Title (en)
DYNAMIC BANDWIDTH ALLOCATION

Title (de)
DYNAMISCHE BANDBREITENZUTEILUNG

Title (fr)
ATTRIBUTION DE BANDE PASSANTE DYNAMIQUE

Publication
EP 1364496 A4 20050629 (EN)

Application
EP 02714833 A 20020206

Priority
• US 0203323 W 20020206
• US 26647501 P 20010206

Abstract (en)
[origin: WO02063798A1] A dynamic bandwidth allocation system and method for dynamically sharing a communication bandwidth. The system provides a scheduler (310) that enables the method to process bandwith information in a communication system (300). The communication system (300) preferably includes one or more communication arrays, or hubs (320), which are centrally located to provide an airlink between a plurality of physically separated processor-based systems or remote units RUs(330 a-f), or other sources of communication such as voice communication, utilizing a communication device, or node. Each hub (320) and RU (330) includes one or more controllers (340, 350). The scheduler (310) utilizes the controllers (340, 350) to track and process bandwidth information for communicating between the one or more hubs (320) and the plurality of RUs (330 a-f). Each RU (330) generally services a plurality of bursty data traffic sources. The scheduler (310) tracks an airlink communication traffic in both downlink and/or uplink directions to accurately determine airlink bandwidth requests for the plurality of RUs (330 a-f).

IPC 1-7
H04L 12/56; H04L 29/06

IPC 8 full level
H04B 7/212 (2006.01); H04B 7/26 (2006.01); H04J 3/06 (2006.01); H04J 3/16 (2006.01); H04L 7/04 (2006.01); H04L 12/28 (2006.01); H04L 12/54 (2013.01); H04L 47/30 (2022.01); H04L 47/762 (2022.01); H04N 7/173 (2006.01); H04W 72/04 (2009.01); H04H 20/28 (2008.01); H04W 16/14 (2009.01); H04W 24/00 (2009.01); H04W 28/14 (2009.01); H04W 28/18 (2009.01); H04W 72/12 (2009.01)

IPC 8 main group level
H04H 1/00 (2006.01)

CPC (source: EP)
H04B 7/2123 (2013.01); H04B 7/2659 (2013.01); H04J 3/0602 (2013.01); H04J 3/0608 (2013.01); H04J 3/1694 (2013.01); H04L 7/04 (2013.01); H04L 7/042 (2013.01); H04L 47/15 (2013.01); H04L 47/30 (2013.01); H04L 47/70 (2013.01); H04L 47/762 (2013.01); H04L 47/824 (2013.01); H04W 28/02 (2013.01); H04H 20/28 (2013.01); H04W 28/14 (2013.01); H04W 72/543 (2023.01)

Citation (search report)
• [XA] HUANG X ET AL: "A MAC PROCOTOL WITH PRIORITY ALGORTIHM FOR WIRELESS ATM NETWORKS", VTC 2000-SPRING. 2000 IEEE 51ST. VEHICULAR TECHNOLOGY CONFERENCE PROCEEDINGS. TOKYO, JAPAN, MAY 15-18, 2000, IEEE VEHICULAR TECHNOLGY CONFERENCE, NEW YORK, NY : IEEE, US, vol. VOL. 2 OF 3. CONF. 51, 15 May 2000 (2000-05-15), pages 982 - 986, XP000968016, ISBN: 0-7803-5719-1
• [XA] LERA A ET AL: "Analysis of MAC protocols for wireless-ATM networks", PERSONAL, INDOOR AND MOBILE RADIO COMMUNICATIONS, 2000. PIMRC 2000. THE 11TH IEEE INTERNATIONAL SYMPOSIUM ON SEPT. 18-21, 2000, PISCATAWAY, NJ, USA,IEEE, vol. 2, 18 September 2000 (2000-09-18), pages 1170 - 1174, XP010520817, ISBN: 0-7803-6463-5
• [XA] PETRAS D ET AL: "Joint performance of DSA++ MAC protocol and SR/D-ARQ protocol for wireless ATM under realistic traffic and channel models", COMPUTER NETWORKS, ELSEVIER SCIENCE PUBLISHERS B.V., AMSTERDAM, NL, vol. 31, no. 9-10, 7 May 1999 (1999-05-07), pages 903 - 918, XP004304527, ISSN: 1389-1286
• [A] PRISCOLI F D: "MAC AND INTERWORKING LAYERS FOR AN ATM WIRELESS SYSTEM", WIRELESS PERSONAL COMMUNICATIONS, KLUWER ACADEMIC PUBLISHERS, NL, vol. 9, no. 2, 1 February 1999 (1999-02-01), pages 113 - 146, XP000800962, ISSN: 0929-6212
• [A] SIGLE R ET AL: "Fair queueing wireless ATM MAC protocols", PERSONAL, INDOOR AND MOBILE RADIO COMMUNICATIONS, 1998. THE NINTH IEEE INTERNATIONAL SYMPOSIUM ON BOSTON, MA, USA 8-11 SEPT. 1998, NEW YORK, NY, USA,IEEE, US, vol. 1, 8 September 1998 (1998-09-08), pages 55 - 59, XP010314766, ISBN: 0-7803-4872-9
• See references of WO 02067514A1

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)
WO 02063798 A1 20020815; AT E324716 T1 20060515; AT E341167 T1 20061015; AT E383685 T1 20080115; CA 2437467 A1 20020815; CA 2437476 A1 20020815; CA 2437546 A1 20020829; CA 2437725 A1 20020815; CA 2437733 A1 20020815; CA 2441487 A1 20020815; CN 1251521 C 20060412; CN 1498461 A 20040519; CN 1498469 A 20040519; CN 1498472 A 20040519; CN 1498485 A 20040519; CN 1498507 A 20040519; CN 1541463 A 20041027; DE 60210933 D1 20060601; DE 60210933 T2 20070426; DE 60214981 D1 20061109; DE 60214981 T2 20070503; DE 60224506 D1 20080221; DE 60224506 T2 20090108; EP 1364474 A1 20031126; EP 1364474 A4 20050323; EP 1364496 A1 20031126; EP 1364496 A4 20050629; EP 1366584 A1 20031203; EP 1366584 A4 20050504; EP 1366584 B1 20080109; EP 1366585 A1 20031203; EP 1366585 A4 20050615; EP 1366585 B1 20060426; EP 1366587 A1 20031203; EP 1366587 A4 20050629; EP 1366629 A1 20031203; EP 1366629 A4 20050810; EP 1366629 B1 20060927; WO 02063805 A1 20020815; WO 02063805 A9 20030327; WO 02063807 A1 20020815; WO 02063810 A1 20020815; WO 02063891 A1 20020815; WO 02063891 A9 20040506; WO 02067514 A1 20020829

DOCDB simple family (application)
US 0203324 W 20020206; AT 02709322 T 20020206; AT 02720902 T 20020206; AT 02740071 T 20020206; CA 2437467 A 20020206; CA 2437476 A 20020206; CA 2437546 A 20020206; CA 2437725 A 20020206; CA 2437733 A 20020206; CA 2441487 A 20020206; CN 02806674 A 20020206; CN 02806675 A 20020206; CN 02806676 A 20020206; CN 02806677 A 20020206; CN 02806924 A 20020206; CN 02807121 A 20020206; DE 60210933 T 20020206; DE 60214981 T 20020206; DE 60224506 T 20020206; EP 02706145 A 20020206;