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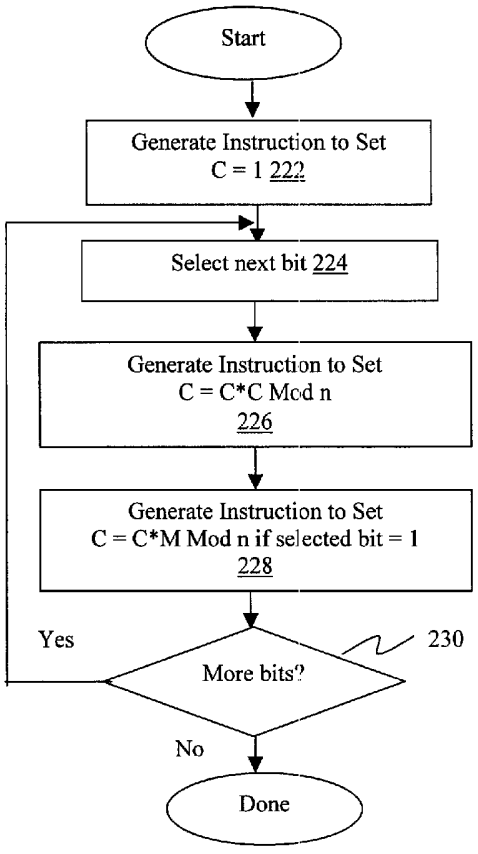
[Continued on next page]

(54) Title: KEY BASED DECIPHER INCLUDING ITS GENERATION, DISTRIBUTION AND USAGE



(57) Abstract: A decipher key based decipher with at least a portion of the decipher key dissolved into the decipher is disclosed. The decipher includes in-line instructions specifically designed to incrementally contribute to computation of M^e Mod n, where e is a predetermined at least partially unique decipher key. In one embodiment, the decipher includes a first in-line instruction to set an output variable to equal to 1, and a second in-line instruction to set the output variable to equal to the square of the output variable modulus n. In another embodiment, the decipher includes in-line instructions that perform the incremental computation in accordance with an addition chain of e.

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US04/05125

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : H04L 9/00
US CL : 380/030

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. : 380/030 713/151;380/29

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)
Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2002/0159589 A1 (She et al.) 31 October 2002, see entire document.	1-51
Y	US 4,405,829 A (Rivest et al.) 20 September 1983, see entire document.	1-51
Y	US 5,535,276 A (Ganesan) 09 July 1996, see entire document.	2-10,12-19,21-27 & 29-51
Y	Koblitz, Neal (A Course in Number Theory and cryptography) Second Edition, 1994.	2-10,12-19,21-27,29-35,37-43,45-51
Y	RSA (A method for Obtaining Digital Signatures and Public-Key Cryptosystems) 1998.	4-10,14-19,23-27,30-35,38-43,46-51
Y,P	US 2004/0005054 A1 (Montgomery et al.) 08 January 2004, see entire document.	8-10,18-19,26-27,34-35,42-43, 50-51

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

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Date of the actual completion of the international search	Date of mailing of the international search report
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Continuation of B. FIELDS SEARCHED Item 3:
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key,based,wireless,phone,cellphone,variables,conditional,chaining,near,method,cryptography,addition,decipher,part