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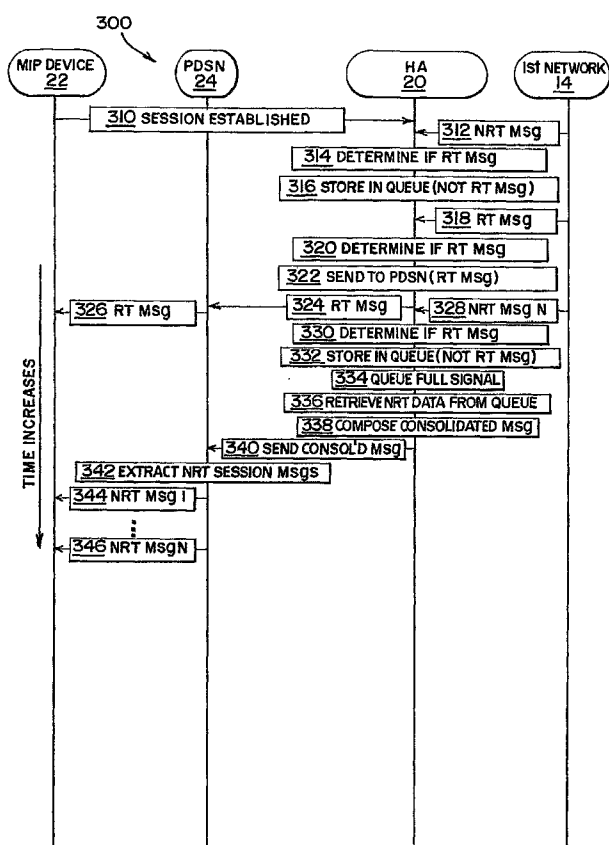
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[Continued on next page]

(54) Title: METHOD AND SYSTEM OF CONSOLIDATING MOBILE IP MESSAGES WITHIN A NETWORK



(57) Abstract: A method and system of consolidating mobile IP message within a network is provided. The method and system applies to the transfer of datagrams between home {20} and foreign agents and mobile IP devices [20]. The system provides for a temporary capture and storage of small non-real-time datagrams within the queue [316] by a home agent or packet data service node. Upon a queue full condition, the datagrams are consolidated into larger datagrams and transferred from the home agent [20] to a packet data service node [24] or from a packet data service node [24] to a home agent [20]. Real-time datagrams can be prioritized higher than non-real-time datagrams and transferred immediately to and from mobile IP devices without queuing. Optionally, a watchdog timer may be employed by the home agent [20] and packet data service nodes [24] to prompt the assembling and sending of consolidated datagrams to limit latency encountered by a queued data.



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International application No.

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A. CLASSIFICATION OF SUBJECT MATTER

IPC: **G06F 9/00**(2006.01);**H04L 12/43**(2006.01)

USPC: 370/473,461,447,462,509;718/103,100,107

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)

U.S. : 370/473, 461, 447, 462, 509; 718/103, 100, 107

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)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6,111, 888 A1 (GREEN ET AL.) 29 AUGUST 2000, SEE COL. 13, LINES 13-17.	1-6
X	US 6,490, 611 B1 (SHEN ET AL.) 02 DECEMBER 2002, SEE ABSTRACT, COL. 2, LINES 40-60, COL. 10, LINES 40-52, COL. 3, LINES 55-60, COL. 3, LINES 66-67).	7-20



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* Special categories of cited documents:		"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
"A"	document defining the general state of the art which is not considered to be of particular relevance	"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
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"O"	document referring to an oral disclosure, use, exhibition or other means		
"P"	document published prior to the international filing date but later than the priority date claimed		

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