

A PROCESS FOR AUTHENTICATION, BY AN OUTSIDE MEDIUM, OF A PORTABLE OBJECT CONNECTED TO THAT MEDIUM VIA A TRANSMISSION LINE AND SYSTEM FOR CARRYING OUT THE PROCESS.

1 A process of authentication, by an outside medium, of a
2 portable object connected to that medium via a transmission line
3 and a system for carrying out the process. To authenticate a
4 portable object (7) connected to a terminal linked to the outside
5 medium by a transmission line, the outside medium (1) manages a
6 control table (11) containing a non-secret piece of data (N_7)
7 specific to each object that can be identified, as well as a
8 parameter (E_1) and a result (R_1) entered in the control table
9 during the preceding authentication of the object. A new
10 parameter (E_6), produced by the medium during authentication, is
11 used to calculate a new result (R_6) in the object. The old
12 result is recalculated. If it matches the one in the table (11),
13 the object is authenticated, and the new parameter (E_6) and
14 result (R_6) are entered in the control table in place of the
15 preceding ones. The process is well suited for use in protecting
16 computer networks.