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(54) Title: TRANSMISSION OF DIGITAL AND ANALOG SIGNALS IN THE SAME BAND

(57) Abstract

A combination of broadband program materials, such as TV, plus digital communications services of all types, are broadcast to a cell in the same frequency band, such as 27.5 to 28.5 GHz. The combination of all the transmitted channels have a combined bandwidth substantially exceeding the frequency band. At least some of the channels are transmitted with two diversity characteristics different from those of other channels. In one embodiment analog signals transmit the broadband services, preferably using wide deviation FM modulation, the FM channels filling the band. By choosing carrier frequencies selectively, between 5 and 9 T-1 digital channels can be broadcast in each FM channel when polarization is the same. Differing polarization of digital and FM signals in the same band can enable selection and detection of the desired one of a full spectrum of digital signals, or any one of the analog signals.

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/IB 97/00807

A. CLASSIFICATION OF SUBJECT MATTER

IPC6: H04B 1/04
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)

IPC6: H04B, H04J, H04L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, 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.
X	WO 9602101 A1 (USA DIGITAL RADIO PARTNERS L.P.), 25 January 1996 (25.01.96), page 6, line 5 - page 7, line 7; page 9, line 20 - page 12, line 15, figures 1,2	1-11,17-21, 28-34
A	--	12-16,22-27
A	US 5278826 A (JOHN L. MURPHY), 11 January 1994 (11.01.94), abstract	1-34
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Date of the actual completion of the international search	Date of mailing of the international search report
26 January 1998	27 -01- 1998
Name and mailing address of the ISA/ Swedish Patent Office Box 5055, S-102 42 STOCKHOLM Facsimile No. +46 8 666 02 86	Authorized officer MIKAEL SOLLERHED Telephone No. +46 8 782 25 00

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Information on patent family members

07/01/98

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9602101 A1	25/01/96	AU 3094495 A	09/02/96
		IL 114471 D	00/00/00
US 5278826 A	11/01/94	NONE	