

Title (en)

DATA PROCESSING METHOD AND DEVICE FOR PROTECTED EXECUTION OF INSTRUCTIONS

Title (de)

DATENVERARBEITUNGSVERFAHREN UND VORRICHTUNG ZUM SCHUTZ VON BEFEHLSAUSFÜHRUNG

Title (fr)

PROCEDE ET DISPOSITIF DE TRAITEMENT DE DONNEES SERVANT A PROTEGER L'EXECUTION D'INSTRUCTIONS

Publication

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Application

EP 01936364 A 20010514

Priority

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Abstract (en)

[origin: WO0197010A2] A device to determine whether an application program has been unduly manipulated is provided with a signature register that is coupled to the output of the instruction register and/or to the addresses of the program memory. The signature register is also coupled to a mode bit of a processor having two operating modes. In a first mode, the signature register accumulates the output of the instruction register and/or the addresses of the program memory, yet the output of the signature register is not externally discernable. In a second mode, the signature register is set to no longer accumulate inputs. In the second mode, the signature register content is checked by a comparison with a specified value. This comparison value can be effectively contained in an instruction at relevant positions in the program. In one embodiment, the signature value is not compared directly but is only compared after the value is encrypted to ensure that in the case of unauthorized manipulation of the program, the comparison value cannot be readily modified.

IPC 1-7

G06F 9/00

IPC 8 full level

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