



US007284266B1

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

(10) **Patent No.:** **US 7,284,266 B1**  
(45) **Date of Patent:** **Oct. 16, 2007**

(54) **SYSTEM AND METHOD FOR SECURE BIOMETRIC IDENTIFICATION**

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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 0 days.

(21) Appl. No.: **09/531,720**

(22) Filed: **Mar. 21, 2000**

- (51) **Int. Cl.**
- G06F 15/16** (2006.01)
  - G06F 17/30** (2006.01)
  - G06F 7/04** (2006.01)
  - G06G 7/58** (2006.01)
  - G06K 19/00** (2006.01)
  - H04L 9/00** (2006.01)
  - H03M 1/68** (2006.01)
  - H04N 7/16** (2006.01)

(52) **U.S. Cl.** ..... **726/9**; 713/186; 726/28

(58) **Field of Classification Search** ..... 713/186, 713/159, 170; 705/61-64; 382/115; 726/28  
See application file for complete search history.

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*Primary Examiner*—Gilberto Barrón, Jr.

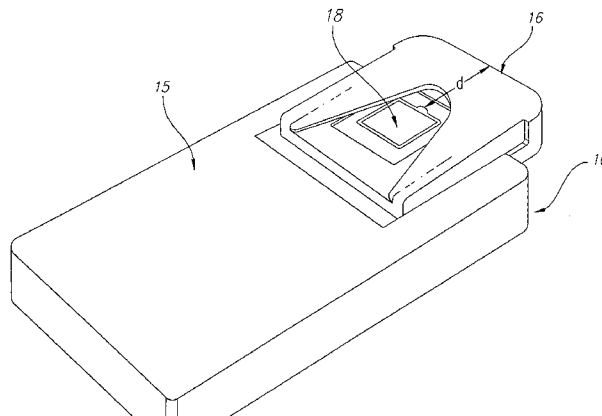
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(57) **ABSTRACT**

A system and method for secure biometric identification. The inventive system includes a mobile unit and a server. The mobile unit is adapted to receive biometric input and provide a first signal in response thereto. In the illustrative implementation, the mobile unit is a Personal Digital Assistant (PDA) and the biometric input is provided by a fingerprint sensor mounted thereon. A first transceiver is mounted on the PDA for transmitting the first signal and receiving a second signal in response thereto. The PDA is adapted to encrypt the first signal and decrypt the second signal. A secure device is mounted at the PDA. The secure device has two modes of operation: a first locked mode by which access thereto is prohibited and a second unlocked mode by which access thereto is enabled on receipt of the second signal. In the illustrative implementation, the secure device is an encrypted database for which the second signal is a decryption key. The server unit includes a second transceiver for receiving the first signal transmitted via the wireless link. The first and second transceivers are adapted to operate in accordance with the Bluetooth specification. The server is equipped with a system for authenticating the biometric data and providing the second signal in response thereto. The second signal is then communicated to the mobile unit where it is utilized to access the secure device, e.g., encrypted database.

**13 Claims, 7 Drawing Sheets**



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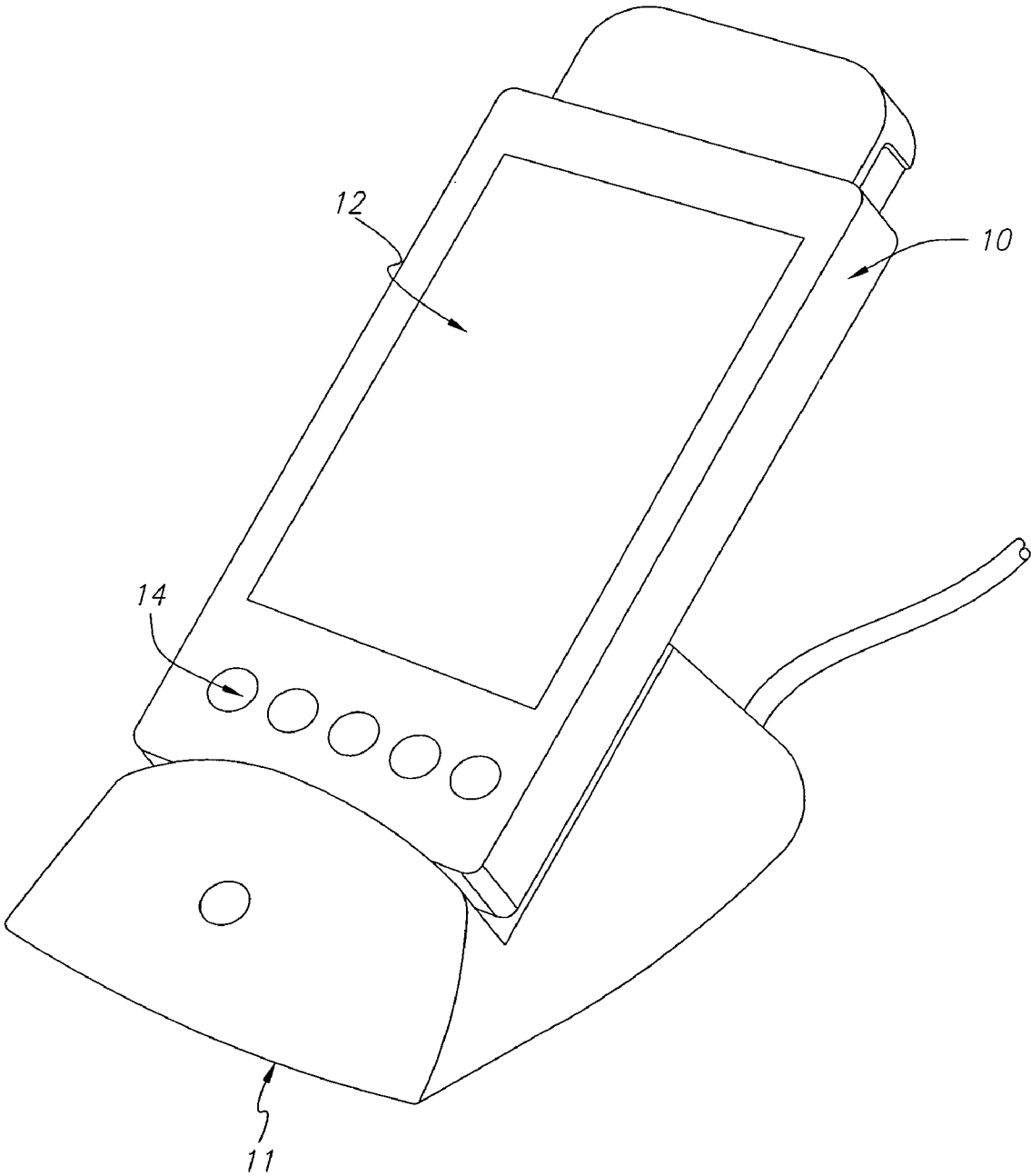


FIG. 1a

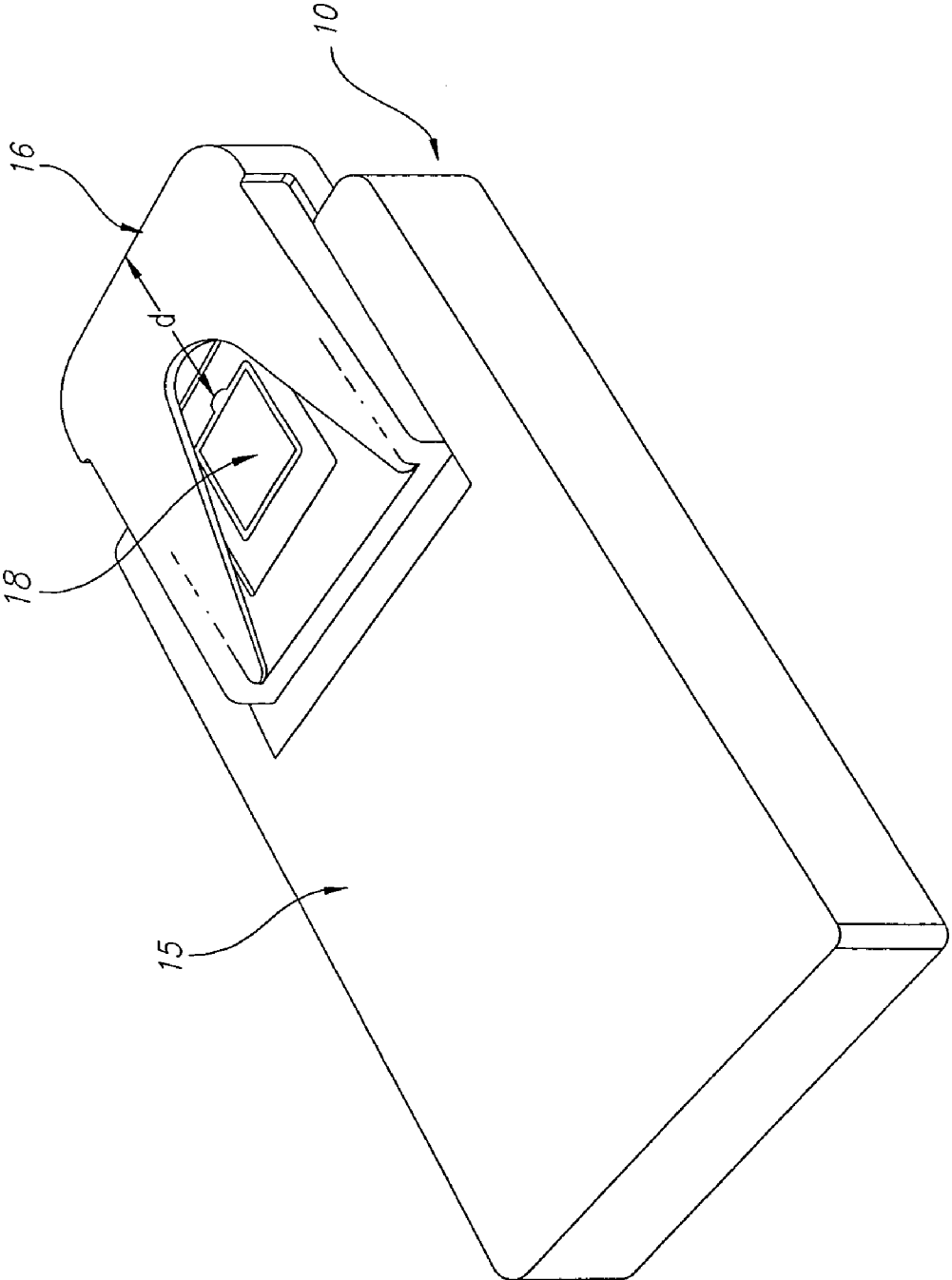
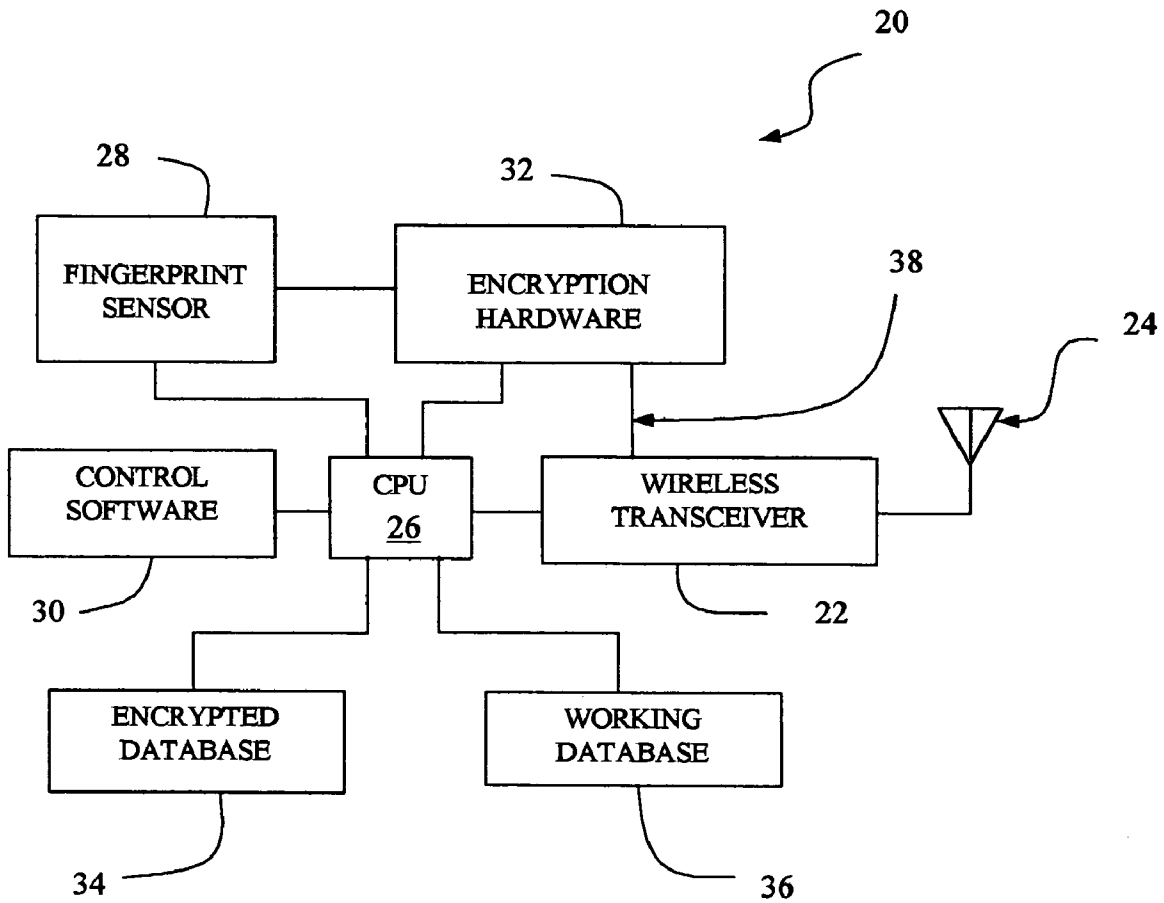


FIG. 1b

Fig. 2



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