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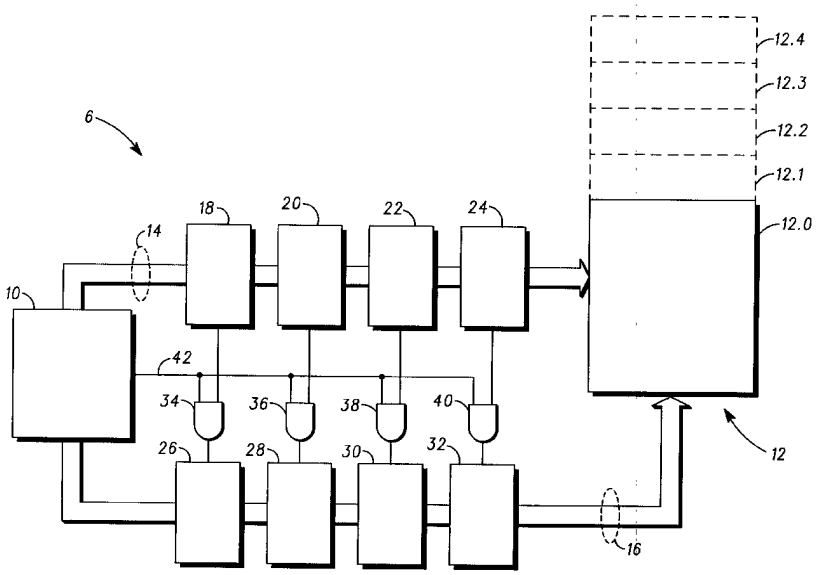
(54) Title: ARRANGEMENT FOR ENCRYPTION/DECRYPTION OF DATA AND DATA CARRIER INCORPORATING SAME



(57) Abstract: An arrangement (6) for encrypting/decrypting data comprising: random access memory (12) for holding the data; a processor (10) for processing the data, the processor having a memory map including a first portion (12.0) mapped onto the random access memory and a second portion (12.1); and control means (18, 34, 26) coupled to receive an instruction to write data to an address in the second portion of the memory map and in response thereto to write the data in a perdetermined permuted form to an associated address in the random access memory, whereby data read from said associated address in the random access memory is an encrypted/decrypted version of the data written to said address in the second portion of the memory map.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 G06F12/14

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 6 G06F H04L

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)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 001 753 A (DAVIO MARC ET AL) 19 March 1991 see the whole document ---	1-6
A	KROPF T ET AL: "A HARDWARE IMPLEMENTATION OF A MODIFIED DES-ALGORITHM" MICROPROCESSING AND MICROPROGRAMMING, vol. 30, no. 1 / 05, 1 August 1990, pages 59-65, XP000141633 see page 60, left-hand column, paragraph 2 - page 63, right-hand column, paragraph 1 ---	1-6
A	ANONYMOUS: "Software Data Encryption Standard" IBM TECHNICAL DISCLOSURE BULLETIN, vol. 29, no. 12, May 1987, NEW YORK, US, pages 5594-5595, XP002057001 see the whole document --- -/--	1-6

[X] Further documents are listed in the continuation of box C.

[X] Patent family members are listed in annex.

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Date of the actual completion of the international search	Date of mailing of the international search report
25 February 1998	10/03/1998

Name and mailing address of the ISA	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31–70) 340–2040, Tx. 31 651 epo nl, Fax: (+31–70) 340–3016	Powell, D

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication,where appropriate, of the relevant passages	Relevant to claim No.
A	PFITZMANN A ET AL: "MORE EFFICIENT SOFTWARE IMPLEMENTATIONS OF (GENERALIZED) DES" COMPUTERS & SECURITY INTERNATIONAL JOURNAL DEVOTED TO THE STUDY OF TECHNICAL AND FINANCIAL ASPECTS OF COMPUTER SECURITY, vol. 12, no. 5, 1 August 1993, pages 477-500, XP000398172 see the whole document	1-6
A	GB 2 250 617 A (MITSUBISHI ELECTRIC CORP) 10 June 1992	
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nformation on patent family members

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		EP 0282123 A	14-09-88
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US 4573119 A	25-02-86	NONE	