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

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(54) **METHOD MIGRATING OPEN NETWORK CONNECTIONS**

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(73) Assignee: **Sun Microsystems, Inc.**, Santa Clara, CA (US)

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(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 641 days.

"Nomadic Computing Environment Employing Wired and Wireless Networks" By Toshiaki Tanaka, Masahiro Morikura and Hitoshi Takanashi, IEICE Trans. Commun., vol. E81-B No. 8, Aug. 8, 1998, pp. 1565-1573 (XP-000788462).

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(22) Filed: **Mar. 22, 2001**

(65) **Prior Publication Data**

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(51) **Int. Cl.**<sup>7</sup> ..... **G06F 15/177**; G06F 15/16

(52) **U.S. Cl.** ..... **709/228**; 709/220; 709/221; 709/248

(58) **Field of Search** ..... 709/220, 221, 709/228, 248

(57) **ABSTRACT**

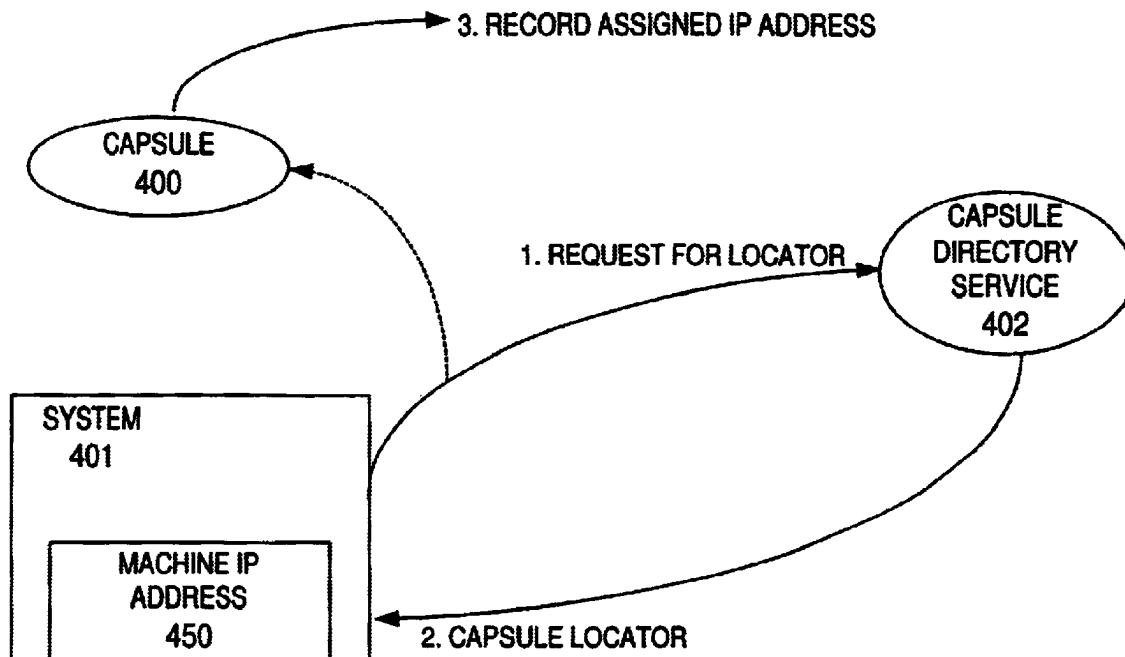
A mechanism for the migration of open network connections is described herein. According to one or more embodiments of the present invention, an active computing environment called compute capsule is provided. Each capsule has a unique locator. Packets are used to send information between capsules using the locators. When a capsule migrates, any open network connections that existed before the migration may continue when the capsule finishes the migration.

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**16 Claims, 11 Drawing Sheets**



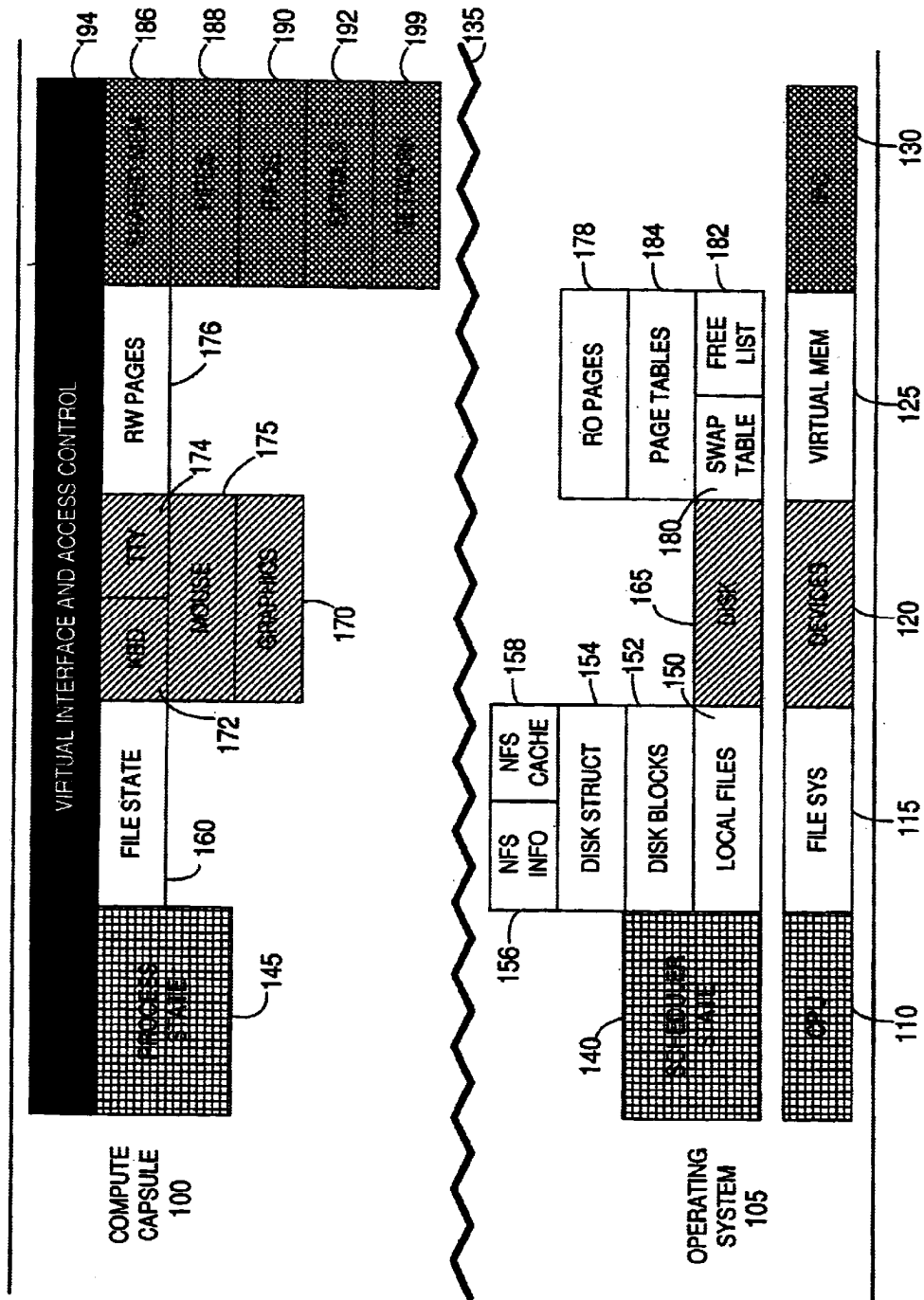


FIGURE 1

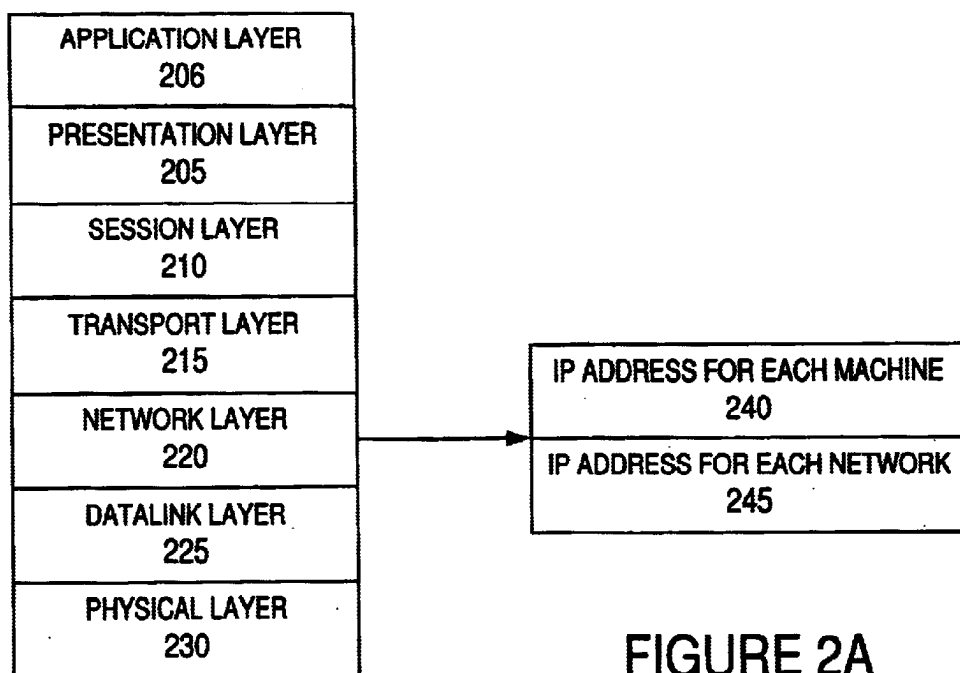


FIGURE 2A

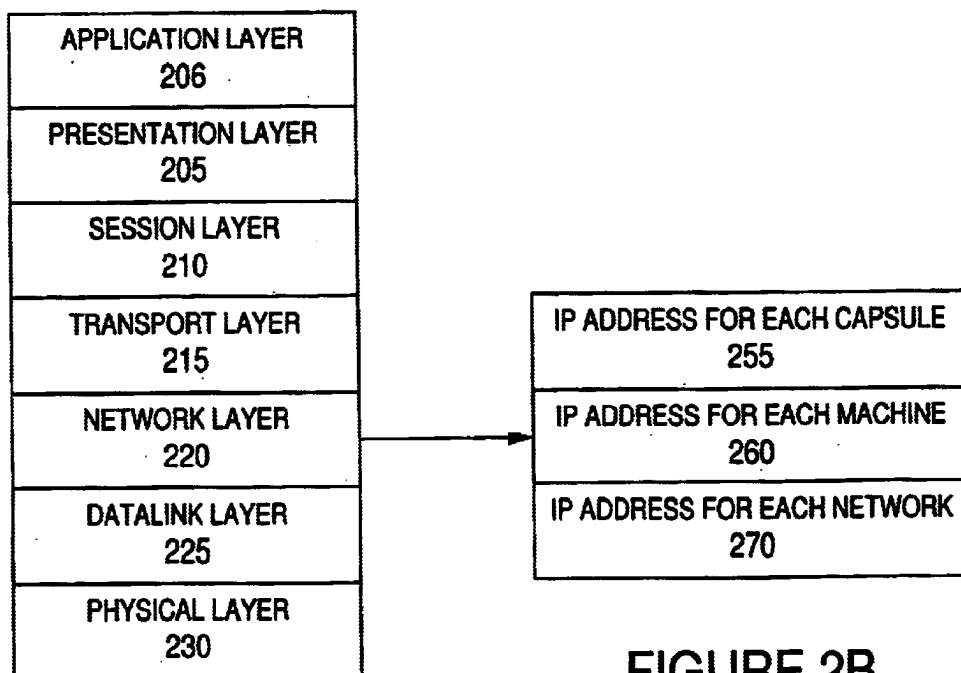


FIGURE 2B

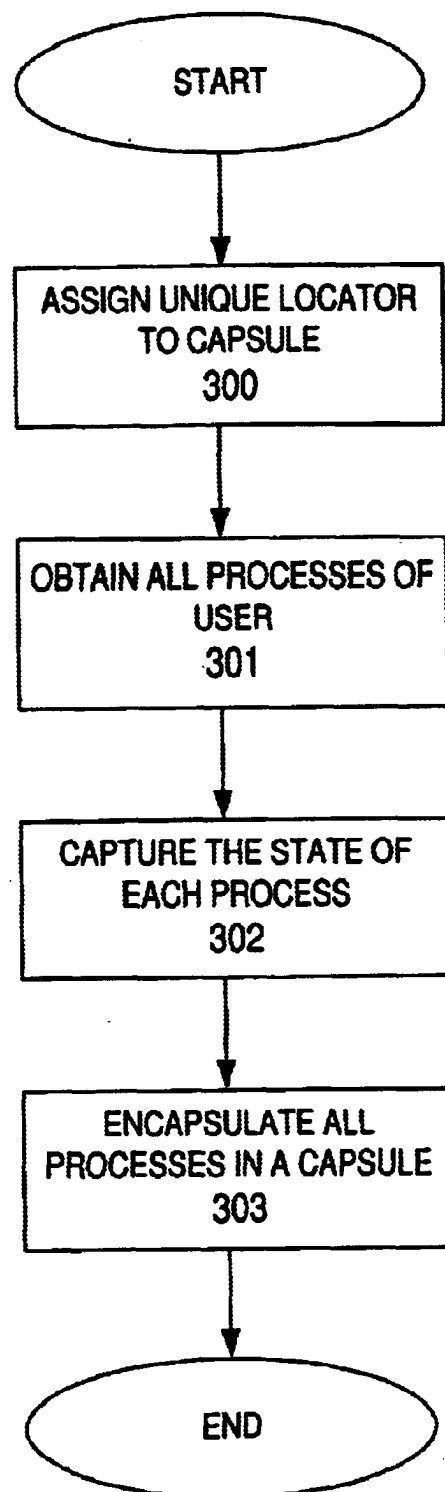


FIGURE 3

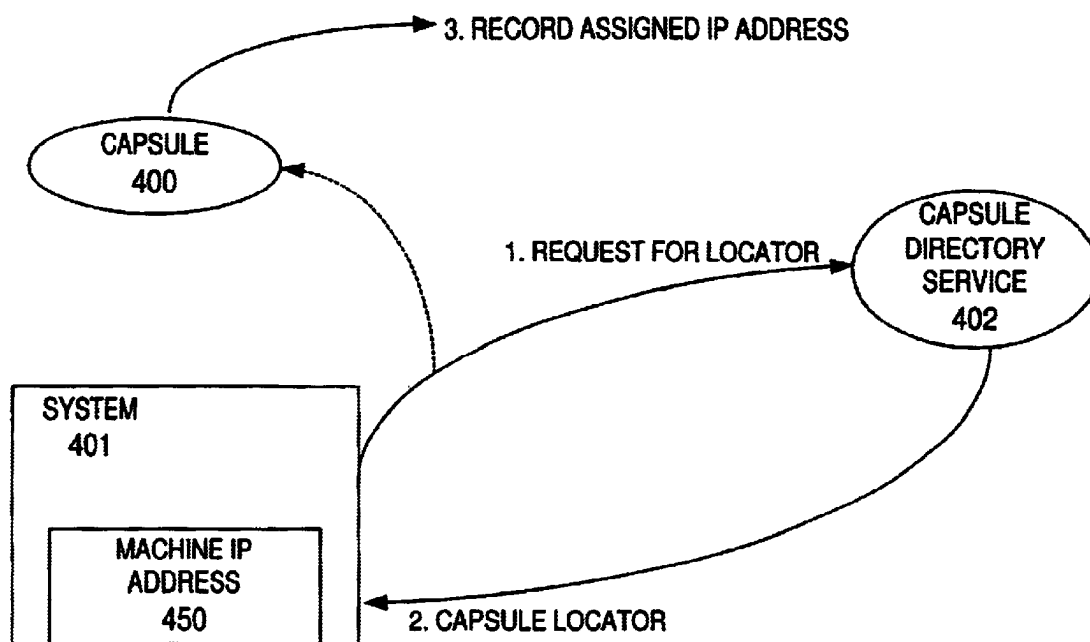


FIGURE 4

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