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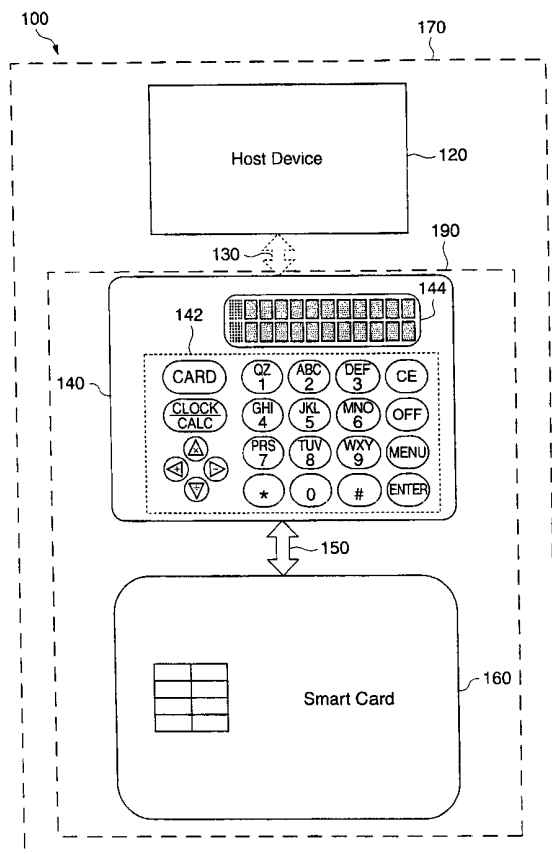
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(54) Title: METHOD AND SYSTEM FOR AN INTEGRATED CIRCUIT CARD INTERFACE DEVICE WITH MULTIPLE MODES OF OPERATION



(57) Abstract: An integrated circuit (IC) card interface device with multiple modes of operation allows communications with numerous IC cards, including smart cards. An interface device according to the present invention can be used several different ways, including: connected to a host device (such as a personal computer); in a standalone configuration; and as a flexible platform upon which future applications can be based, since it can be easily reprogrammed and upgraded. The interface device can contain an application engine and an I/O module, providing a flexible architecture and allowing several different operating modes. In connected mode, the interface device can, for example, be connected to a PC to enable the use of smart cards in secure applications. In standalone mode, the interface device can provide information about smart cards with which it interfaces. Programming mode enables the host device or the smart card itself to update or upgrade the programs available within the interface device. When being updated or upgraded, the source of the programming can be from a host device or from the smart card, adding further flexibility to the use of such an interface device.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G07F7/10

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G07F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5 923 884 A (PEYRET PATRICE ET AL) 13 July 1999 (1999-07-13) claim 1; figure 3 ---	1-40
Y	FR 2 772 957 A (GEMPLUS CARD INT) 25 June 1999 (1999-06-25) claim 1; figures 1,2A ---	1-13, 20-40
A		14-19
Y	US 5 679 945 A (RENNER G FRED ET AL) 21 October 1997 (1997-10-21) cited in the application claim 1; figure 4 ---	14-19
A		1-13, 20-40
A	US 5 844 218 A (KAWAN JOSEPH C ET AL) 1 December 1998 (1998-12-01) claim 1; figure 1 ---	1-40
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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A	WO 97 05582 A (KEYCORP LIMITED ;COOPER DEAN ANTHONY (AU); ACHELLES PETER (AU)) 13 February 1997 (1997-02-13) claim 1; figure 1 -----	1-40

INTERNATIONAL SEARCH REPORT

Information on patent family members

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