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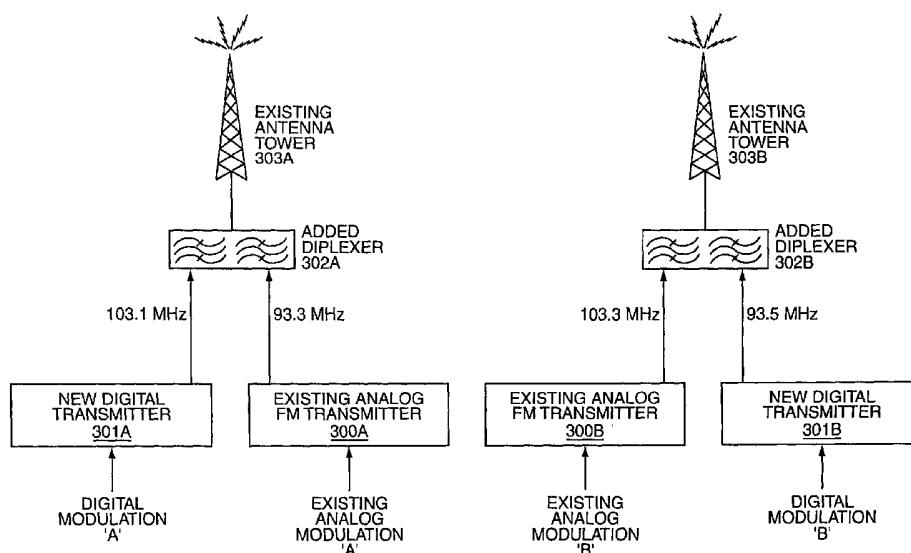
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- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for all designations
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations

[Continued on next page]

(54) Title: DIGITAL FORMAT U.S. COMMERCIAL FM BROADCAST SYSTEM



(57) Abstract: A method of broadcasting commercial FM services in a digital format in at least one bitstream comprises time-division multiplexing the bitstream(s) into one or more channels comprising a data frame, and frequency modulating the data frames around a single carrier frequency into a commercial FM broadcast signal. The modulation may comprise GMSK or 8-PSK, and multiple data frame types may be interleaved. The signal is transmitted on a commercial FM broadcast station such that substantially the entire spectrum of the transmission comprises the digital data frames. The bit rate(s) of the digital bitstream(s) may be monitored, and the bitstream(s) may be reallocated to channels in the data frames based on changes in the bit rate(s). Analog and digital formats may be broadcast simultaneously on non-adjacent commercial FM broadcast carrier channels. A receiver is operative to extract and decode content from a digital format FM broadcast signal.



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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) IPC 7 H04H H04B H04L		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
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C. DOCUMENTS CONSIDERED TO BE RELEVANT		
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X	HANZO L ET AL: "A mobile hi-fi digital audio broadcasting scheme" VEHICULAR TECHNOLOGY CONFERENCE, 1994 IEEE 44TH STOCKHOLM, SWEDEN 8-10 JUNE 1994, NEW YORK, NY, USA, IEEE, 8 June 1994 (1994-06-08), pages 1035-1039, XP010123233 ISBN: 0-7803-1927-3	1,2, 9-13,24, 26-37
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A	the whole document	1,2, 5-13, 16-37
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<input checked="" type="checkbox"/> Further documents are listed in the continuation of box C. <input checked="" type="checkbox"/> Patent family members are listed in annex.		
° Special categories of cited documents :		
A document defining the general state of the art which is not considered to be of particular relevance *E* earlier document but published on or after the international filing date *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) *O* document referring to an oral disclosure, use, exhibition or other means *P* document published prior to the international filing date but later than the priority date claimed		*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. *&* document member of the same patent family
Date of the actual completion of the international search <p style="text-align: center;">6 December 2002</p>		Date of mailing of the international search report <p style="text-align: center;">16/12/2002</p>
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016		Authorized officer <p style="text-align: center;">Willems, B</p>

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