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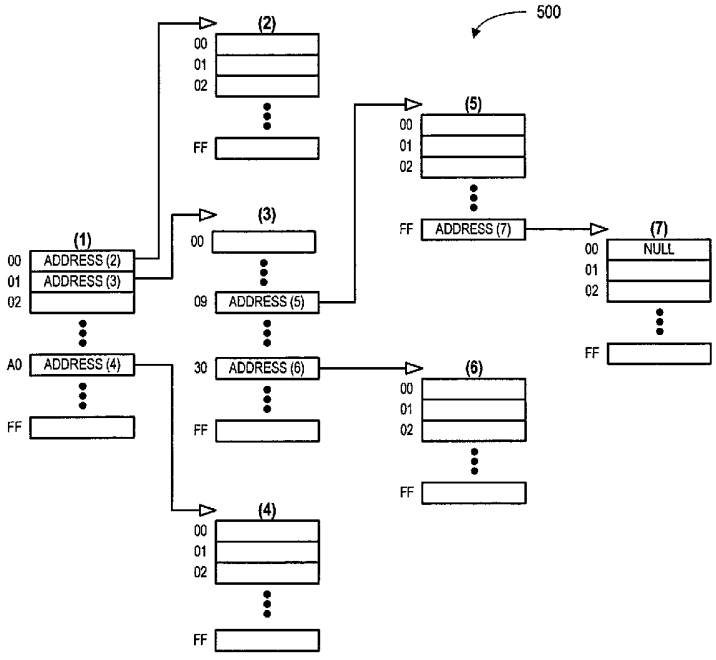
(54) Title: HIERARCHICAL PREFIX BASED ROUTING IN IPV6 NETWORKS




(57) Abstract: The application relates to prefix based routing in IPv6. The routing tables are organized as tire data structures. In some embodiments also the interface identifier part of the address is hashed to obtain additional routing information.

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# INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 03/24502

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H04L12/56

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 H04L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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| A | page 3, line 14 -page 4, line 2<br>page 11, line 8 -page 12, line 20<br>page 13, line 16 -page 14, line 35 | 14,15,17 |

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[X] Further documents are listed in the continuation of box C.

[X] Patent family members are listed in annex.

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| Date of the actual completion of the international search | Date of mailing of the international search report |
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| 28 January 2004 | 05/02/2004 |

| Name and mailing address of the ISA | Authorized officer |
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| European Patent Office, P.B. 5818 Patentlaan 2<br>NL – 2280 HV Rijswijk<br>Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,<br>Fax: (+31-70) 340-3016 | Goller, W |

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category ° | Citation of document, with indication,where appropriate, of the relevant passages | Relevant to claim No. |
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| X | KUO G-S ET AL: "A new architectural concept of hierarchical routing scheme for IPv6 in future high-speed large global Internet" TELECOMMUNICATIONS SYMPOSIUM, 1998. ITS '98 PROCEEDINGS. SBT/IEEE INTERNATIONAL SAO PAULO, BRAZIL 9-13 AUG. 1998, NEW YORK, NY, USA,IEEE, US, 9 August 1998 (1998-08-09), pages 638-643, XP010300847 ISBN: 0-7803-5030-8 | 1-13,16, 18-22 |
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