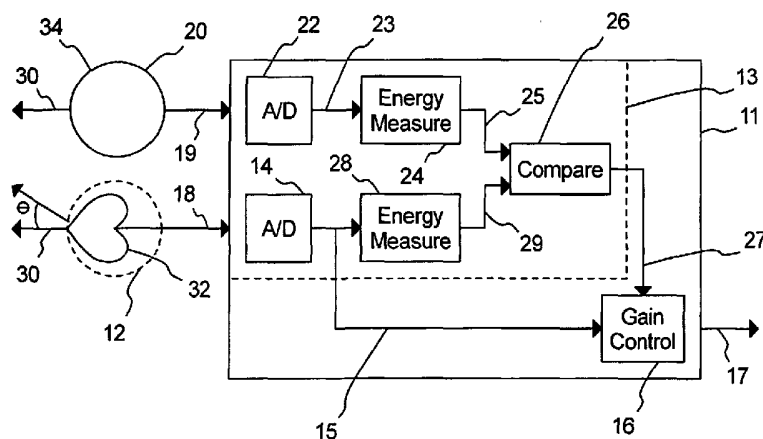
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[Continued on next page]

(54) Title: CIRCUIT AND METHOD FOR ACOUSTIC SOURCE DIRECTIONAL PATTERN DETERMINATION UTILIZING TWO MICROPHONES



(57) Abstract: A circuit for determining an angular direction of an acoustic source relative to a reference direction comprises an uni-directional microphone (12), an omni-directional microphone (20), and a background noise suppression circuit (11). The uni-directional microphone (12) is a directional microphone such that the intensity of an acoustic source detected at the uni-directional microphone (12) is dependent on the angular direction of the acoustic source relative to a reference direction (30). The omni-directional microphone (20) is a non-directional microphone such that the intensity of the acoustic source detected at the omni-directional microphone (20) is substantially independent of the angular direction of the acoustic source relative to the reference direction. The background noise suppression circuit (11) determines the direction of the acoustic source by calculating a quotient between a signal strength characteristics (21) and (31) of the acoustic source as detected by the two microphones (12) and (20) and provides for suppressing an output signal (17) if the quotient does not indicate that the acoustic source that is within a threshold angle of the reference direction (30).



— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

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A. CLASSIFICATION OF SUBJECT MATTER

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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 381/92, 313; 367/119

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y, E	US 6,694,028 B1 (MATSUO) 17 February 2004 (17.02.2004), Figures 1, 3, 7; column 7 lines 27-62	1-5, 8-12
Y	US 5,471,538 A (SASAKI et al) 28 November 1995 (28.11.1995), Figures 2, 3; column 5 lines 27-65	1-5, 8-12

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

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