

Title (en)

METHOD AND SYSTEM FOR SUPPORTING DYNAMIC RESOURCE MANAGEMENT IN A BACKHAUL NETWORK

Title (de)

VERFAHREN UND SYSTEM ZUR UNTERSTÜTZUNG VON DYNAMISCHER RESSOURCENVERWALTUNG IN EINEM BACKHAULNETZ

Title (fr)

PROCÉDÉ ET SYSTÈME DE PRISE EN CHARGE DE GESTION DYNAMIQUE DE RESSOURCES DANS UN RÉSEAU DE RACCORDEMENT

Publication

EP 2898626 A1 20150729 (EN)

Application

EP 13779151 A 20130920

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- EP 13779151 A 20130920

Abstract (en)

[origin: WO2014044821A1] A method for supporting dynamic resource management in a backhaul network, wherein a resource management function is provided that includes an offline component and an online component for routing data traffic in the form of pipes, wherein said pipes include a path from an ingress switch to an egress switch of said backhaul network and an assigned capacity, wherein said offline component performs offline path computation based on expected traffic demands that are determined from one or more traffic matrices in order to compute offline computed paths for said pipes being represented in said one or more traffic matrices, wherein said expected traffic demands constitute claimable resources for said pipes, wherein said offline computed paths are installed in the backhaul network in order to configure said pipes, wherein initially only a fraction of the maximum allowable capacity that corresponds to the amount of said claimable resources is allocated as capacity for said pipes, wherein said resource management function allocates capacities to said pipes dependent on current data traffic, wherein in case excess traffic demands for one or more of said pipes - excess pipes - occur, because being beyond said expected traffic demands for said excess pipes, said excess traffic demands constitute opportunistic resources for said excess pipes, and wherein said online component performs online path computation in such a way that said online component uses unblocked claimable resources of one or more pipes different from said excess pipes in order to provide said opportunistic resources for said excess pipes.

IPC 8 full level

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Citation (search report)

See references of WO 2014044821A1

Citation (examination)

IOVANNA P ET AL: "A traffic engineering system for multilayer networks based on the GMPLS paradigm", IEEE NETWORK, IEEE SERVICE CENTER, NEW YORK, NY, US, vol. 17, no. 2, 1 March 2003 (2003-03-01), pages 28 - 37, XP011095762, ISSN: 0890-8044, DOI: 10.1109/MNET.2003.1188284

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