Title (en)

DISTRIBUTED CABLE MODEM TERMINATION SYSTEM WITH SOFTWARE RECONFIGUABLE MAC AND PHY CAPABILITY

Title (de)

VERTEILTES CABLE-MODEM-TERMINATION-SYSTEM MIT PER SOFTWARE NEUKONFIGURIERBERER MAC- UND PHY-KAPAZITÄT

Title (fr)

SYSTÈME DE TERMINAISON DE MODEM CÂBLE DISTRIBUÉ DOTÉ D'UNE CAPACITÉ MAC ET PHY RECONFIGURABLE PAR LOGICIEL

Publication

EP 2817963 A1 20141231 (EN)

Application

EP 13752319 A 20130218

Priority

- US 201213400415 A 20120220
- US 201261622132 P 20120410
- US 201213478461 A 20120523
- US 201213555170 A 20120722
- US 2013026608 W 20130218

Abstract (en)

[origin: WO2013126310A1] Distributed and software reconfigurable CMTS (CMRTS) device, based on MAC and PHY units with FPGA and DSP components, for a HFC CATV network. The various CATV RF modulators, such as QAM modulators, may be divided between QAM modulators located at the cable plant, and remote QAM modulators ideally located at the fiber nodes. A basic set of CATV QAM data waveforms may optionally be transmitted to the nodes using a first fiber, and a second set of IP/on-demand data may be transmitted to the nodes using an alternate fiber or alternate fiber frequency, and optionally using other protocols such as Ethernet protocols. The nodes will extract the data specific to each neighborhood and inject this data into unused QAM channels, thus achieving improved data transmission rates through finer granularity. A "virtual shelf" control system for managing and reconfiguring the FPGA and DSP based CMTRS units is also disclosed.

IPC 8 full level

H04N 7/16 (2011.01); **H04N 7/173** (2011.01); **H04N 21/2381** (2011.01); **H04N 21/2385** (2011.01); **H04N 21/239** (2011.01); **H04N 21/61** (2011.01)

CPC (source: EP)

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Cited by

US9854283B2

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

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