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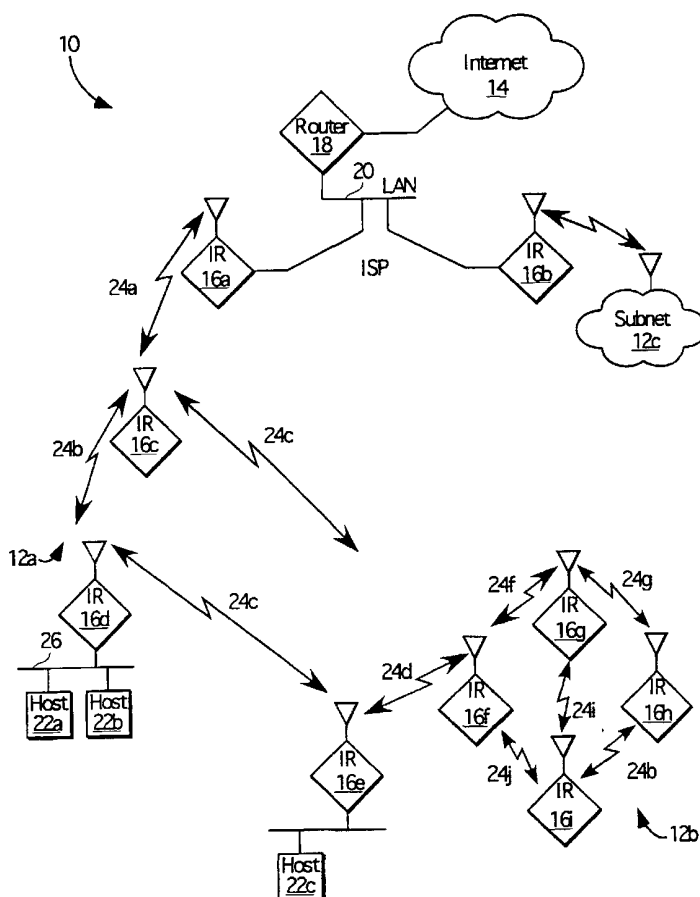
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[Continued on next page]

**(54) Title:** SYSTEM FOR COMMUNICATING LABELED ROUTING TREES



**(57) Abstract:** One or more labeled routing trees (LRTs) are produced at a router of a computer network according to a shortest path determination made over a partial topology graph of the network, which graph is produced according to knowledge of adjacent links of the router and or more LRTs of neighboring routers. The LRTs of the router may be updated in response to receipt of routing state update messages, and such messages may include local link identifiers assigned by a head of a link to which the identifiers pertain, and node parameters of a tail of the link to which the local link identifiers pertain. The routing state update messages may be transmitted within the network: (i) in response to a new destination node being detected by an existing node within the network, (ii) in response to a destination becoming unreachable by a collection of the existing nodes, (iii) in response to the change in the cost of a path to at least one destination exceeding a threshold and/or (iv) in situations where a routing loop may be encountered among two or more of the nodes of the network (e.g., at times when a path implied in the LRT of the router leads to a loop).

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# INTERNATIONAL SEARCH REPORT

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## 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

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WCNC. 1999 IEEE WIRELESS COMMUNICATIONS AND NETWORKING CONFERENCE, vol. 03, 24 September 1999 (1999-09-24), pages 1308-1312, XP002168435 Piscataway, NJ, USA, IEEE, USA ISBN: 0-7803-5668-3 IEEE Catalog Number: 99TH8466 page 1308, right-hand column, line 10 -page 1309, left-hand column, line 38 -----	1-27

☐ Further documents are listed in the continuation of box C.

☐ Patent family members are listed in annex.

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