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

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(54) **STORE AND FORWARD ARCHITECTURE**

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**Related U.S. Application Data**

(63) Continuation of application No. 10/142,553, filed on May 9, 2002, now abandoned.

(51) **Int. Cl.**  
**G06F 15/16** (2006.01)

(52) **U.S. Cl.** ..... **709/203; 725/68; 725/110**

(58) **Field of Classification Search** ..... **709/203, 709/230; 725/68, 110**  
See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

6,327,625 B1 \* 12/2001 Wang et al. .... 709/235  
6,529,932 B1 \* 3/2003 Dadiomov et al. .... 718/101

6,622,925 B2 \* 9/2003 Carner et al. .... 236/46 R  
6,704,768 B1 \* 3/2004 Zombek et al. .... 709/201  
2002/0019848 A1 \* 2/2002 Sugawara et al. .... 709/206  
2002/0052968 A1 \* 5/2002 Bonefas et al. .... 709/231  
2002/0147645 A1 \* 10/2002 Alao et al. .... 705/14  
2002/0152299 A1 \* 10/2002 Traversat et al. .... 709/223  
2002/0169885 A1 \* 11/2002 Alao et al. .... 709/230  
2003/0172181 A1 \* 9/2003 Sharma ..... 709/238

**OTHER PUBLICATIONS**

Qayyum H., Using IVDS and VBI for Interactive Television, Consumer Electronic, IEEE Transactions on vol. 42, issue 3, Aug. 1996, pp. 657-666.\*

Sermersheim, J. Lightweight Directory Access Protocol (v3). Jan. 2001.\*

\* cited by examiner

*Primary Examiner*—Andrew Caldwell

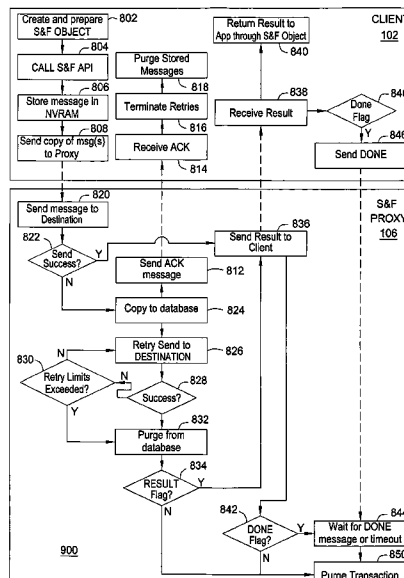
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(57) **ABSTRACT**

A store and forward (S&F) architecture is provided that supports multiple applications within an extensible network to direct information of various formats to any of multiple destinations. In the presently preferred embodiment of the invention, Java applications running on a client send non-priority data to any server on the application network or, alternatively, anywhere on a global telecommunications network such as the Internet, at some time in the future. In the preferred embodiment, S&F allows a client application to send usage statistics to a database on the application network. It also enables T-commerce purchases to be made by the user, where the purchase and other relevant information is sent to a destination web server as if the purchase had taken place on the web via a full web browser on an Internet-connected PC.

**21 Claims, 11 Drawing Sheets**



100

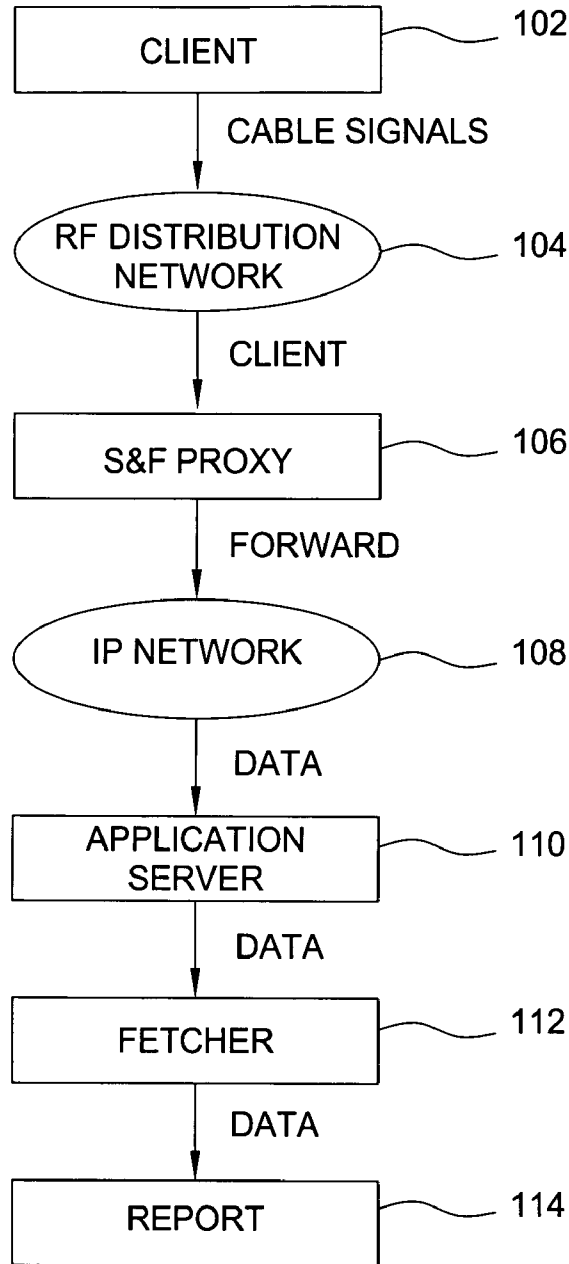


FIG 1A

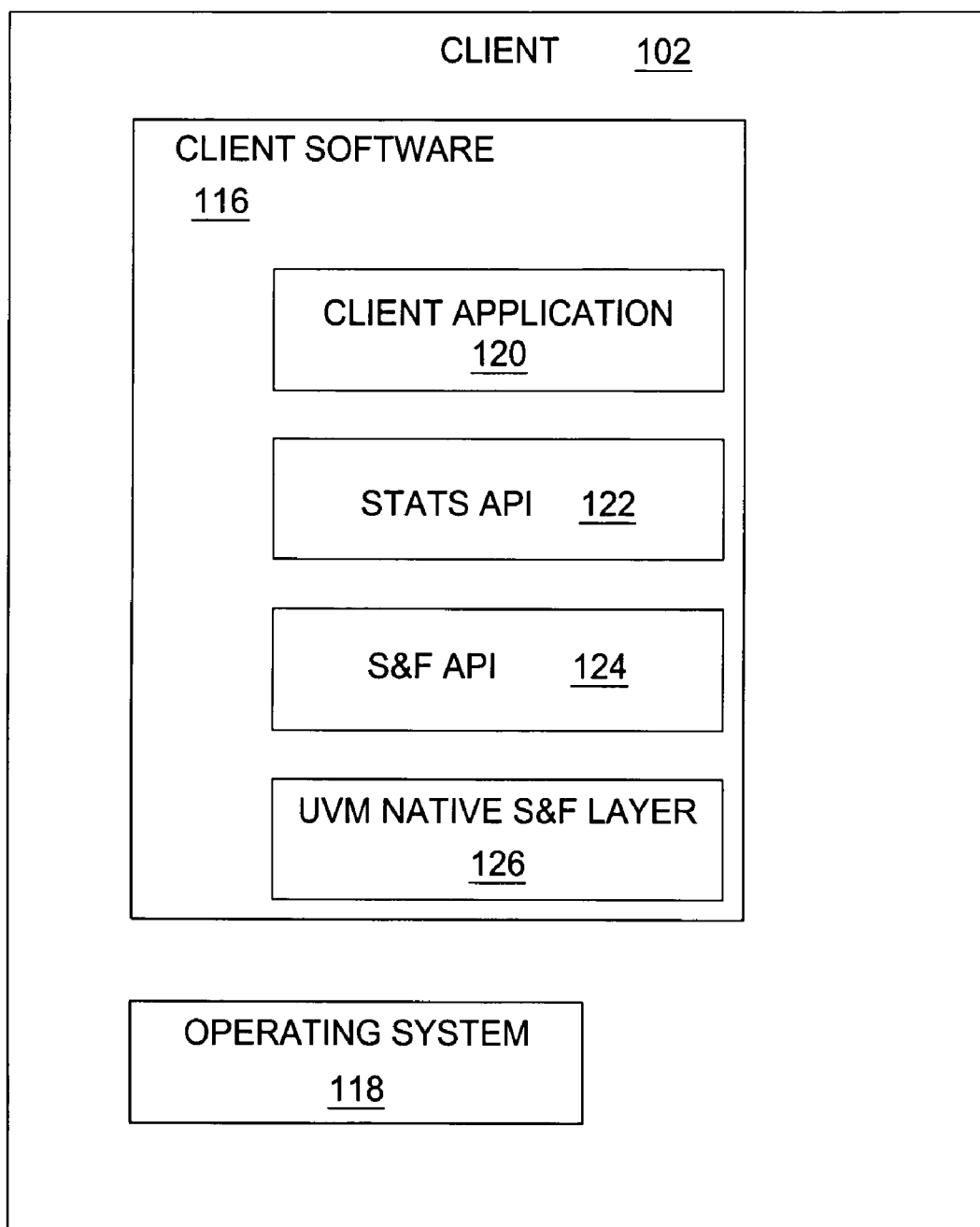


FIG. 1B

200

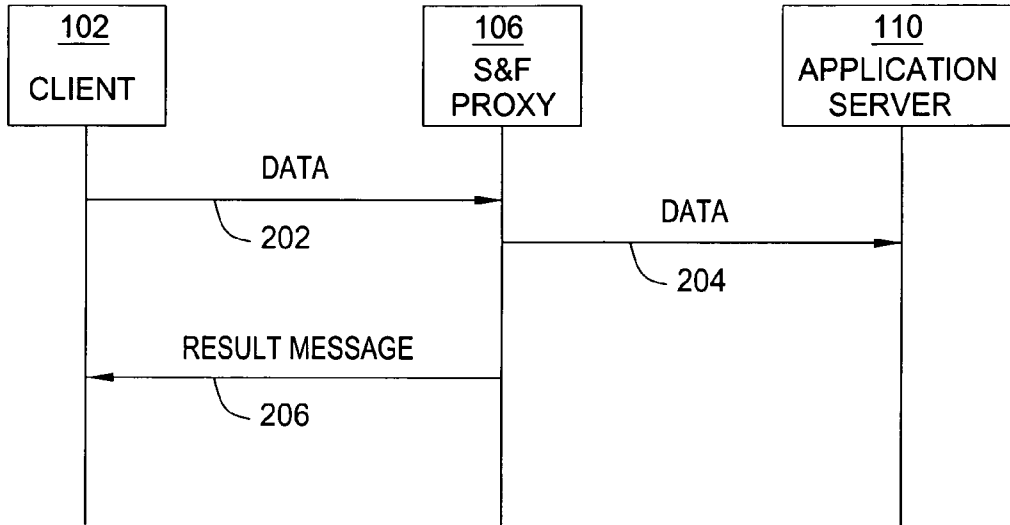


FIG. 2

300

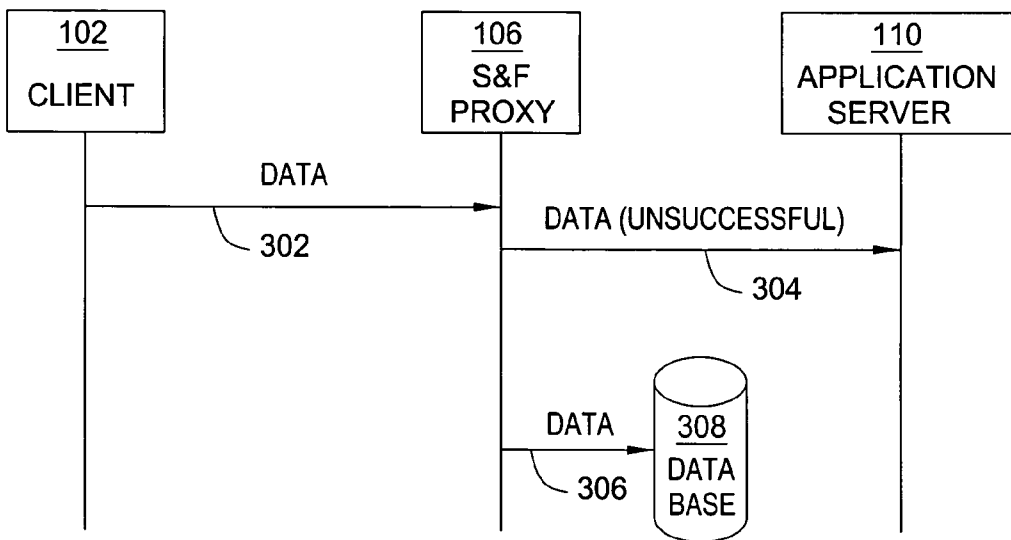


FIG. 3A

300

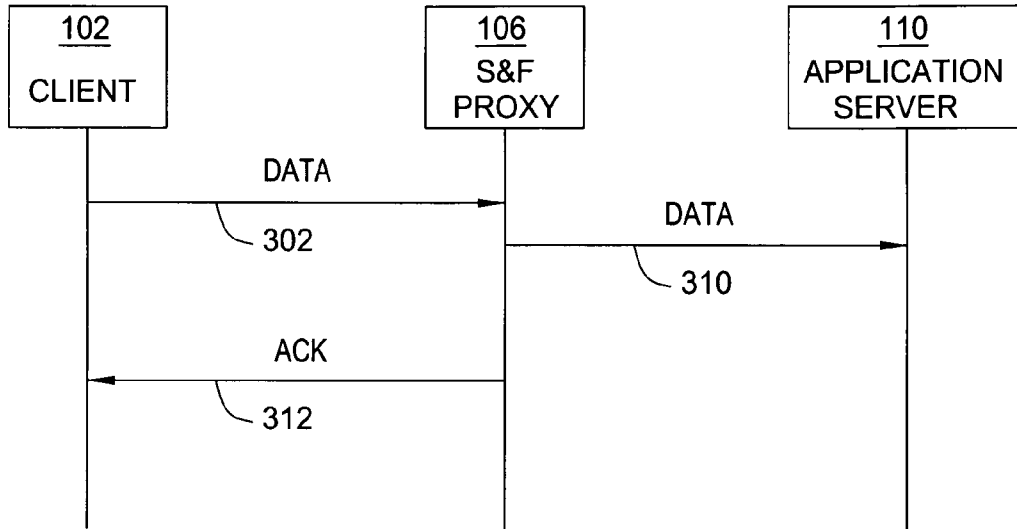


FIG. 3B

300

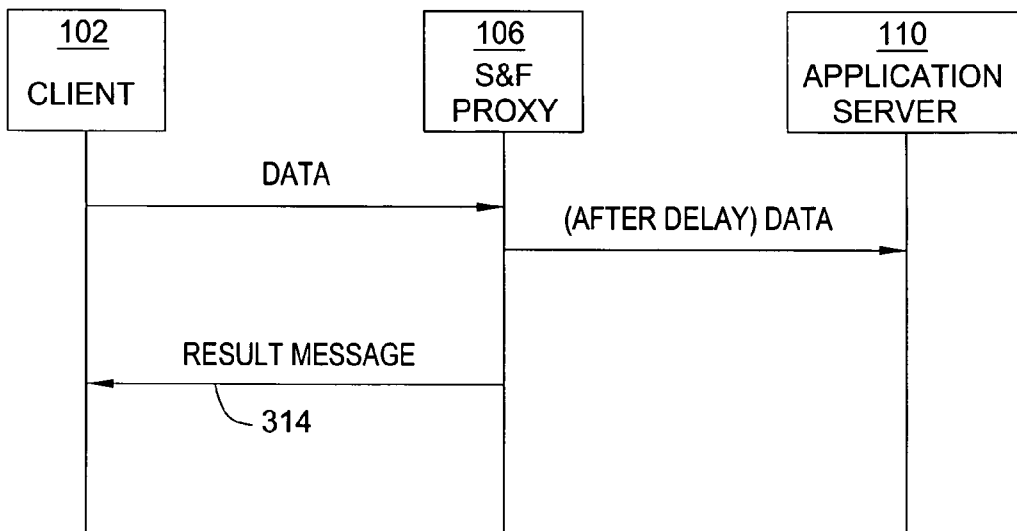


FIG. 3C

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