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Declarations under Rule 4.17:

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.1 7(H))

[Continued on nextpage]

(54) **Title:** SPEAKER DAMAGE PREVENTION IN ADAPTIVE NOISE-CANCELING PERSONAL AUDIO DEVICES

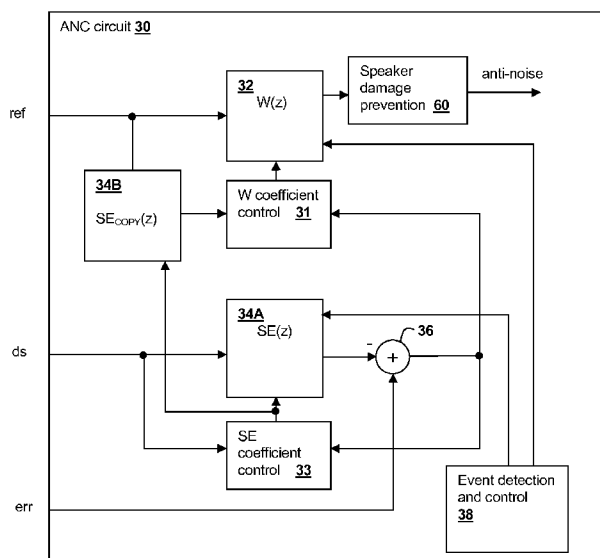


Fig. 3

(57) **Abstract:** A personal audio device, such as a wireless telephone, includes noise canceling circuit (30) that adaptively generates an anti-noise signal from a reference microphone signal (ret) and injects the anti-noise signal into the speaker or other transducer output to cause cancellation of ambient audio sounds. A processing circuit (60) monitors a level of the anti-noise signal, determines that the anti-noise signal may cause damage to the transducer and adjusts the generation of the anti-noise signal such that damage to the transducer is prevented.



- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(Hi))* — *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

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INTERNATIONAL SEARCH REPORT

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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)
 G10K

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)

EPO-Internal , WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

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