

(11) Publication number: 0 480 561 A3

(12)

EUROPEAN PATENT APPLICATION

(21) Application number: 91305535.6

(51) Int. CI.5: G10K 15/08

(22) Date of filing: 19.06.91

30 Priority: 12.10.90 JP 274504/90

(43) Date of publication of application : 15.04.92 Bulletin 92/16

84) Designated Contracting States : **DE GB**

88 Date of deferred publication of search report : 30.09.92 Bulletin 92/40

71 Applicant: PIONEER ELECTRONIC CORPORATION
No.41, Meguro 1-chome
Meguro-ku Tokyo (JP)

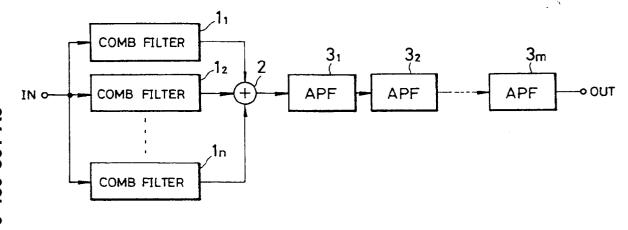
(72) Inventor: Matsushita, Fumio 15-5, Ohmori-Nishi 4-chome, Ohta-ku Tokyo (JP) Inventor: Tsubonuma, Hiroshi 15-5, Ohmori-Nishi 4-chome, Ohta-ku Tokyo (JP)

(74) Representative: Tomlinson, Kerry John et al Frank B. Dehn & Co. European Patent Attorneys Imperial House 15-19 Kingsway London WC2B 6UZ (GB)

(54) Reverberation sound generating apparatus.

A reverberation sound generating apparatus, comprising a plurality of comb filters (1₁-1_n) each having a delay element and a coefficient multiplier, and an adder (2) for adding output signals of the comb filters, wherein the numbers of the samples corresponding to each delay time of the comb filters are mutually prime. With such arrangement, it is possible that the impulse responses of each of the comb filters do not coincide with each other almost at all within the reverberation time. Thus, reverberation sound is not deviated over time and is dispersed uniformly, providing satisfactory reverberation tone quality.

FIG. 1





EUROPEAN SEARCH REPORT

Application Number

EP 91 30 5535

Citation of document with indication, where appropriate,			Relevant	CLASSIFICATION OF THE
Category	of relevant pas		to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
Y	GB-A-1 001 518 (WES * Page 2, lines 34-4 1,2,4,5; figure 5 *	STERN ELECTRIC CO.) 18,77-98; claims	1-3	G 10 K 15/08
Y	80TH CONVENTION OF TENGINEERING SOCIETY, 7th March 1986, page "Implementation of redigital signal micro" Page 1, line 1 - page 1, lines 1-5; figure	Montreux, 4th - es 1-12; J. SIKORAV: reverberators on oprocessors" page 5, line 4; page	1-3	
A	DE-A-2 719 276 (FRA VERTRIEBSGESELLSCHAN * Claim 1 * 		1-3	
				TECHNICAL FIELDS SEARCHED (Int. Cl.5)
				H 03 H E 04 B G 10 K
	The present search report has be	een drawn up for all claims		
1		Date of completion of the search 03-07-1992	n _E	Examiner HEERING P.
CATEGORY OF CITED DOCUMENTS X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category A: technological background O: non-written disclosure P: intermediate document		NTS T: theory or print E: earlier patent after the fill the D: document cit L: document cit C: document of the C: document cit	T: theory or principle underlying the invention E: earlier patent document, but published on, or after the filing date D: document cited in the application L: document cited for other reasons &: member of the same patent family, corresponding document	

EPO FORM 1503 03.82 (P0401)