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(12) **United States Patent**
Dharmarajan

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(54) **METHOD AND SYSTEM FOR AUTHORIZING A CLIENT COMPUTER TO ACCESS A SERVER COMPUTER** 6,401,223 B1 * 6/2002 DePenning 714/42
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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 902 days.

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(57) **ABSTRACT**

(21) Appl. No.: **09/650,105**

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(51) **Int. Cl.**
H04L 9/00 (2006.01)
G06F 13/14 (2006.01)

(52) **U.S. Cl.** **726/8**; 713/150; 726/2; 726/4; 726/21; 709/201; 709/219; 709/229; 370/401; 370/312; 370/332; 380/286

(58) **Field of Classification Search** 713/201, 713/100, 150; 714/42; 380/286; 370/401, 370/312, 332; 705/1, 400; 709/219, 229, 709/201; 726/3, 8-10, 2, 21, 4
See application file for complete search history.

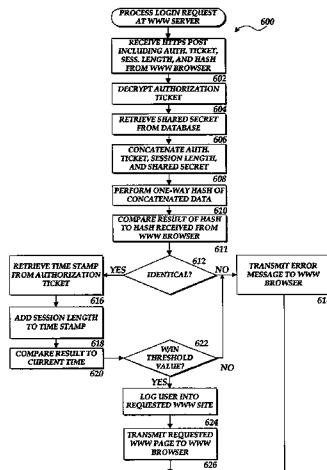
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The present invention includes a client computer, a first server computer, and a second server computer. The first server provides an authorization ticket containing a time stamp to the client computer when the client computer is authorized to access the first server. An elapsed time counter is started at the client computer when access is provided to the first server. When a request is received at the client computer to access the second server, the client computer determines the session length based upon the elapsed time counter. The client computer calculates a hash value for the authorization ticket, the session length, and a secret shared with the second server computer. The client computer transmits a login request to the second server including the authorization ticket, the session length, and the hash. The second server decrypts the authorization ticket and retrieves a copy of the shared secret. The second server executes a hash function on the authorization ticket, the session length, and the shared secret. The second server then compares the computed hash to the hash value received from the second client application. If the two hash values are identical, the second server retrieves the time stamp from the authorization ticket and adds the session length to the time stamp. The second server then compares the resulting value to the current time. If the resulting value and the current time are within a preset threshold value, the client computer is provided.

21 Claims, 6 Drawing Sheets



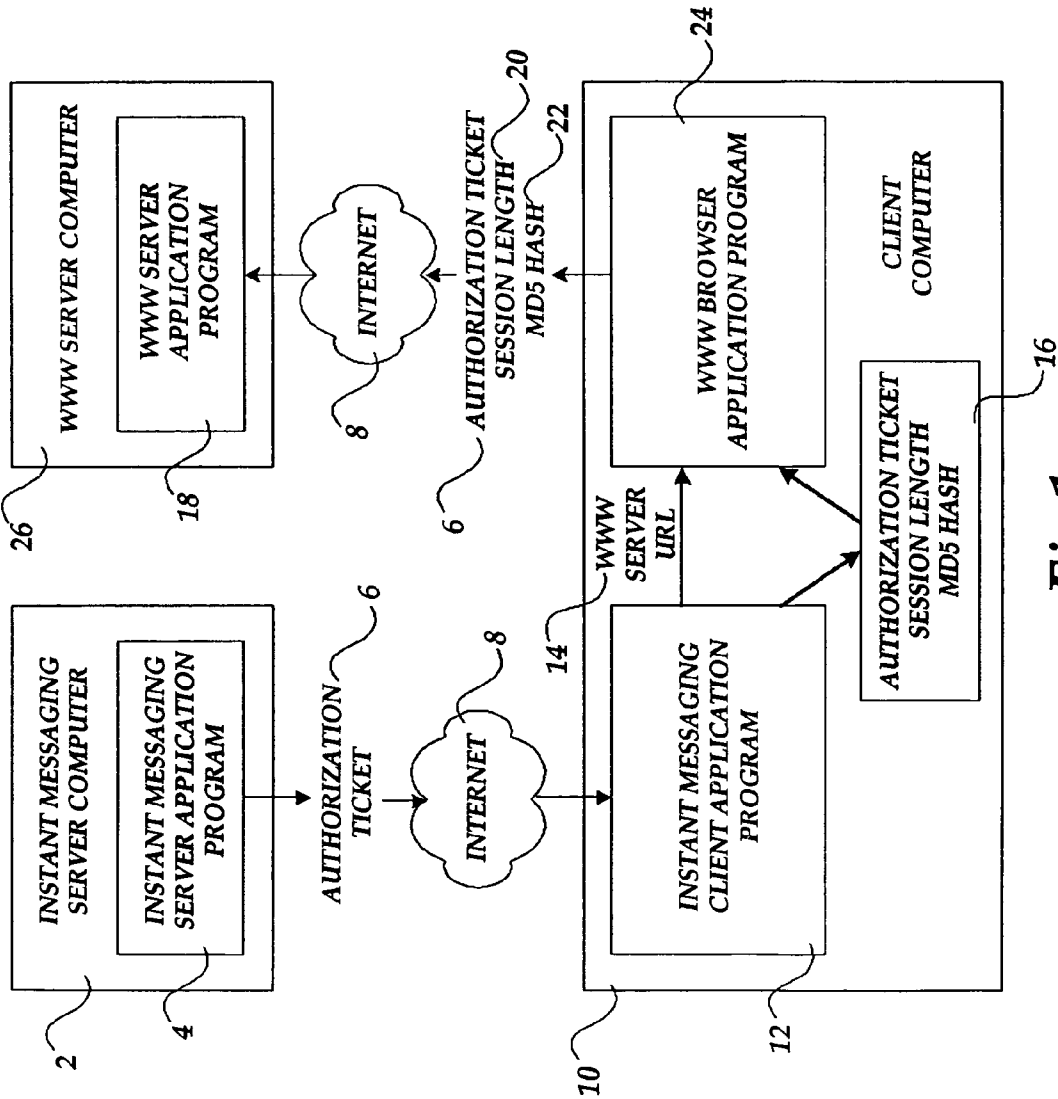
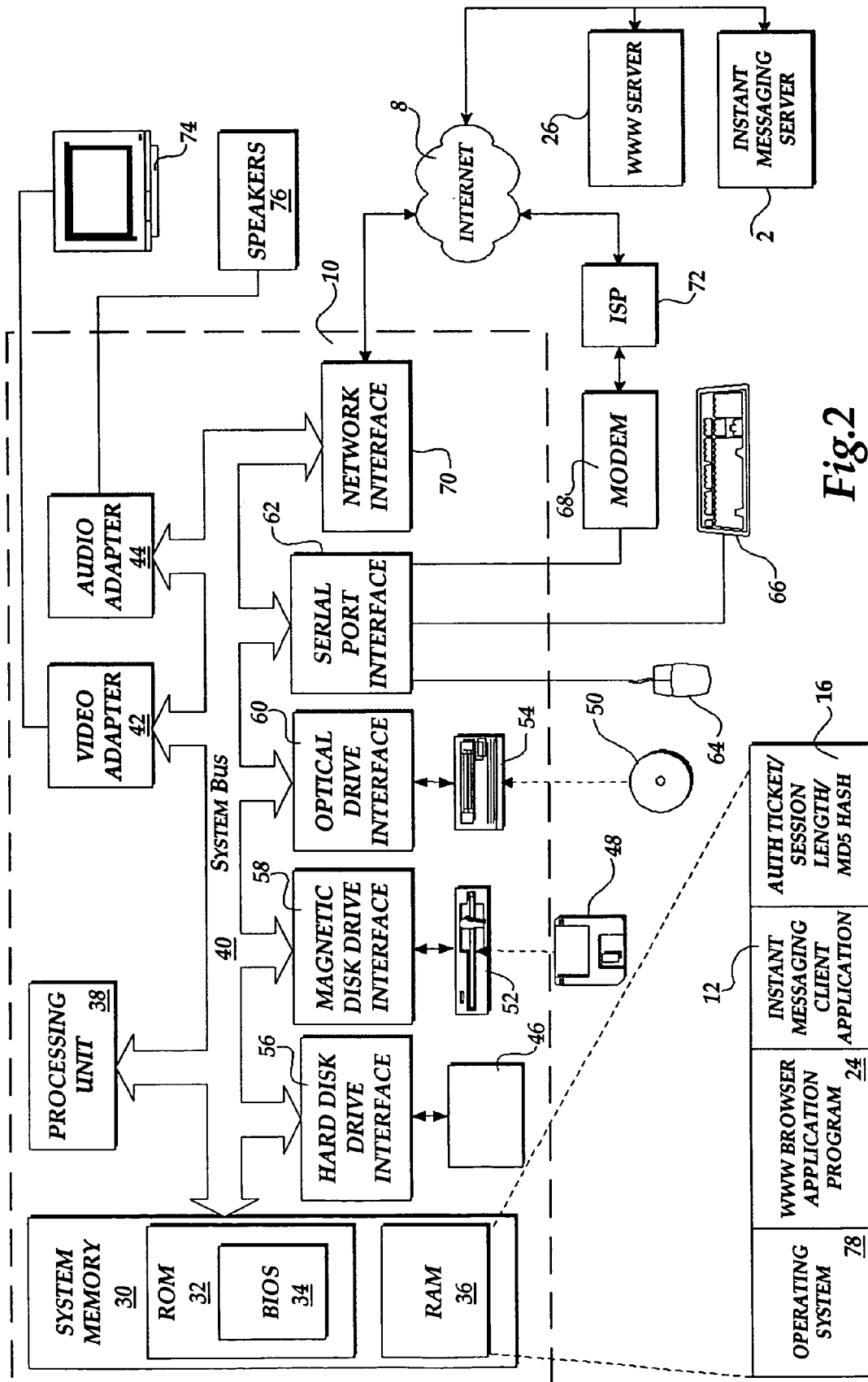


Fig.1



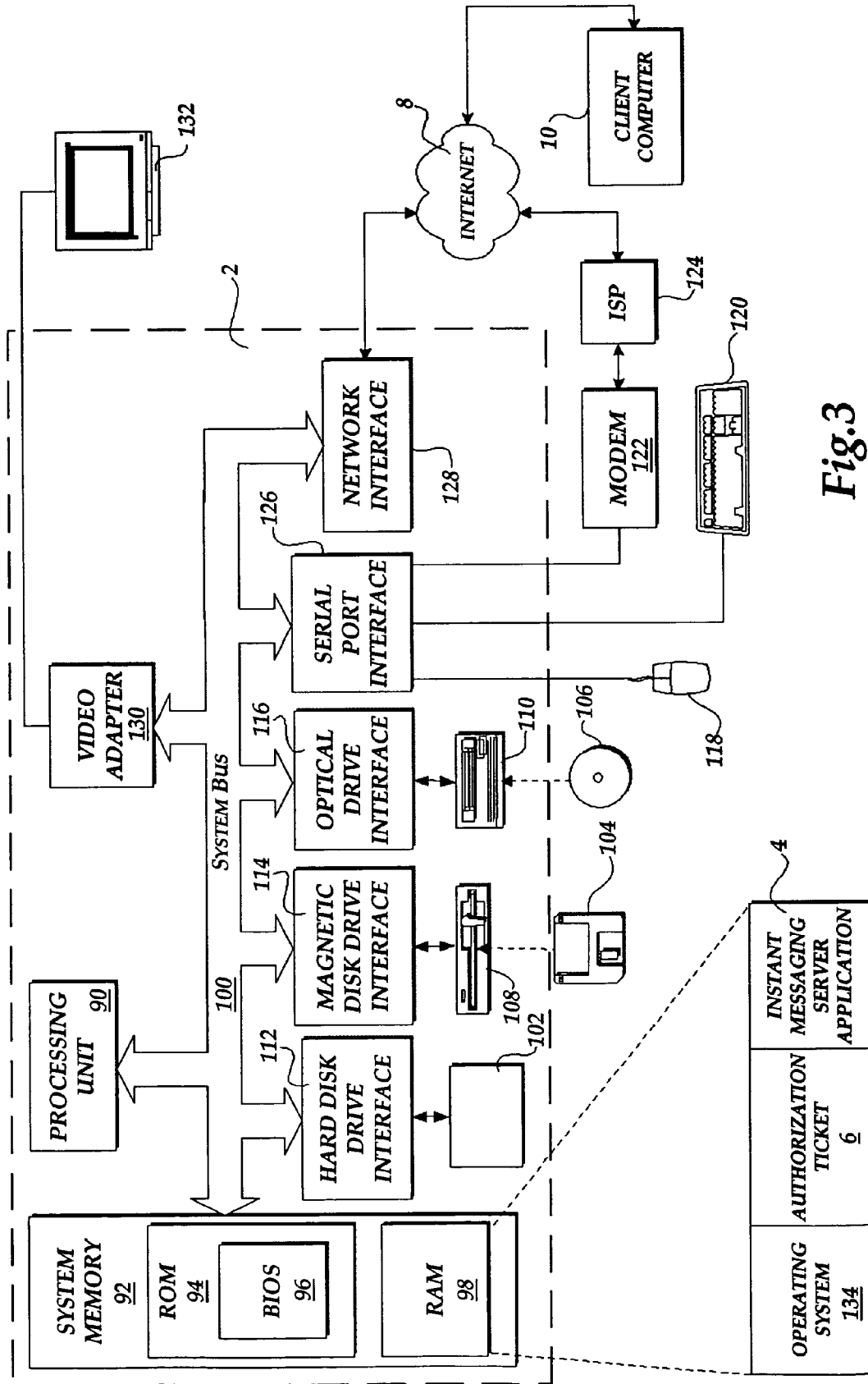


Fig.3

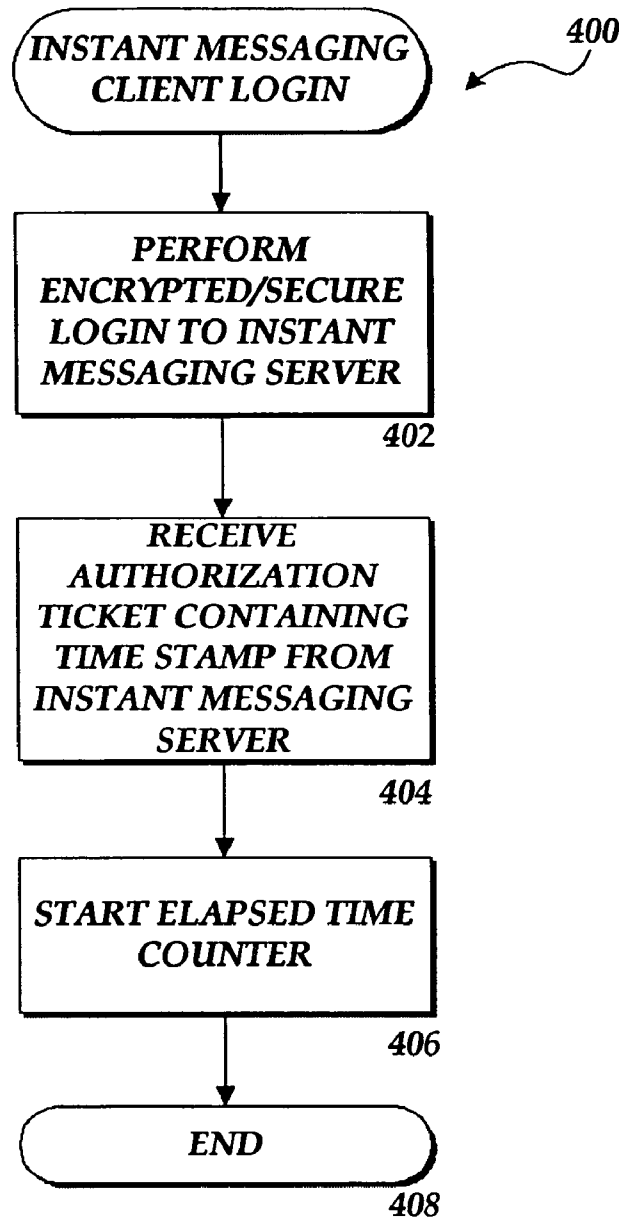


Fig.4

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