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EUROPEAN PATENT APPLICATION

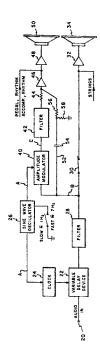
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- Applicant: CBS INC, 51, West 52nd Street, New York New York 10019 (US)
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- inventor: Schmoll, George F. III, 28 West Woodlawn
 Drive, Mundelein Illinois 60060 (US)
 Inventor: Finch, Robert A., R. 50 Martin Drive, Mundelein
 Illinois 60060 (US)
- Ø Designated Contracting States: GB IT NL
- (A) Representative: Abbott, Leonard Charles et al, GILL JENNINGS & EVERY 53/64 Chancery Lane, London WC2A 1HN (GB)
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- An electronic circuit for simulating sound from a rotary loudspeaker.
- (5) A device for electronically simulating vibrato and tremulant effects and the radiation effects produced by a rotary loudspeaker with the aid of two loudspeakers, (50, 34), in which a musical tone signal (20) is applied to a variable delay device (22) associated with one of the loudspeakers (34). The frequency modulated signal (B) produced by the variable delay device is also subjected to amplitude modulation in a modulator (40) controlled in synchronism with the variable delay device, and the resulting composite signal applied to the other loudspeaker (50). Additionally, the high frequency components of the frequency modulated signal from the variable delay device may be summed in an amplifier (46), in an out of phase relationship, with the composite amplitude modulated signal (C) to simulate the effect of a rotating high frequency horn radiator. The sub-audio modulating signal, which may be for example at 1 Hz for a "chrous" effect, or 7 Hz for a "tremulant" effect, is produced by an oscillator (26), and the degree of amplitude- and/or frequency-modulation may be dependant on this sub-audio frequency.



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EUROPEAN SEARCH REPORT

EP 80 30 4625

	DOCUMENTS CONSIDERED TO BE RELEVANT	CLASSIFICATION OF THE APPLICATION (Int. Cl.3)	
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
D	US - A - 4 008 641 (A. TAKADA et al.) * Column 1, line 66 - column 3, line 59; figures 2,3,6 *	1,11	G 10 H 1/043
	Time Jy, Tigures 2,3,0		
	<pre>DE - A - 2 601 697 (ROLAND CORP.) * Page 18, second paragraph;</pre>	1,2	
	figures 1,10 *		
	DE - B - 2 653 454 (PHILIPS PATENTVERWALTUNG GmbH)	2,7	TECHNICAL FIELDS SEARCHED (Int. Cl.º)
	* Column 2, lines 27-55 *		G 10 H 1/00 1/04
	<u>US - A - 3 979 991</u> (K. KAWAMOTO) * Column 5, lines 37-46; column 8	3-5,7	1/043
	lines 56-59; column 9, lines 58-60; column 11, lines 23-41; figures 1,4,6,16 *		
	ADAGUT)		
	<u>US - A - 3 866 505</u> (T. ADACHI) * Figures 1 and 5 *	10	CATEGORY OF
			CITED DOCUMENTS X: particularly relevant
A	<u>US - A - 4 043 243</u> (R.H. PETERSON) * Figures *	1	A: technological background O: non-written disclosure P: intermediate document
A	<u>US - A - 3 719 782</u> (P.R. BARNUM) * Figures *	1	T: theory or principle underlying the invention E: conflicting application D: document cited in the
			application L: citation for other reasons
<u> </u>	The present search report has been drawn up for all claims		e.: member of the same patent family, corresponding document
Place of se	The Hague Date of completion of the search	Examiner E	XELMANS