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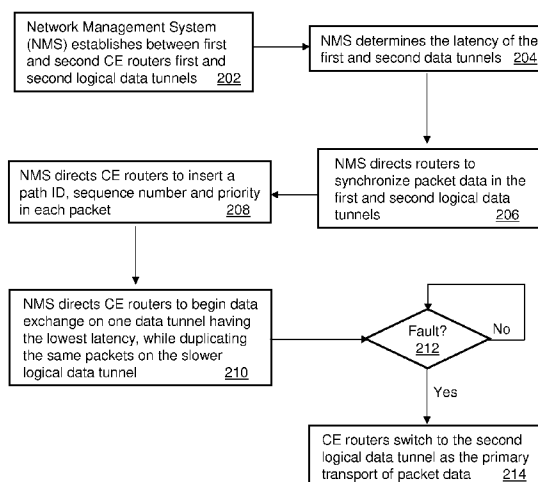
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(54) Title: METHOD AND APPARATUS FOR RELIABLE COMMUNICATIONS IN A PACKET NETWORK



200

(57) Abstract: A system and method are disclosed for reliable communications in a packet network. A system that incorporates teachings of the present disclosure may include, for example, a network management system (NMS) having a controller programmed to establish between first and second customer edge (CE) routers in a full mesh packet network first and second logical data tunnels conforming to an isolation protocol, synchronize packet data in the first and second logical data tunnels, enable packet data exchanges between the first and second CE routers over the first logical data tunnel, direct the first and second CE routers to duplicate the packet data exchanged between them over the second logical data tunnel, and direct the first and second CE routers to synchronously switch to the second logical data tunnel upon detecting a fault in the first logical data tunnel.

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## INTERNATIONAL SEARCH REPORT

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**A. CLASSIFICATION OF SUBJECT MATTER**  
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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)  
 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, INSPEC

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

| Category* | Citation of document, with indication, where appropriate, of the relevant passages                                                                                                                                                                                                                                                                                                                                                        | Relevant to claim No. |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| Y         | US 2004/199662 A1 (KAROL MARK J [US] ET AL) 7 October 2004 (2004-10-07) paragraphs [0016] - [0021]; figures 1,2 paragraphs [0039] - [0045]; figure 5 claims 1-8                                                                                                                                                                                                                                                                           | 1-20                  |
| Y         | <p>KODIALAM M ET AL: "Dynamic routing of bandwidth guaranteed tunnels with restoration"</p> <p>INFOCOM 2000. NINETEENTH ANNUAL JOINT CONFERENCE OF THE IEEE COMPUTER AND COMMUNICATIONS SOCIETIES. PROCEEDINGS. IEEE TEL AVIV, ISRAEL 26-30 MARCH 2000, PISCATAWAY, NJ, USA, IEEE, US, vol. 2, 26 March 2000 (2000-03-26), pages 902-911, XP010376180 ISBN: 0-7803-5880-5 Chapter I</p> <p style="text-align: center;">-----<br/>-/--</p> | 1-20                  |



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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

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| Y         | US 6 751 746 B1 (JAIN BIJENDRA N [US] ET AL) 15 June 2004 (2004-06-15)<br>column 3, line 57 - column 5, line 3<br>column 7, line 40 - column 8, line 16;<br>figure 2<br>column 14, lines 47-67; figure 6<br>----- | 1-20                  |
| Y         | US 2003/231614 A1 (BEYDA WILLIAM J [US] ET AL) 18 December 2003 (2003-12-18)<br>paragraphs [0013] - [0024]; figures 1-4<br>-----                                                                                  | 1-20                  |
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# INTERNATIONAL SEARCH REPORT

Information on patent family members

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