



US007239227B1

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

(10) **Patent No.:** **US 7,239,227 B1**
(45) **Date of Patent:** **Jul. 3, 2007**

(54) **COMMAND INTERFACE USING
FINGERPRINT SENSOR INPUT SYSTEM**

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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.: **09/475,686**

(22) Filed: **Dec. 30, 1999**

(51) **Int. Cl.**
G06F 7/04 (2006.01)

(52) **U.S. Cl.** **340/5.82**; 340/5.81; 382/124;
382/312

(58) **Field of Classification Search** 340/5.1,
340/5.2, 5.25, 5.5, 5.53, 5.8, 5.82, 5.83, 426.28,
340/5.81; 382/124, 125, 126, 312; 435/4,
435/289.1, DIG. 22, DIG. 34, 518
See application file for complete search history.

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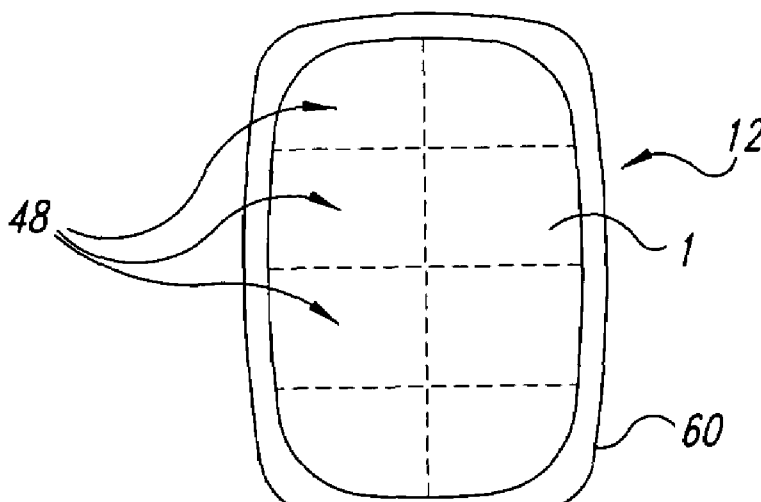
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Primary Examiner—Van T. Trieu

(57) **ABSTRACT**

A substrate having a fingerprint sensing system usable as a command interface using finger movements. A user's fingerprint pattern is recognized and compared to previously stored reference patterns. If the fingerprint pattern matches a previously stored pattern, the user is then permitted to enter certain commands via the same interface system. For example, in the case of an automobile, a user may identify themselves with their fingerprint, and then perform such functions as unlocking the doors, setting the seat to a selected location, or even pre-starting the car prior to their entering the automobile. The very same devices which perform the fingerprint identification and sensing are also used for the input sensing and command recognition to perform the various commands. A user is thus able to securely control desired functions in an automobile, while being assured that an unauthorized user will not have access to the automobile, even as they were able to obtain the command interface device.

31 Claims, 5 Drawing Sheets



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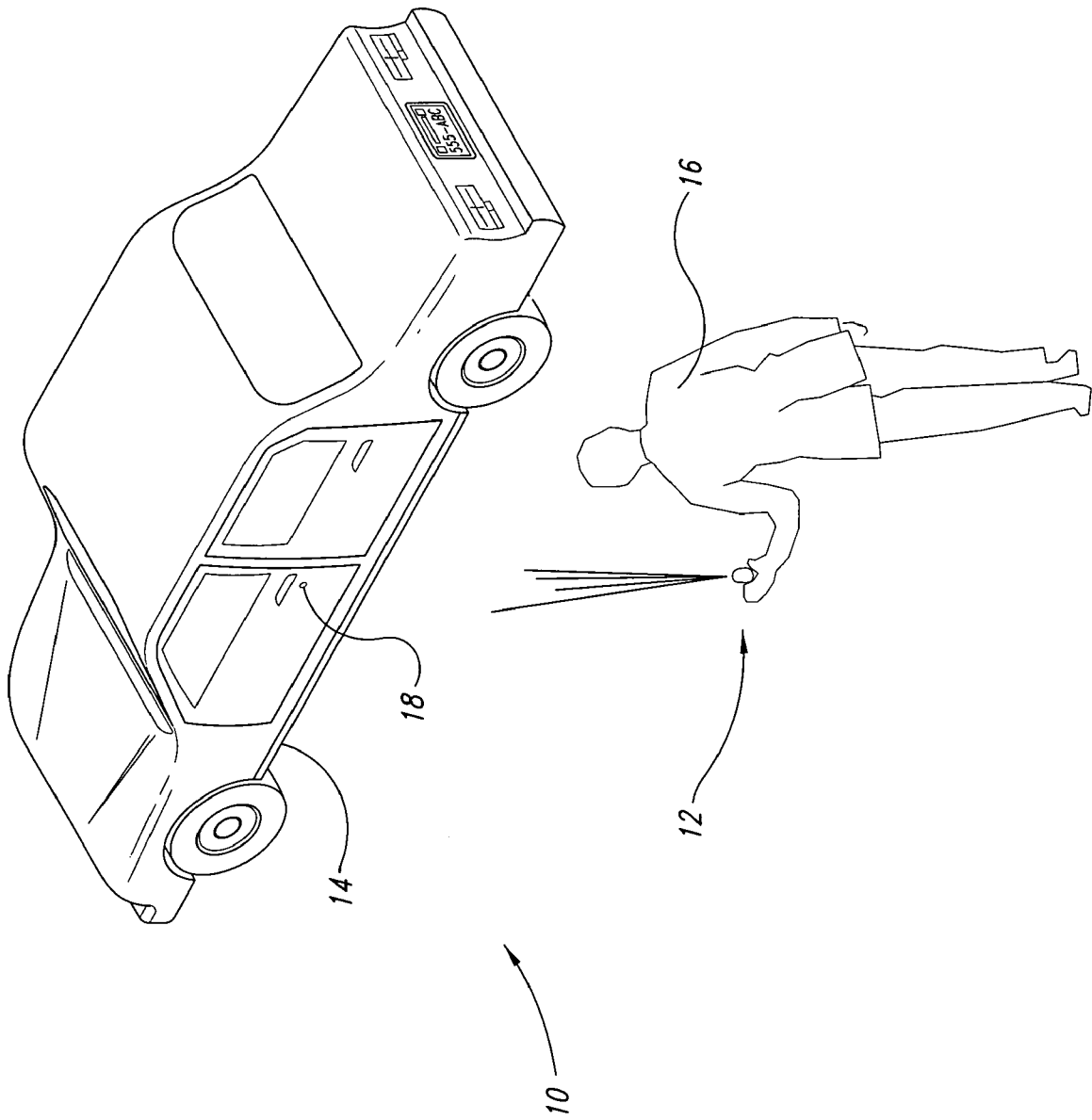


Fig. 1

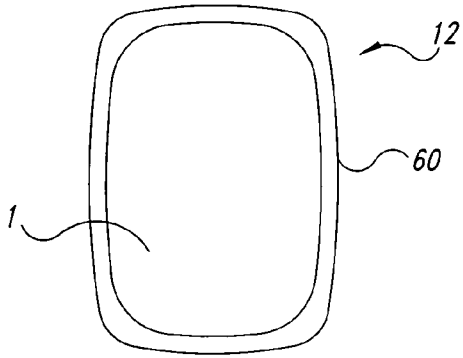


Fig. 2A

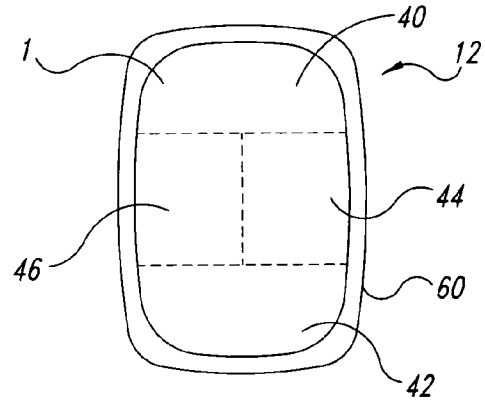


Fig. 2B

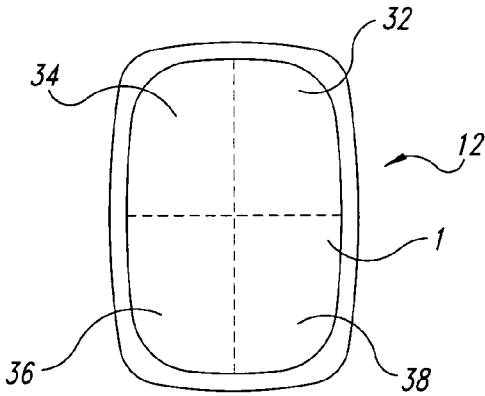


Fig. 2C

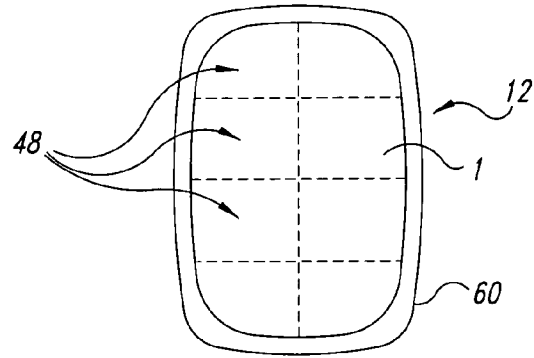


Fig. 2D

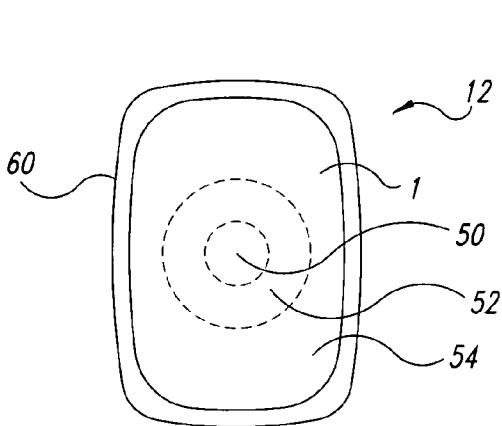


Fig. 2E

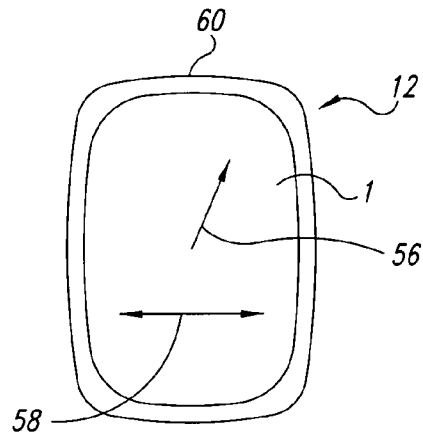
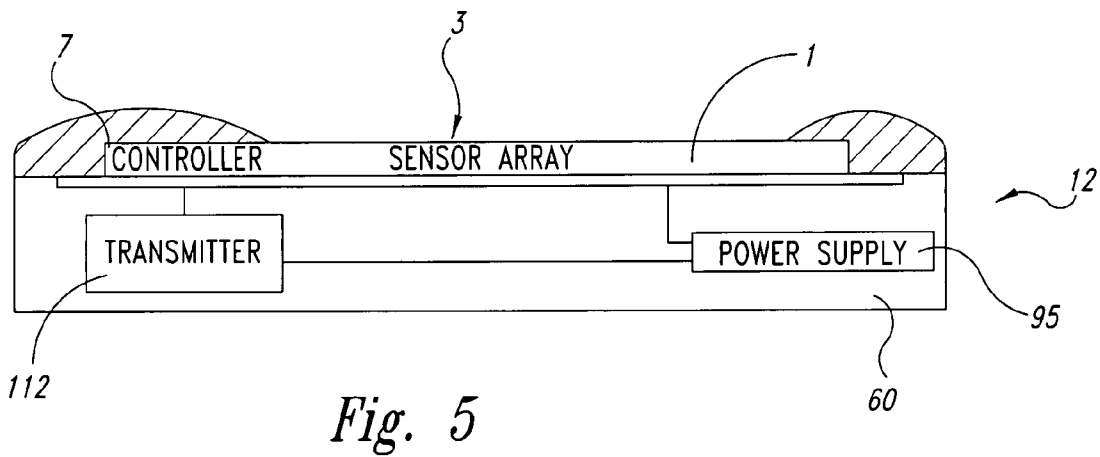
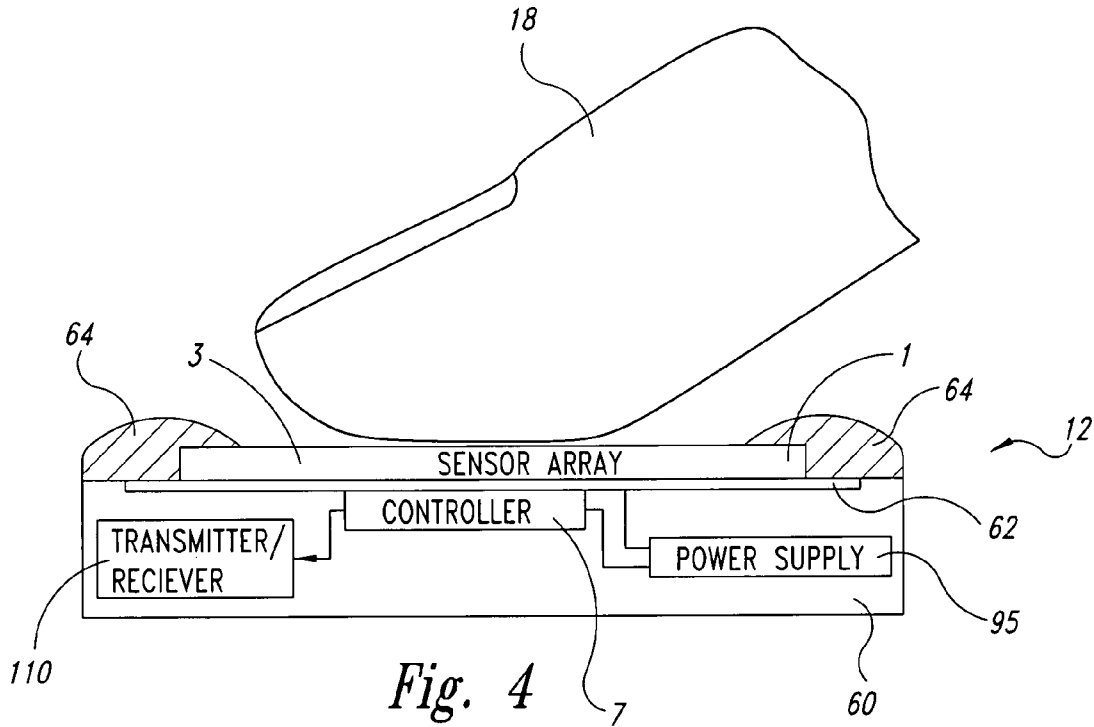


Fig. 3



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