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(71) Applicant: KNOWLES ELECTRONICS, INC. [US/US]; 1151 Maplewood Drive, Itasca, IL 60143 (US).

(72) Inventors: LOEPPERT, Peter, V.; 2028 Timber Ridge Lane, Hoffman Estates, IL 60195 (US). SCHAFFER, David, E.; 760 Elm Street, Glen Ellyn, IL 60137 (US).

(74) Agents: MORNEAULT, Monique, A. et al.; Wallenstein & Wagner, Ltd., 311 South Wacker Drive - 5300, Chicago, IL 60606 (US).

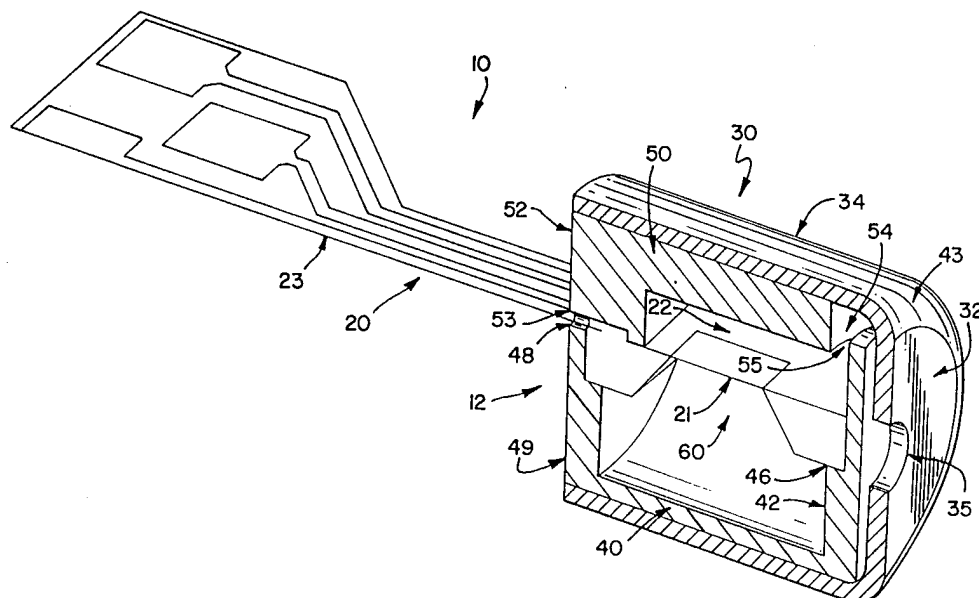
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(54) Title: MINIATURE SILICON CONDENSER MICROPHONE



(57) Abstract

A housing for shielding a transducer of the type mounted on a silicon die attached to a flexible circuit. The housing provides a jacket which protects the silicon die from physical damage. The jacket, in cooperation with the top and bottom cups, further provides a shield for the silicon die from light and electromagnetic interferences. An acoustic port located on the top portion of the jacket furnishes the means by which acoustic energy enters the jacket to contact the transducer. A back cavity, formed between the bottom cup and the silicon die, serves as the acoustic pressure reference which allows the microphone to function properly.

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INTERNATIONAL SEARCH REPORT

In national Application No

PCT/US 97/20942

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)

IPC 6 H04R H01L

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 practical, 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.
A	WO 95 31082 A (KNOWLES ELECTRONICS INC) 16 November 1995 see page 1, line 7 - page 3, line 14; figures ---	1, 19, 33, 38
A	EP 0 424 916 A (KNOWLES ELECTRONICS INC) 2 May 1991 see column 1, line 35 - line 5; figures ---	1, 19, 33, 38
A	DE 43 43 702 C (SIEMENS AUDIOLOGISCHE TECHNIK) 9 March 1995 see column 1, line 35 - line 50; figures ---	1, 19, 33, 38
A	US 4 430 520 A (TIBBETTS GEORGE C ET AL) 7 February 1984 see column 1, line 11 - column 2, line 40; figures --- -/--	1, 19, 33, 38

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☒ Patent family members are listed in annex.

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Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040. Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Gastaldi, G

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4 993 072 A (MURPHY PRESTON V) 12 February 1991 see column 1, line 45 - column 2, line 5; figures ---	1, 19, 33, 38
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