

Title (en)
METHOD AND DEVICE FOR LAYER 3 ADDRESS LEARNING

Title (de)
VERFAHREN UND VORRICHTUNG ZUM LERNEN VON SCHICHT-3-ADRESSEN

Title (fr)
SCHEMA D'AUTO-APPRENTISSAGE D'ADRESSE DE COUCHE 3 PROGRAMMABLE DANS UN COMMUTATEUR DE RESEAU

Publication
EP 1273139 A2 20030108 (EN)

Application
EP 01922614 A 20010323

Priority
• US 0109373 W 20010323
• US 54861200 A 20000413

Abstract (en)
[origin: WO0180493A2] A packet identifier module is configured for determining whether a received data packet originated from a router. If the packet identifier module identifies the received data packet as being from a network node other than the router, the switch module selectively stores the layer 2 address and the associated layer 3 address of the data packet as an associated layer 2-layer 3 address pair in an address table. The selective storing of the associated layer 2-layer 3 address is also referred to as learning the internet protocol (IP)-media access control association (MAC) of the data packet. By selectively learning the IP-MAC associations of selected data packets from the non-router ports, the likelihood of overflowing the address table is reduced. Furthermore, by using the learned IP-MAC associations, the network switch may switch layer 3 data packets bypassing the router and reducing latency.

IPC 1-7
H04L 12/46; H04L 12/44

IPC 8 full level
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CPC (source: EP KR)
H04L 45/742 (2013.01 - KR); **H04L 49/602** (2013.01 - EP); **H04L 61/10** (2013.01 - EP); **H04L 61/59** (2022.05 - EP); **H04L 49/3009** (2013.01 - EP); **H04L 49/351** (2013.01 - EP); **H04L 49/352** (2013.01 - EP); **H04L 61/00** (2013.01 - EP)

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