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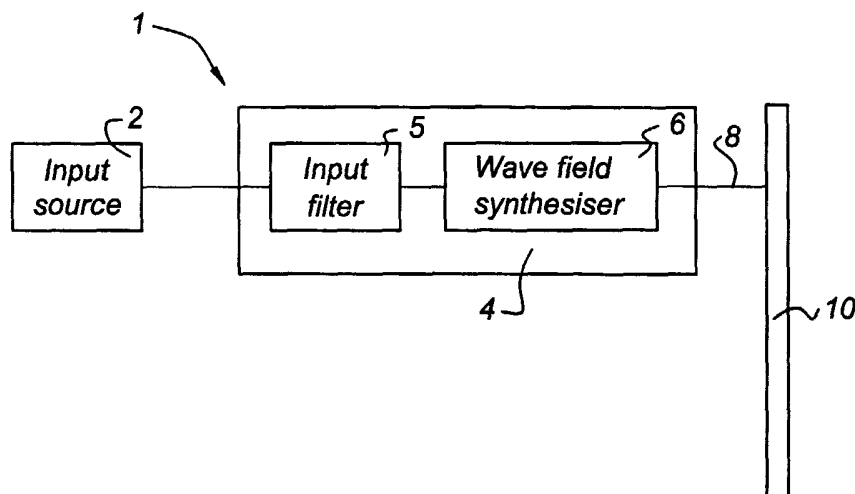
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(54) Title: WAVE FIELD SYNTHESISYS SOUND REPRODUCTION SYSTEM USING A DISTRIBUTED MODE PANEL



(57) Abstract: Arrangement of a sound reproduction system (1), including at least one input (2), a sound field generator (4), a loudspeaker panel (10); the at least one input (2) connected to the sound field generator (4), and the sound field (4) connected to the loudspeaker panel (10); the at least one input (2) arranged for generating and audio signal; the sound field generator (4) including a wave field synthesiser (6) arranged for generating a spatially perceptible sound field for the audio signal and for outputting the spatially perceptible sound field to the loudspeaker panel (10) consisting of a plate (12) and a plurality of transducers (16), arranged within an array (14) on the large plate (12) for reproducing the spatially perceptible sound field from the wave field synthesiser (6) by exciting bending waves in the plate (12).



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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER IPC 7 H04S3/00 G10K15/02 H04R7/04		
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 7 H04S G10K H04R		
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	BOONE M. M. ET AL: "On the applicability of distributed mode loudspeaker panels for wave field synthesis based sound reproduction" PREPRINTS OF PAPERS PRESENTED AT THE 108TH AES CONVENTION, PARIS, FEB. 19 -22, 2000, NEW YORK, AES, US, no. 5165, 19 - 22 February 2000, pages 1-9, XP001023901 cited in the application page 2, paragraph 2 -page 4, paragraph 4 --- -/--	1-13
<input checked="" type="checkbox"/> Further documents are listed in the continuation of box C. <input type="checkbox"/> Patent family members are listed in annex.		
° Special categories of cited documents :		
A document defining the general state of the art which is not considered to be of particular relevance *E* earlier document but published on or after the international filing date *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) *O* document referring to an oral disclosure, use, exhibition or other means *P* document published prior to the international filing date but later than the priority date claimed	*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. *&* document member of the same patent family	
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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	<p>BERKHOUT A J: "A holographic approach to acoustic control" JOURNAL OF THE AUDIO ENGINEERING SOCIETY, DEC. 1988, USA, vol. 36, no. 12, pages 977-995, XP001024047 ISSN: 0004-7554 cited in the application abstract</p> <p>-----</p>	1-13