

Title (en)

APPARATUS AND METHOD FOR DETERMINING NETWORK TOPOLOGY

Title (de)

VERFAHREN UND VORRICHTUNG ZUR BESTIMMUNG EINER NETZTOPOLOGIE

Title (fr)

APPAREIL ET PROCEDE DE DETERMINATION DE LA TOPOLOGIE D'UN RESEAU

Publication

EP 0724795 A1 19960807 (EN)

Application

EP 94929738 A 19940829

Priority

- US 9409690 W 19940829
- US 11523293 A 19930901

Abstract (en)

[origin: WO9506989A1] An apparatus and method for determining the topology of a computer network including data-relay devices (A, B, C) and node devices (d, ... k) based on a comparison of source addresses heard by the various data relay-devices. A source address table is compiled for each port of each data-relay device, and for each select pair of ports the addresses in the source tables are compared to determine whether there is an intersection of heard devices. In order to account for directed transmissions which are not heard at every port, further comparison is made of all of the other ports of the device, eliminating the ports for which the intersection is the empty set. From the determined connections, a topology of the network is graphed showing direct and transitive connections. In cases where there is both a direct and transitive connection, the redundant direct connection is eliminated.

IPC 1-7

H04L 12/24; H04L 12/56

IPC 8 full level

G06F 13/00 (2006.01); **H04L 12/24** (2006.01); **H04L 12/56** (2006.01); **H04L 12/751** (2013.01); **H04L 45/02** (2022.01)

CPC (source: EP)

H04L 41/122 (2022.05); **H04L 45/02** (2013.01)

Citation (search report)

See references of WO 9506989A1

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

WO 9506989 A1 19950309; AU 675362 B2 19970130; AU 7868994 A 19950322; EP 0724795 A1 19960807; JP H09504913 A 19970513

DOCDB simple family (application)

US 9409690 W 19940829; AU 7868994 A 19940829; EP 94929738 A 19940829; JP 50820094 A 19940829