



(12) **United States Patent**
Habusha et al.

(10) **Patent No.:** US **6,205,498 B1**
(45) **Date of Patent:** Mar. 20, 2001

(54) **METHOD AND SYSTEM FOR MESSAGE TRANSFER SESSION MANAGEMENT**

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(73) Assignee: **Microsoft Corporation**, Redmond, WA (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **09/053,415**

(22) Filed: **Apr. 1, 1998**

(51) **Int. Cl.**⁷ **G06F 13/14**

(52) **U.S. Cl.** **710/29; 379/202; 379/229; 340/825.5; 709/221; 709/228; 714/749; 714/708**

(58) **Field of Search** **710/29, 15; 709/221, 709/228; 379/202, 229; 340/825.5; 714/749, 708**

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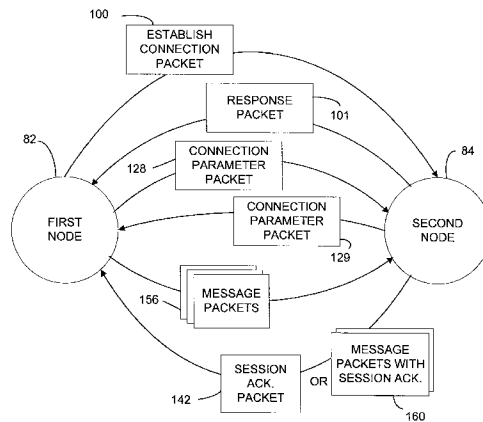
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(57)

ABSTRACT

A method and system for managing the transfer of message packets between first and second nodes in a message queuing system utilizes a session acknowledgment protocol to coordinate the two-way flow of packet transmission. In a session initiation phase, each node specifies a session acknowledgment timeout period and a transmission window size for transmission of message packets thereto. During the session, the first node transmits multiple message packets up to the window size set by the second node and stops to wait for a session acknowledgment from the second computer. The session acknowledgment may piggyback on a message packet sent to the first node. A window-size field in the session acknowledgment allows the receiving node to dynamically adjust the incoming data flow.

17 Claims, 5 Drawing Sheets



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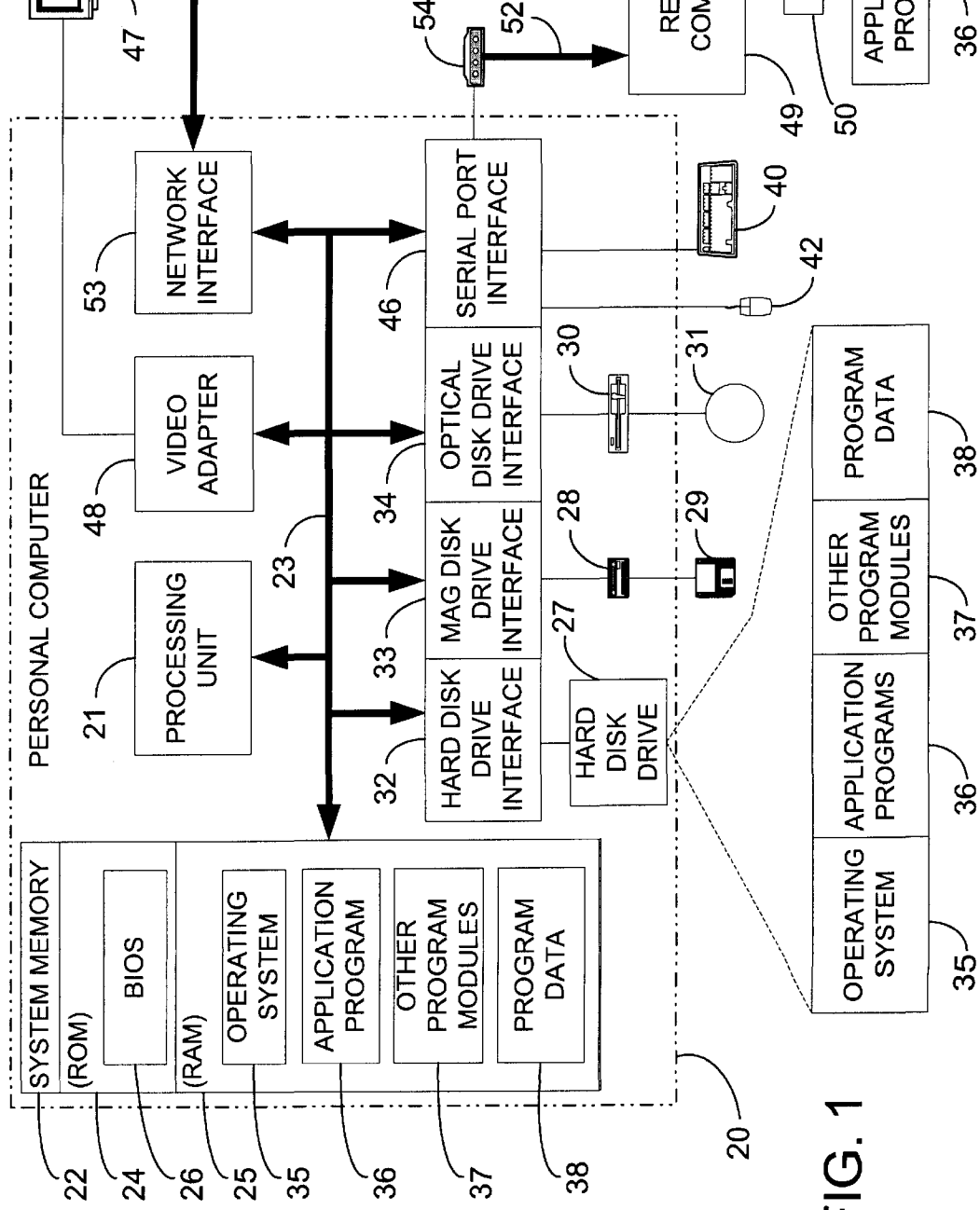


FIG. 1

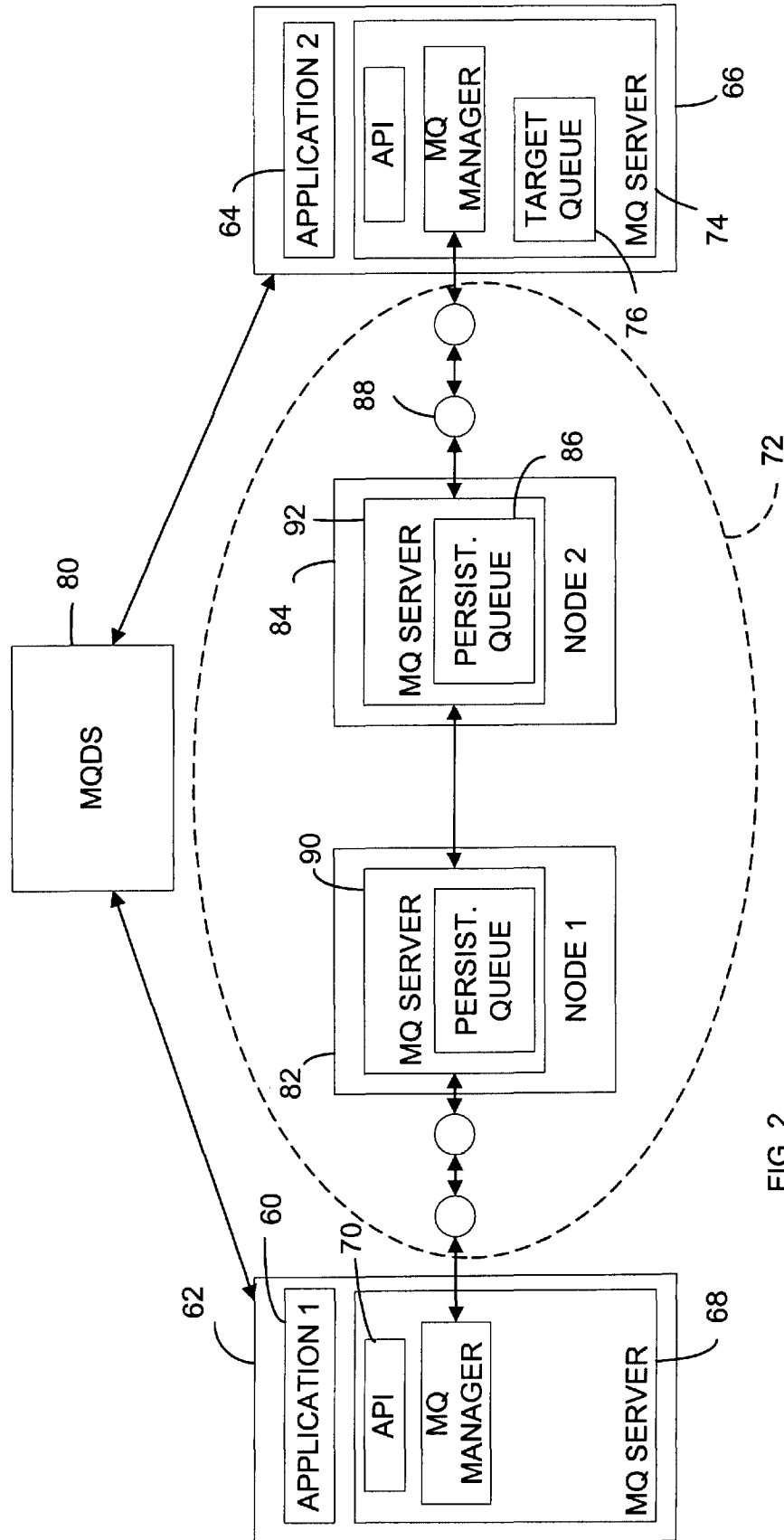


FIG. 2

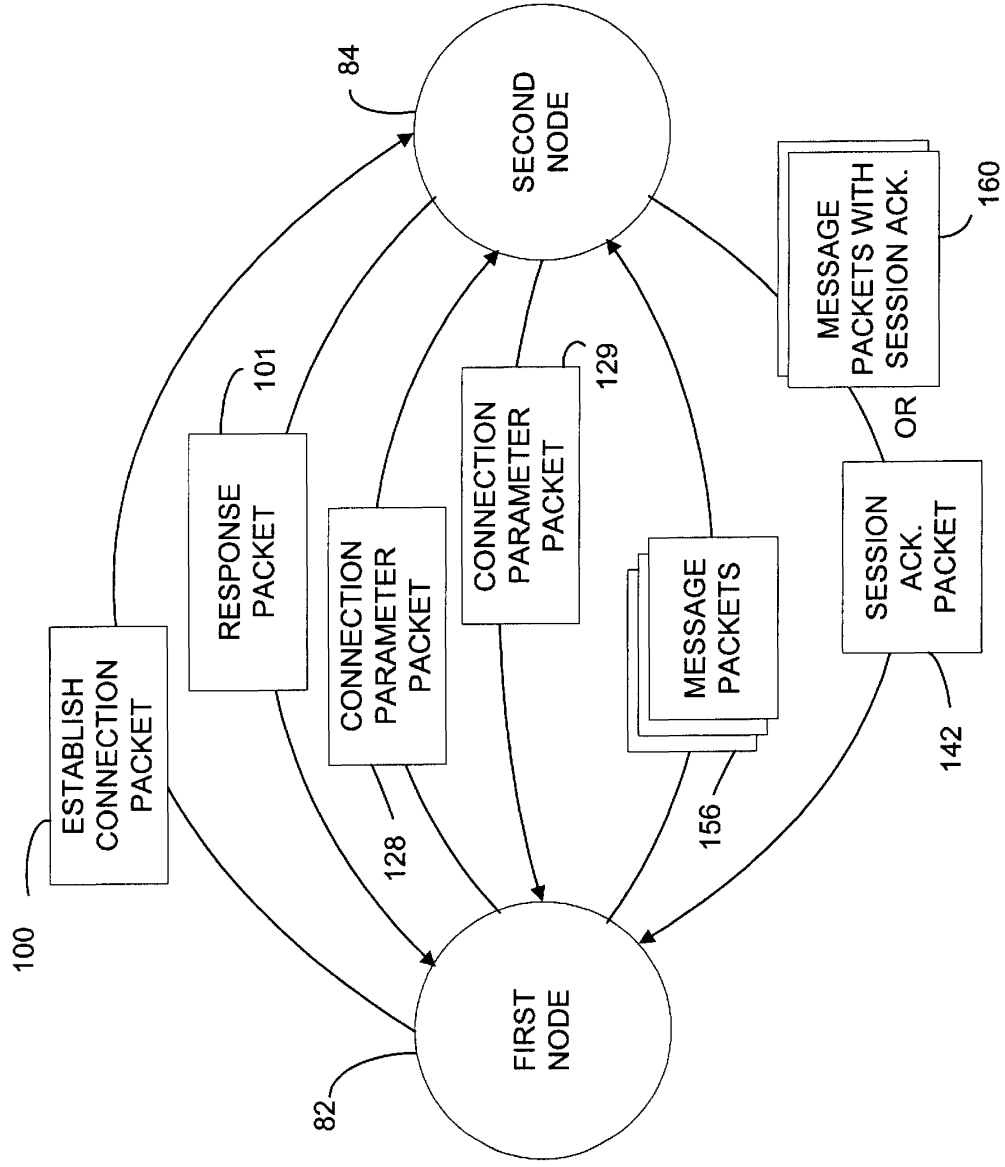


FIG. 3

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