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Brown

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(54) **HYBRID DEVICE HAVING A PERSONAL DIGITAL KEY AND RECEIVER-DECODER CIRCUIT AND METHODS OF USE**

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(51) **Int. Cl.**
G06F 21/00 (2013.01)
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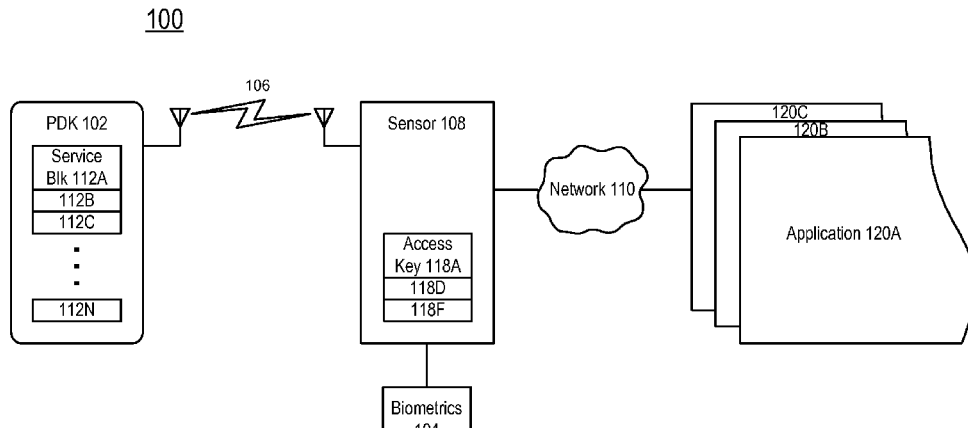
(52) **U.S. Cl.**
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(58) **Field of Classification Search**
USPC 726/3, 4
See application file for complete search history.

(57) **ABSTRACT**

A hybrid device includes a personal digital key (PDK) and a receiver-decoder circuit (RDC). The PDK and RDC of the hybrid device are coupled for communication with each other. In one embodiment, the hybrid device also provides a physical interconnect for connecting to other devices to send and receive control signals and data, and receive power. The hybrid device operates in one of several modes including, PDK only, RDC only, or PDK and RDC. This allows a variety of system configurations for mixed operation including: PDK/RDC, RDC/RDC or PDK/PDK. The present invention also includes a number of system configurations for use of the hybrid device including: use of the hybrid device in a cell phone; simultaneous use of the PDK and the RDC functionality of hybrid device; use of multiple links of hybrid device to generate an authorization signal, use of multiple PDK links to the hybrid device to generate an authorization signal; and use of the hybrid device for authorization inheritance.

20 Claims, 15 Drawing Sheets



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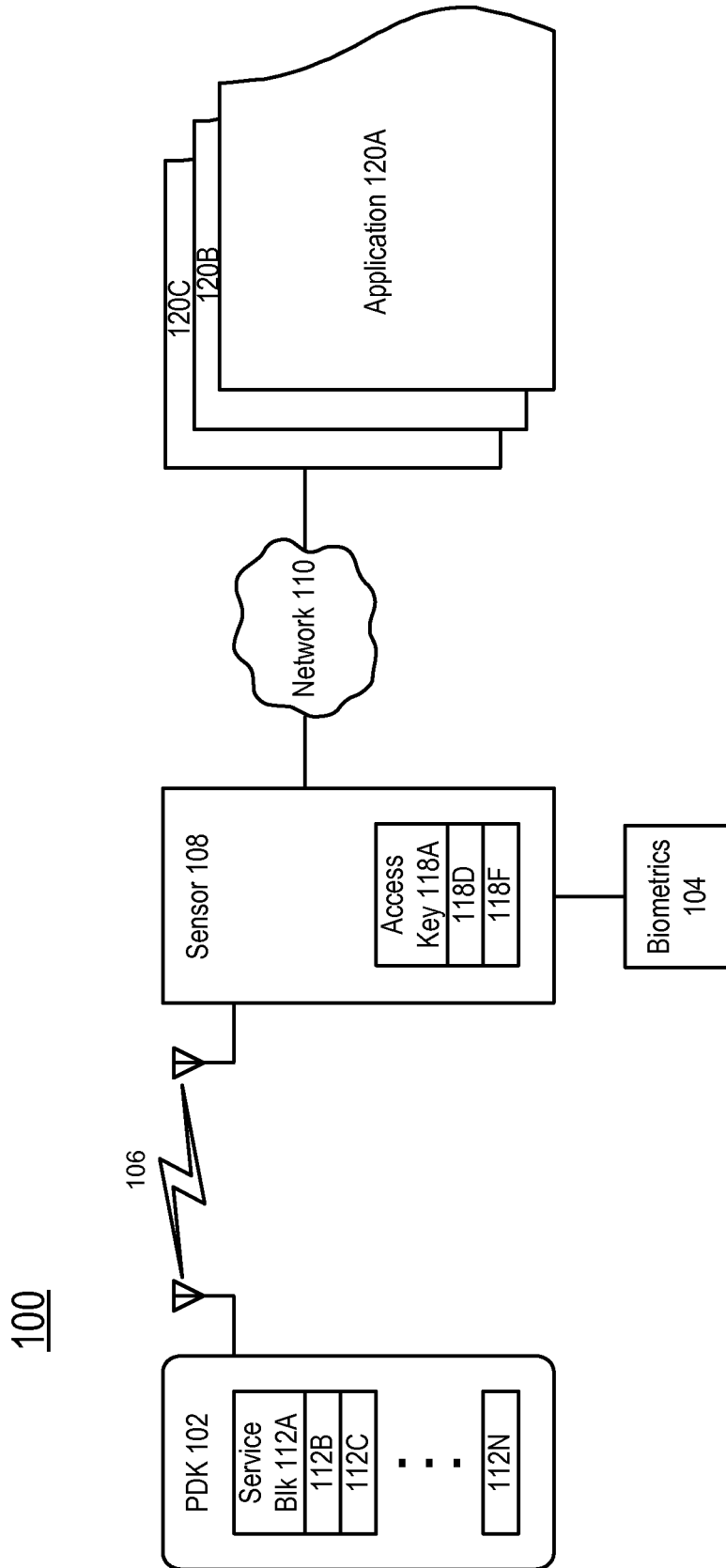


FIG. 1

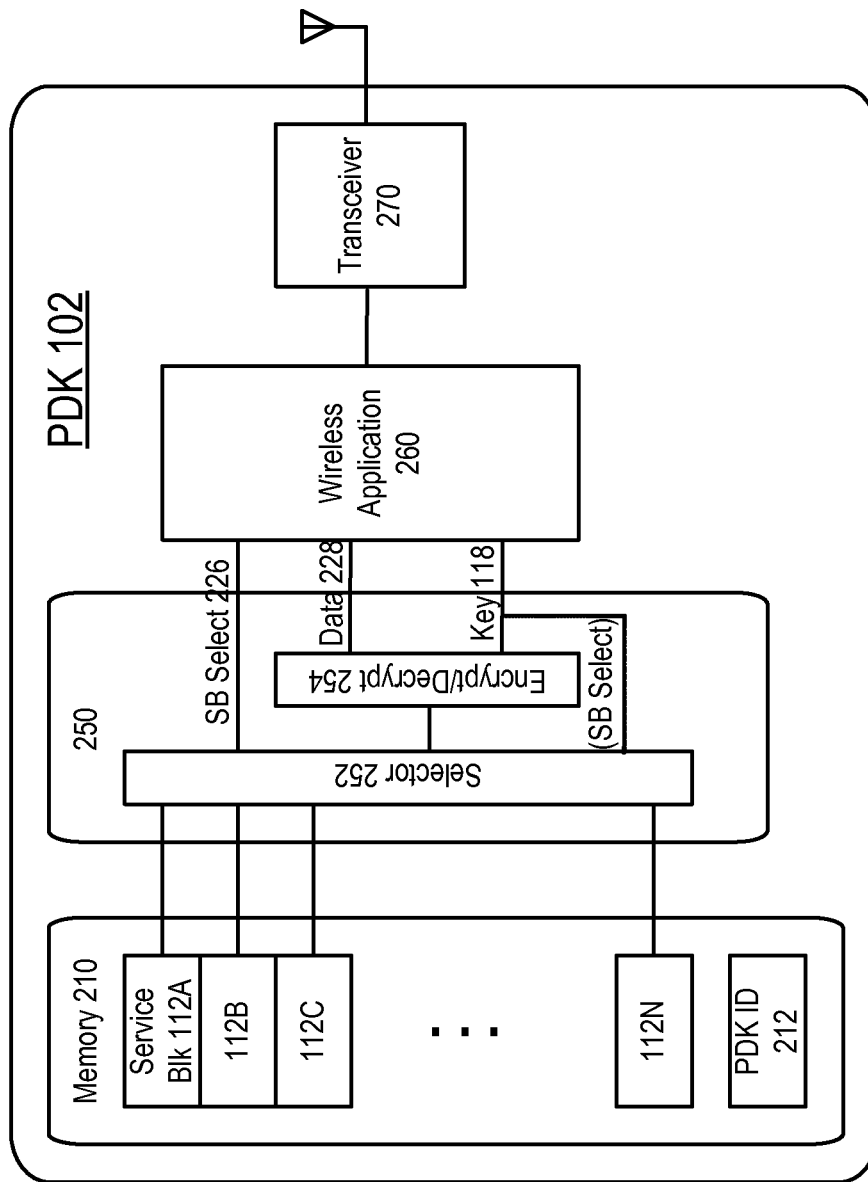


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