

Title (en)
METHOD, SYSTEM, DEVICE FOR PROVING THE AUTHENTICITY OF AN ENTITY AND/OR THE INTEGRITY AND/OR THE AUTHENTICITY OF A MESSAGE

Title (de)
VERFAHREN, SYSTEM, EINRICHTUNG ZUM NACHWEIS DER AUTENTIZITÄT EINER EINHEIT UND/ODER DER INTEGRITÄT UND/ODER AUTENTIZITÄT EINER NACHRICHT

Title (fr)
PROCEDE, SYSTEME, DISPOSITIF DESTINES A PROUVER L'AUTHENTICITE D'UNE ENTITE ET/OU L'INTEGRITE ET/OU L'AUTHENTICITE D'UN MESSAGE

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Application
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Abstract (en)
[origin: WO0045550A2] Proof is established by means of the following parameters: m pairs of private values Q_i and public values G_i , $m > 1$, a public module n made of the product of f first factors p_j , $f > 2$, a public exponent v, linked to each other by relations of the type: $G_i \cdot Q_i^{v-1} \equiv 1 \pmod n$ or $G_i = Q_i^{v-1} \pmod n$. Said exponent v is such that $v = 2 \cdot k$ where $k > 1$ is a security parameter. Public value G_i is the square g_i^2 of a base number g_i that is lower than f first factors p_j , so that the two equations: $x^2 = g_i \pmod n$ and $x^{2k} = -g_i \pmod n$ do not have a solution in x in the ring of the modulo n integers and such that the equation $x^{v-1} = g_i^{v-2} \pmod n$ has solutions in x in the ring of the modulus n integers.

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