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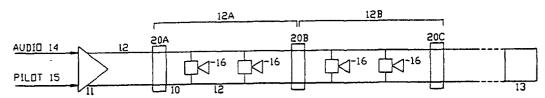
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(54) PA system having zone isolator circuits

(57) A public address network using a single pair of signal wires (12) split in to sections using isolator circuits (20) which detect short circuit faults and open circuit

faults and isolate if a fault is detected. In a fault tolerant mode an audio signal (14) and a pilot signal (15) for powering the isolators (20) are supplied from both ends of the signal wires (12).

FIG.1



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EUROPEAN SEARCH REPORT

Application Number EP 99 30 5005

Category	Citation of document with indicati of relevant passages	on, where appropriate,	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
X	DE 36 27 960 C (PHILIP 3 September 1987 (1987 * column 2, line 3-23 * column 2, line 433 - * column 3, line 34 - * column 4, line 9 - column 4	-09-03) * column 23 * column 4, line 1 *	1-10	H04R27/00
Х	GB 2 299 238 A (AUDIX LIMITED) 25 September * page 1, line 1-7 *		1,4,5	
Α	* page 2, line 26-31 * * page 3, line 2-30 * * page 4, line 8 - page	e 5, line 1 *	2,3,6-10	
A	US 3 989 908 A (BUDRYS 2 November 1976 (1976- * column 1, line 7-14 * column 1, line 64 - * column 2, line 52 -	11-02) * column 2, line 19 *	1-10	
				TECHNICAL FIELDS SEARCHED (Int.Cl.6)
				H04R G11B
I.	The present search report has been d			
	THE HAGUE	Date of completion of the search 28 January 2004	Zan	Examiner ti, P
CATEGORY OF CITED DOCUMENTS X: particularly relevant if taken alone Y: particularly relevant if combined with anoth document of the same category A: technological background		T : theory or princip E : earlier patent do after the filing da D : document cited L : document cited f	le underlying the invention cument, but published on, or te in the application	

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EP 99 30 5005

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28-01-2004

	,	Patent document cited in search report		Publication date		Patent fam member(s	ily)	Publication date
	DE	3627960	С	03-09-1987	DE	3627960	C1	03-09-1987
	GB	2299238	Α	25-09-1996	NONE			
	US	3989908	A	02-11-1976	CA	1044762	A1	19-12-1978
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L				fficial lournal of the Eu		·		

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

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