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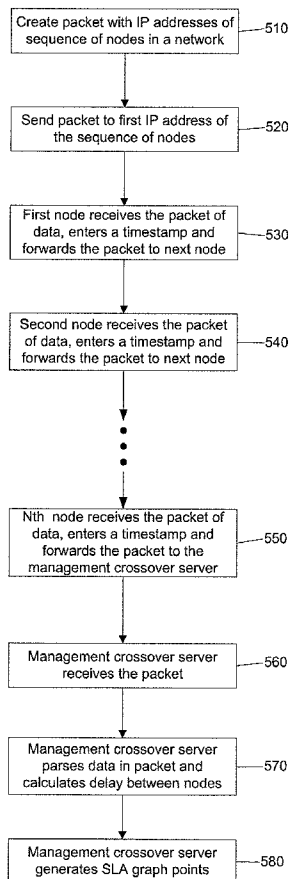
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[Continued on next page]

(54) Title: NETWORK LATENCY ANALYSIS PACKET AND METHOD



(57) Abstract: A packet and a method for analyzing network latency are disclosed. The disclosed systems and methods measure the latency between nodes in a network and do so while using less bandwidth and processing than traditional methods by using a packet to traverse a network (510, 520) and collect timestamps at various nodes (530, 540, 550) so that the delay in transit time between nodes can be calculated (570) when the packet returns to a server (560).

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- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
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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, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 993 146 A (LUCENT TECHNOLOGIES INC [US]) 12 April 2000 (2000-04-12)	1,3-5, 7-11,16, 18
Y	column 1, line 54 - column 2, line 25	2,14,15, 20
A	column 2, line 36 - line 43	6,12,13, 17,19
	column 3, line 11 - column 6, line 27; figures 1,2A,2B,4	
Y	US 2003/048754 A1 (BRUCKMAN LEON [IL]) 13 March 2003 (2003-03-13)	2,14
A	page 1, paragraph 6 page 2, paragraph 12 - paragraph 17	7,8
	-/--	

Further documents are listed in the continuation of Box C.

See patent family annex.

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P document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

& document member of the same patent family

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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.
Y	US 6 545 979 B1 (POULIN ANDRE [CA]) 8 April 2003 (2003-04-08)	15,20
A	column 1, line 57 - column 3, line 13 column 3, line 47 - column 5, line 54; figures 1,2	11
A	----- US 6 587 438 B1 (BREDEL JUERGEN [US]) 1 July 2003 (2003-07-01) column 4, line 36 - column 12, line 67; figure 10 -----	1,11,20

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/US2007/069412

Patent document cited in search report	Publication date	Publication date	Patent family member(s)	Publication date
EP 0993146	A	12-04-2000	AU 5267199 A	13-04-2000
			BR 9904410 A	05-09-2000
			CA 2280333 A1	09-04-2000
			CN 1260656 A	19-07-2000
			JP 2000156721 A	06-06-2000
			KR 20000028960 A	25-05-2000
			US 6683856 B1	27-01-2004
US 2003048754	A1	13-03-2003	NONE	
US 6545979	B1	08-04-2003	NONE	
US 6587438	B1	01-07-2003	NONE	