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(54) Title: PHYSICAL PRESENCE DIGITAL AUTHENTICATION SYSTEM (POINTS/CASH PURCHASING MECHANISM)

(57) Abstract: The interactive authentication system allows a consumer to interact with a base station, such as broadcast media (e.g., television and radio) or PC, to receive coupons, special sales offers, and other information with an electronic card. The electronic card can also be used to transmit a signal that can be received by the base station to perform a wide variety of tasks. These tasks can include launching an application, authenticating a user at a website, and completing a sales transaction at a website (e.g., by filling out a form automatically.) The interaction between the base station and the electronic card is accomplished by using the conventional sound system in the base station so that a special reader hardware need not be installed to interact with the electronic card. The user is equipped with an electronic card that can receive and transmit data via sound waves. In the various embodiments, the sound waves can be audible or ultrasonic (which can be slightly audible to some groups of people).



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# INTERNATIONAL SEARCH REPORT

International application No.

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## A. CLASSIFICATION OF SUBJECT MATTER

IPC(6) : H04M 1/00; G06F 17/60, 17/00

US CL : 379/355; 705/39; 364/479.02

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)

U.S. : 379/355; 705/39; 364/479.02

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 practicable, search terms used)  
EAST- internet, computer, electronic card, online commerce, DTMF, sound wave

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,583,933 A (MARK) 10 December 1996 (10.12.1996), entire document	1,2,7-13,18
X	US 6,016,484 A (WILLIAMS et al.) 18 January 2000 (18.01.2000), entire document	3-6,14-17,19,20
A	US 5,883,810 A (FRANKLIN et al.) 16 March 1999 (16.03.1999), entire document	3-6,14-17
A	US 6,226,678 B1 (MATTAWAY et al.) 01 May 2001 (01.05.2001), entire document	1,2,7-9,11-13,18,19

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

### \* Special categories of cited documents:

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"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

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