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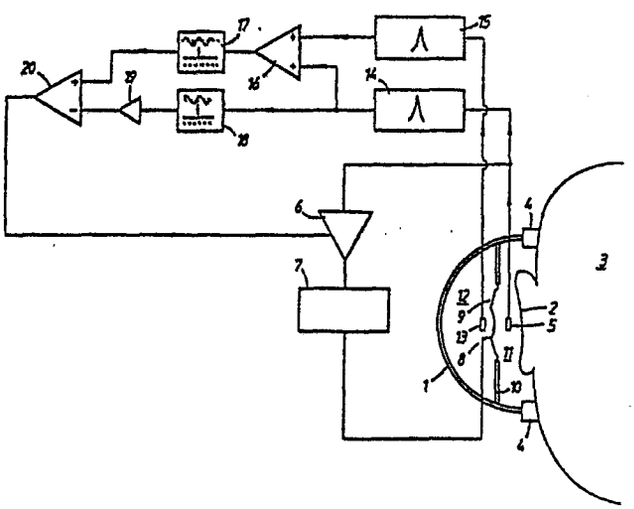
(54) **Improvements relating to noise reduction arrangements.**

(57) An active noise reduction (ANR) arrangement for reducing acoustic noise in an earphone structure (1) includes an automatic gain control arrangement (14-20) providing a variable loop gain dependent upon the variable noise reduction which is produced in the earphone (1) by the active noise reduction arrangement and which is effectively measured by noise pick-up microphones (5 and 13) located, respectively, in earphone structure front and rear internal cavities (11 and 12) positioned in front of and at the rear of a noise-cancelling transducer diaphragm (8,9) and providing a signal related to the measured noise reduction.



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EUROPEAN SEARCH REPORT

Application Number

EP 86 30 1946

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
A	GB-A-2 088 951 (LORD CORP.) * Abstract * ---	1	G 10 K 11/00 G 10 K 11/16
A	DE-A-3 133 107 (V. LEHNERT) * Figures 1,3; claims * -----	1	

TECHNICAL FIELDS SEARCHED (Int. Cl.4)

G 10 K
A 61 F

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	05-07-1988	MINNOYE G.W.

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
Y : particularly relevant if combined with another document of the same category
A : technological background
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P : intermediate document

T : theory or principle underlying the invention
E : earlier patent document, but published on, or after the filing date
D : document cited in the application
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