Title (en)

DIGITAL BROADCAST SYSTEM USING SATELLITE DIRECT BROADCAST AND TERRESTRIAL REPEATER

Title (de)

DIGITALES RUNDFUNKSYSTEM MIT VERWENDUNG DER DIREKTÜBERTRAGUNG PER SATELLIT UND EINEN TERRESTRISCHEN REPEATER

Title (fr)

SYSTEME DE DIFFUSION NUMERIQUE UTILISANT UN SYSTEME DE RADIODIFFUSION DIRECTE PAR SATELLITE ET UN REPETEUR SITUE SUR LA TERRE

Publication

EP 1072111 A4 20060927 (EN)

Application

EP 98933306 A 19980710

Priority

- US 9814280 W 19980710
- US 7959198 P 19980327
- US 5866398 A 19980410

Abstract (en)

[origin: CA2325026A1] A digital broadcast system is provided which uses a satellite direct radio broadcast system having different downlink modulation options in combination with a terrestrial repeater network employing different re-broadcasting modulation options to achieve high availability reception by mobile radios (14), static radios and portable radios (14) in urban areas, suburban metropolitan areas, and rural areas, including geographically open areas and geographic areas characterized by high terrain elevations. Two-arm and threearm receivers are provided which each comprise a combined architecture for receiving both satellite and terrestrial signals, and for maximum likelihood combining of received signals for diversity purposes. A terrestrial repeater is provided for reformatting a TDM satellite signal as a multicarrier modulated terrestrial signal. Configurations for indoor and outdoor terrestrial repeaters are also provided.

IPC 1-7

H04H 1/00; H04B 7/155

IPC 8 full level

H04B 7/155 (2006.01); **H04B 7/185** (2006.01); **H04H 20/71** (2008.01)

CPC (source: EP)

H04B 7/18523 (2013.01); **H04H 20/06** (2013.01); **H04H 20/71** (2013.01); H04H 2201/19 (2013.01)

Citation (search report)

- [XA] CA 2209165 A1 19980125 - CD RADIO INC [US]
- [A] US 4506383 A 19850319 - MCGANN WILLIAM E [US]
- [A] WO 9722189 A1 19970619 - WORLDSPACE INC [US]
- [A] WO 9527373 A1 19951012 - DIVERSIFIED COMMUNICATION ENGI [US]
- [X] ZOU W Y ET AL: "COFDM: AN OVERVIEW", IEEE TRANSACTIONS ON BROADCASTING, IEEE SERVICE CENTER, PISCATAWAY, NJ, US, vol. 41, no. 1, March 1995 (1995-03-01), pages 1 - 8, XP000858041, ISSN: 0018-9316
- See references of WO 9949602A1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

OA 11532 A 20040507; AP 2000001925 A0 20000930; AU 8297998 A 19991018; BR 9815768 A 20011120; CA 2325026 A1 19990930; CN 1178412 C 20041201; CN 1291385 A 20010411; EA 002604 B1 20020627; EA 200001005 A1 20010423; EP 1072111 A1 20010131; EP 1072111 A4 20060927; ID 27313 A 20010322; IL 138309 A0 20011031; JP 2002508623 A 20020319; KR 20010042231 A 20010525; PL 343075 A1 20010730; TR 200002768 T2 20001221; TW 390066 B 20000511

DOCDB simple family (application)

OA 1200000257 A 19980710; AP 2000001925 A 19980710; AU 8297998 A 19980710; BR 9815768 A 19980710; CA 2325026 A 19980710; CN 98813934 A 19980710; EA 200001005 A 19980710; EP 98933306 A 19980710; ID 20001891 A 19980710; IL 13830998 A 19980710; JP 2000538457 A 19980710; KR 20007010757 A 20000927; PL 34307598 A 19980710; TR 200002768 T 19980710; TW 87112878 A 19980805