Title (en)

METHOD FOR APPLYING A HIGH ENTROPY MASKING COUNTERMEASURE IN A BLOCK ENCRYPTION ALGORITHM, AND A LOGIC INTEGRATED CIRCUIT IMPLEMENTING SUCH A METHOD

Title (de)

VERFAHREN ZUR ANWENDUNG EINER HOCH ENTROPISCHEN MASKIERUNGSGEGENMASSNAHME BEI EINEM BLOCKVERSCHLÜSSELUNGSALGORITHMUS UND LOGISCHE INTEGRIERTE SCHALTUNG ZUR UMSETZUNG DIESES VERFAHRENS

Title (fr)

PROCÉDÉ D'APPLICATION D'UNE CONTRE-MESURE DE MASQUAGE À ENTROPIE ÉLEVÉE DANS UN ALGORITHME DE CRYPTAGE DE BLOC ET CIRCUIT INTÉGRÉ LOGIQUE METTANT EN UVRE CE PROCÉDÉ

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Application

EP 12721434 A 20120420

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Abstract (en)

[origin: WO2012146550A1] A method for applying a high entropy masking countermeasure in a block encryption algorithm, and a logic integrated circuit implementing such a method. The invention relates to a block encryption algorithm based encryption method implementing a masking countermeasure and comprising a step of non-linear substitution of the elements of the State matrix. According to the invention, this method comprises for each encryption of the block: - a precalculation step, during which several independent and masked substitution tables are generated in parallel, and - during the non-linear substitution step, the elements of the State matrix are substituted by elements from said independent and masked substitution tables.

IPC 8 full level

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CPC (source: EP)

H04L 9/003 (2013.01); **H04L 9/0631** (2013.01); H04L 2209/043 (2013.01)

Citation (search report)

See references of WO 2012146550A1

Citation (examination)

FISKIRAN A M ET AL: "Fast Parallel Table Lookups to Accelerate Symmetric-Key Cryptography", INFORMATION TECHNOLOGY: CODING AND COMPUTING, 2005. ITCC 2005. INTERNA TIONAL CONFERENCE ON LAS VEGAS, NV, USA 04-06 APRIL 2005, IEEE COMPUTER SOCIETY, LOS ALAMITOS, CALIF. [U.A.], vol. 1, 4 April 2005 (2005-04-04), pages 526 - 531, XP010795902, ISBN: 978-0-7695-2315-6

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