

Title (en)

Method and system for extending broadcast coverage on a single frequency network

Title (de)

Verfahren und Vorrichtung für die Ausweitung des Sendebereichs in einem Gleichwellennetz

Title (fr)

Méthode et dispositif pour l'extension de la portée de l'émission dans un réseau d'émetteurs émettant en onde commune

Publication

**EP 1041758 A3 20040303 (EN)**

Application

**EP 00105296 A 20000314**

Priority

US 28265299 A 19990331

Abstract (en)

[origin: EP1041758A2] A system for aligning the phase characteristics of N identical digitized audio program signals distributed from a studio to N broadcasting stations via N time division multiplex (TDM) communication signals includes N TDM multiplexers, each of which (i) multiplexes a digitized audio program signal into at least one channel of a TDM communication link established between the studio and one of the N broadcasting stations, and (ii) multiplexes a timing signal into another channel of the TDM communication signal. A TDM de-multiplexer at each of the broadcasting stations extracts the digitized audio program signal and the timing signal from the corresponding TDM communication signal. A timing signal comparator compares the extracted timing signal to a local timing signal that is delayed by a precise and adjustable amount, and produces an offset time corresponding to the comparison result. The delay adjust circuit dynamically adjusts the delay of the TDM signal as a function of the offset time, preferably so as to drive the offset time to substantially zero. The timing signal at the studio and the timing signals at each of the broadcast stations are provided by an existing time distribution network. <IMAGE>

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**H04H 3/00**

IPC 8 full level

**H04H 1/00** (2006.01); **H04H 3/00** (2006.01); **H04H 20/67** (2008.01)

CPC (source: EP)

**H04H 20/06** (2013.01); **H04H 20/67** (2013.01); **H04H 2201/20** (2013.01)

Citation (search report)

- [X] WO 9720404 A1 19970605 - ERICSSON GE MOBILE INC [US]
- [A] EP 0515214 A1 19921125 - BRITISH TELECOMM [GB]
- [A] US 5822324 A 19981013 - KOSTRESKI BRUCE [US], et al

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US8683069B2; US9859994B2; US7865610B2; US7512175B2; WO2006101622A1; WO2017172903A1; US10666369B2; US11258525B2; US11683108B2

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