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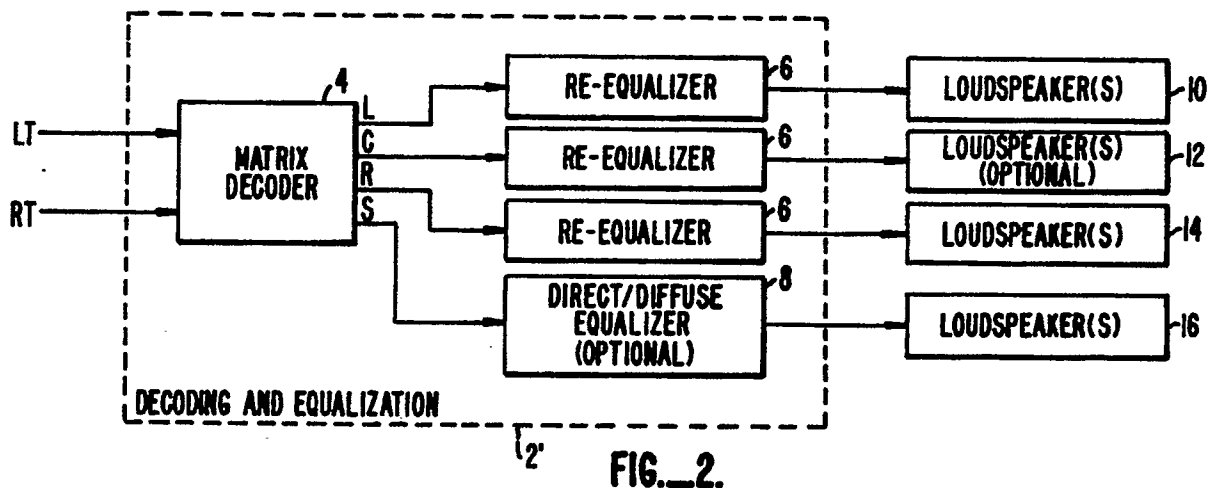
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(54) **Surround-sound system.**

(57) Spectral imbalance (alteration in timbre) when playing home video versions of motion pictures is overcome by re-equalization according to a unique correction response curve which compensates for the equalization for playback in large theater-sized auditoriums inherent in motion picture soundtracks. Surround-sound home playback of motion pictures is enhanced by employing main channel loudspeakers that produce generally direct sound fields and surround channel loudspeakers that produce generally

diffuse sound fields. Preferably, further equalization is applied to the reproduced surround channel to compensate for the differences in perceived timbre between direct and diffuse sound fields. In addition, the reproduced surround-sound channel is further enhanced by decreasing the interaural cross-correlation of the surround-sound channel sound field at listening positions within the room, preferably by introducing slight pitch shifting in the signals applied to multiple surround loudspeakers.



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EUROPEAN SEARCH REPORT

Application Number

EP 89 10 0047

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.5)
A	EP-A-0 249 640 (SONY CORP.) * Page 1, line 17 - page 6, line 16; figures * - - -	1,7,19,31, 32,33,35, 37,39	H 04 S 3/00
A	FUNKSCHAU, vol. 58, no. 17, August 1986, pages 88-92, Munich, DE; "Live-Atmosphäre von der Videokassette" * Page 92, middle column, lines 10-32; figure 7 * - - -	1,7	
A	GB-A-2 006 583 (DOLBY LABORATORIES) * Page 3, lines 49-103; figure 2 * - - -	1,7	
A,D	JOURNAL OF THE AUDIO ENGINEERING SOCIETY, vol. 23, no. 3, April 1975, pages 178-186, New York, US; R.B. SCHULEIN: "In situ measurement and equalization of sound reproduction systems" * Page 181, right-hand column, line 4 - page 183, left-hand column, line 16; figures 6,8 * - - - - -	1	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			H 04 S H 04 R
Place of search		Date of completion of search	Examiner
The Hague		13 May 91	GASTALDI G.L.
CATEGORY OF CITED DOCUMENTS			
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