

Title (en)
COMMON TIME REFERENCE FOR PACKET SWITCHES

Title (de)
GEMEINSAME REFERENZZEIT FÜR PAKETVERMITTLUNGEN

Title (fr)
REFERENCE DE TEMPS COMMUNE POUR COMMUTATION DE PAQUETS DE DONNEES

Publication
EP 1004190 A4 20020502 (EN)

Application
EP 99927505 A 19990611

Priority

- US 9913311 W 19990611
- US 8889198 P 19980611
- US 8889398 P 19980611
- US 8890698 P 19980611
- US 8891498 P 19980611
- US 8891598 P 19980611
- US 8898398 P 19980611
- US 12051598 A 19980722
- US 12052998 A 19980722
- US 12063698 A 19980722
- US 12067298 A 19980722
- US 12070098 A 19980722
- US 12094498 A 19980722

Abstract (en)
[origin: WO9965198A1] The invention describes a method for transmitting and forwarding packets over a packet switching network via communication links with variable delays. The switches (10) of the network maintain a common time reference (002), which is obtained either from an external source or is generated and distributed internally. A packet that arrives to an input port (30) of a switch (10) is switched to an output port (40) based on specific routing information in the packet header. Each switch (10) along a route from a source to a destination forwards packets in periodic time intervals that are predefined using the common time reference. The time interval duration can be longer than the time duration required for transmitting a packet, in which case the exact position of a packet in the time interval is not predetermined.

IPC 1-7
H04L 12/66; H04Q 11/04; H04L 12/56; H04L 12/64

IPC 8 full level
H04L 12/64 (2006.01); **H04J 3/06** (2006.01); **H04Q 11/04** (2006.01)

CPC (source: EP)
H04L 12/6418 (2013.01); **H04L 47/10** (2013.01); **H04L 47/22** (2013.01); **H04L 47/28** (2013.01); **H04L 49/90** (2013.01); **H04J 3/0644** (2013.01); **H04J 3/0685** (2013.01); **H04J 2203/0082** (2013.01); **H04J 2203/0083** (2013.01); **H04L 69/28** (2013.01)

Citation (search report)

- [DX] US 5418779 A 19950523 - YEMINI YECHIAM [US], et al
- [A] YEMINI Y ET AL: "Isochronets: a high-speed network switching architecture", NETWORKING: FOUNDATION FOR THE FUTURE. SAN FRANCISCO, MAR. 28 - APR. 1, 1993, PROCEEDINGS OF THE ANNUAL JOINT CONFERENCE OF THE COMPUTER AND COMMUNICATIONS SOCIETIES (INFOCOM), LOS ALAMITOS, IEEE COMP. SOC. PRESS, US, vol. 2 CONF. 12, 28 March 1993 (1993-03-28), pages 740 - 747, XP010032243, ISBN: 0-8186-3580-0
- [DA] CHUNG-SHENG LI ET AL: "Time-driven priority flow control for real-time heterogeneous internetworking", PROCEEDINGS OF IEEE INFOCOM 1996. CONFERENCE ON COMPUTER COMMUNICATIONS. FIFTEENTH ANNUAL JOINT CONFERENCE OF THE IEEE COMPUTER AND COMMUNICATIONS SOCIETIES. NETWORKING THE NEXT GENERATION. SAN FRANCISCO, MAR. 24 - 28, 1996, PROCEEDINGS OF INFOCOM, L, vol. 2 CONF. 15, 24 March 1996 (1996-03-24), pages 189 - 197, XP010158070, ISBN: 0-8186-7293-5
- [PA] LI C-S ET AL: "Pseudo-isochronous cell forwarding", COMPUTER NETWORKS AND ISDN SYSTEMS, NORTH HOLLAND PUBLISHING. AMSTERDAM, NL, vol. 30, no. 24, 14 December 1998 (1998-12-14), pages 2359 - 2372, XP004150561, ISSN: 0169-7552
- See references of WO 9965198A1

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)
WO 9965198 A1 19991216; AT E359647 T1 20070515; CA 2308184 A1 19991216; CA 2308215 A1 19991216; EP 1004189 A1 20000531; EP 1004189 A4 20020502; EP 1004189 B1 20070411; EP 1004190 A1 20000531; EP 1004190 A4 20020502; WO 9965197 A1 19991216

DOCDB simple family (application)
US 9913311 W 19990611; AT 99927504 T 19990611; CA 2308184 A 19990611; CA 2308215 A 19990611; EP 99927504 A 19990611; EP 99927505 A 19990611; US 9913310 W 19990611