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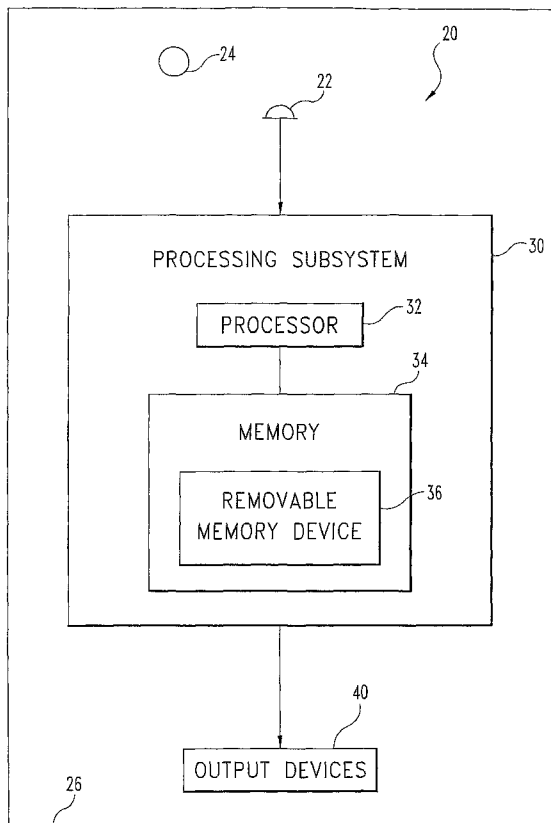
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[Continued on next page]

(54) **Title:** DETERMINING REVERBERATION TIME



(57) **Abstract:** Included in the embodiments of the present invention is a system (20) to detect sound with sensor (22) to generate a corresponding sound signal and processing subsystem (30) to iteratively determine two or more values in accordance with a maximum likelihood function for evaluation of reverberation time. One of these values corresponds to a time constant parameter, and another of these values corresponds to a diffusive power parameter. An estimate representative of the reverberation time is further provided by subsystem (30) as a function of an order-statistics filter.

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A. CLASSIFICATION OF SUBJECT MATTER
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B. FIELDS SEARCHED
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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.
X,P --- Y,P	US 2003/0099365 A (KARJALAINEN ET AL) 29 May 2003 (29.05.2003) *Figs. 1a-b; page 4, paragraph 0065-0076*	1-16,18-24,26-30 ----- 17,25,31
X,P --- Y,P	US 2004/0091120 A (KANTOR ET AL) 13 May 2004 (13.05.2004) *Figs. 1-3; page 2, paragraphs 0014 and 0024; page 3, paragraph 0046 to page 4, paragraph 0062; page 5, paragraph 0071	1-16,18-24,26-30,32-25 ----- 17,25,31
X --- Y	Xiang, Ning. "Evaluation of reverberation times using a nonlinear regression approach". Acoustic Society of America. October 1995. *whole document*	1-16,18-24,26-30,32-35 ----- 17,25,31

Further documents are listed in the continuation of Box C. See patent family annex.

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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	Cox, T.J. "Extracting Room Reverberation Time from Speech Using Artificial Neural Networks". J.Audio Eng. Soc., Vol. 49, No. 4, 2001 April, pages 219-230 *whole document*	1-35