

# EXHIBIT 17

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

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(54) **DIGITAL WIRELESS TELEPHONE SYSTEM FOR DOWNLOADING SOFTWARE TO A DIGITAL TELEPHONE USING WIRELESS DATA LINK PROTOCOL**

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(22) Filed: **Jul. 28, 1998**

(51) **Int. Cl.**<sup>7</sup> ..... **H04Q 7/20**

(52) **U.S. Cl.** ..... **455/419; 370/401; 370/328**

(58) **Field of Search** ..... 370/401, 402, 370/403, 404, 338, 351, 352, 353, 354, 355, 356, 328, 400; 455/560, 561, 418, 419, 420; 709/209, 223

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*Primary Examiner*—Steven Nguyen

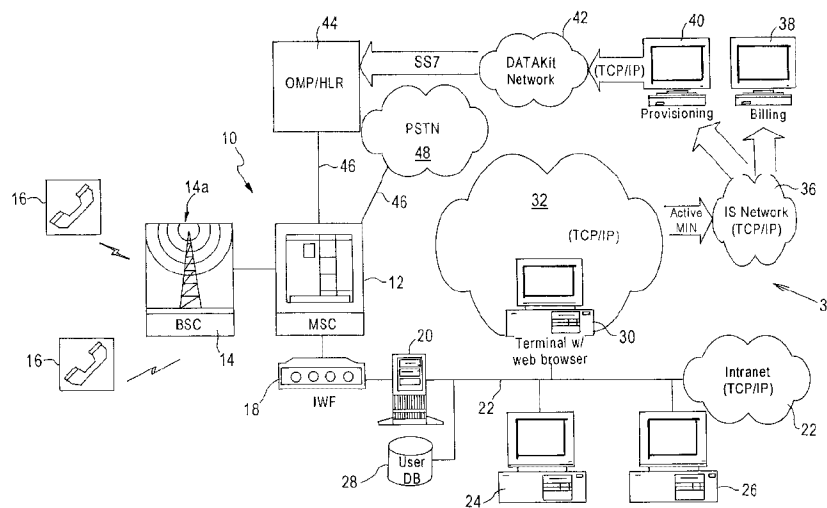
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(57) **ABSTRACT**

A digital wireless telephone downloads software related to digital telephone services using a client browser. The digital telephone initiates a data call to an interworking unit via a digital wireless telephone network, using a prescribed wireless data protocol such as IS-95A. The interworking unit recovers the payload of the wireless data packets to establish a two-way data link with the digital telephone. The interworking unit sends data messages to a destination server across a second two-way data link in a packet switched network to establish a two way session between the digital telephone and the destination server. The user of the digital telephone can thus communicate with the server via a two-way application-layer session using hypertext-based messaging. The digital telephone can thus navigate between different servers on the packet switched network for activation of different digital telephone services, and for downloading new software or updating existing software related to the digital telephone services.

**35 Claims, 6 Drawing Sheets**





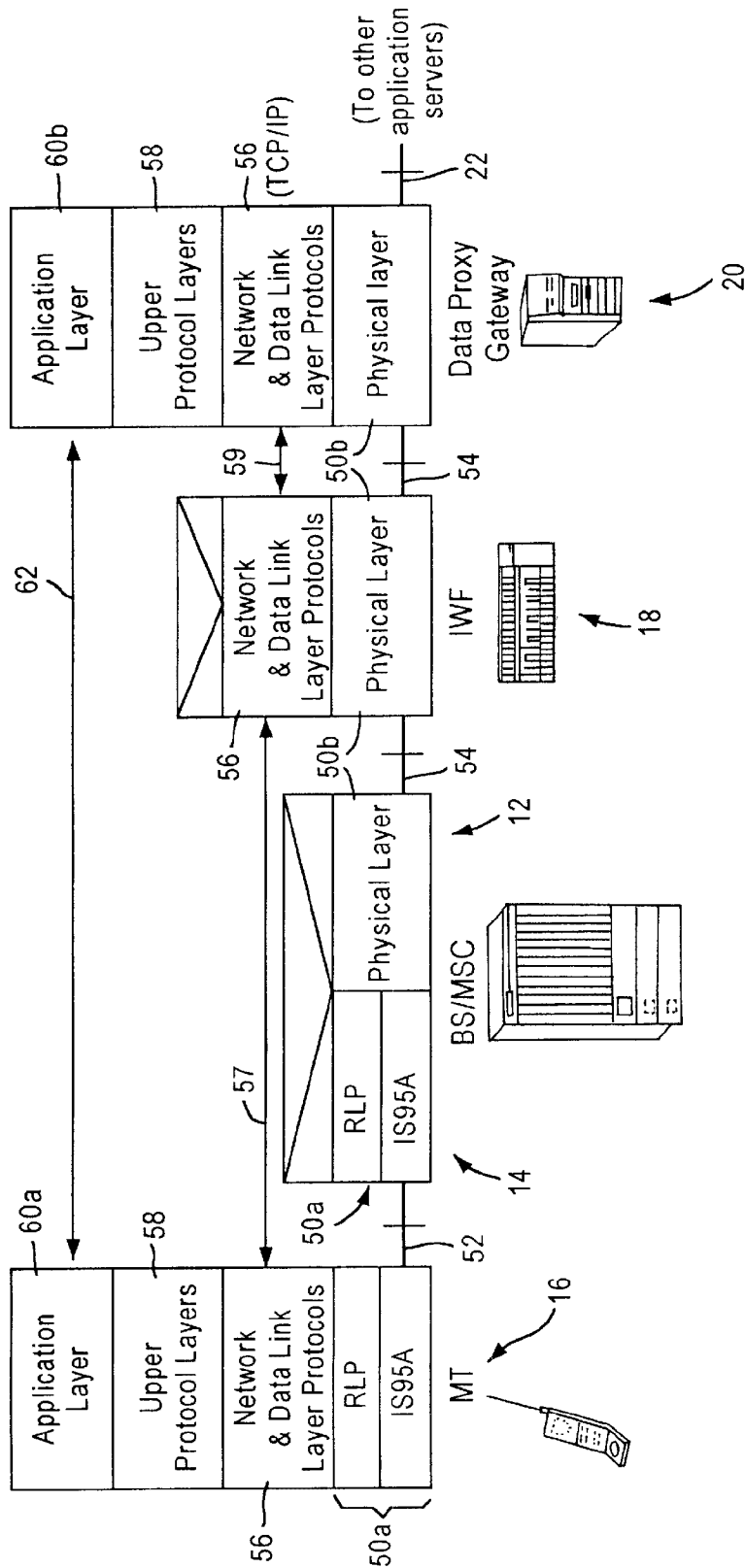


Figure 2

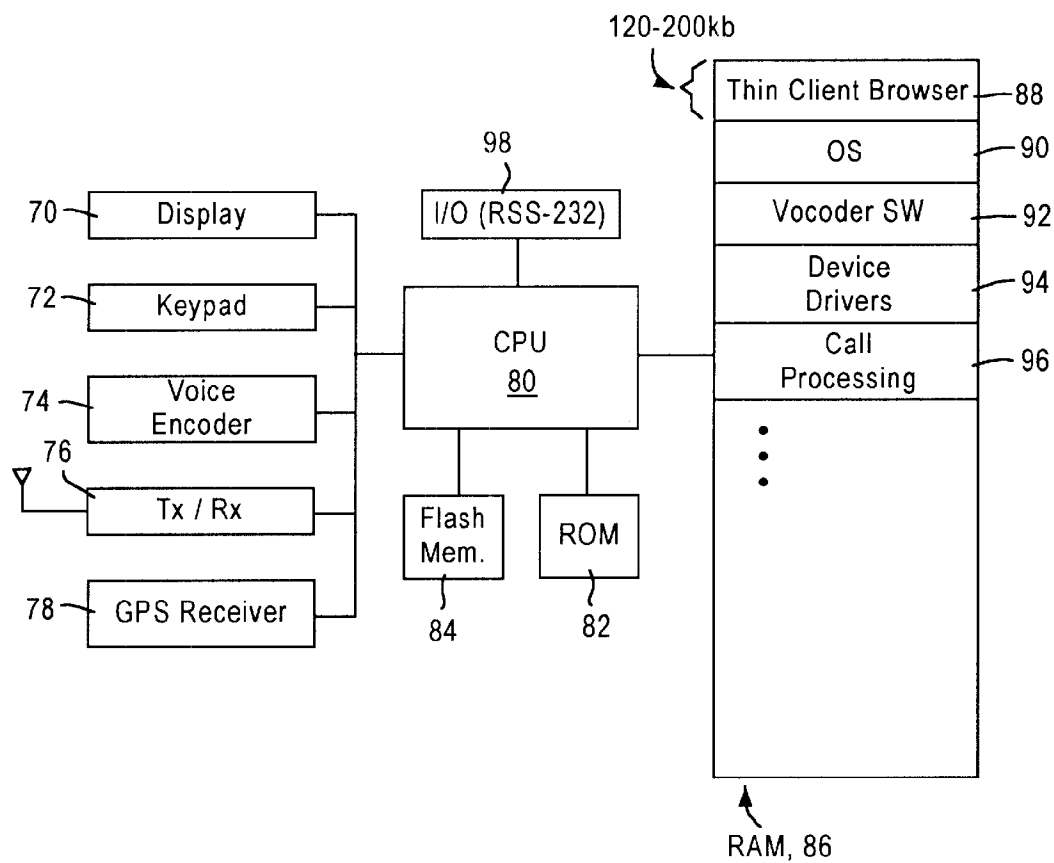


Figure 3

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