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(54) **Title:** METHOD AND SYSTEM FOR IMPROVING A WIRELESS COMMUNICATION ROUTE

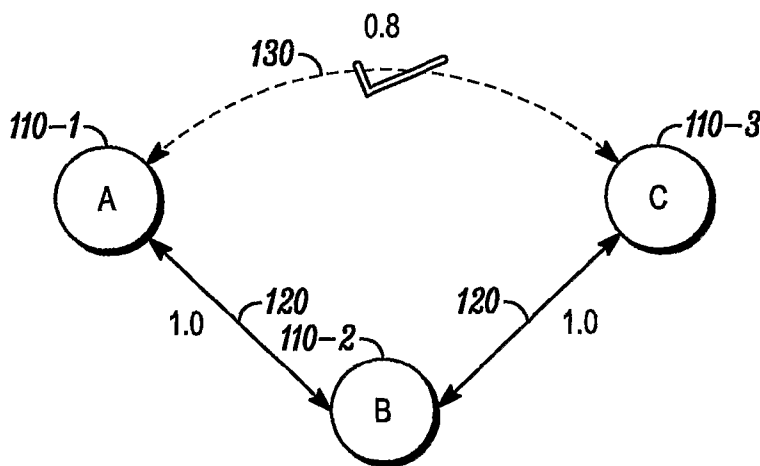


FIG. 1

(57) **Abstract:** A system and method for improving a current wireless communication route, between a source node and a destination node in an on-demand wireless communication network, enables the current communication route to be improved even when the current route has not failed. The method includes analyzing at a local node a packet transmission from the source node, the packet transmission comprising a current route metric (step 705). The local node then determines that it can provide an improved wireless communication route, between the source node and the destination node, having a better route metric than the current route metric (step 710). A route improvement message is then transmitted from the local node to the source node (step 740).

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## INTERNATIONAL SEARCH REPORT

International application No.

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## A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - H04L 12/66 (2007.01)

USPC - 370/355

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(S) - H04L 12/66, 12/28, 1/00; H04Q 7/24, 7/20; G06F 3/00 (2007.01)

USPC - 370/355, 238, 252, 338, 241; 375/267; 709/239; 455/450, 452, 517; 715/735; 703/21

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 practicable, search terms used)

PatBas  $\beta$ , MicroPatent

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6,961,310 B2 (CAIN) 01 November 2005 (01.11.2005) entire document	1-3, 5, 7-13
Y		4, 6
Y	US 6,973,622 B1 (RAPPAPORT et al) 03 December 2005 (06.12.2005) entire document	4, 8
A	US 6,954,435 B2 (BILLHARTZ et al) 11 October 2005 (11.10.2005) entire document	1-13
A	US 2004/0260808 A1 (STRUTT) 23 December 2004 (23.12.2004) entire document	1-13
A	US 2005/0053005 A1 (CAIN et al) 10 March 2005 (10.03.2005) entire document	1-13

 Further documents are listed in the continuation of Box C.

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