

Title (en)  
MULTIPLE NUMBER BASE ENCODER/DECODER USING CORRESPONDING XOR

Title (de)  
AUF MEHREREN ZAHLENBASEN BASIERTEN KODIERER/DEKODIERER UNTER VERWENDUNG VON ENTSPRECHENDEN XOR-FUNKTIONEN

Title (fr)  
CODEUR/DECODEUR A PLUSIEURS BASES DE NUMERATION UTILISANT UNE RELATION DE OU EXCLUSIF

Publication  
**EP 1183819 A4 20030416 (EN)**

Application  
**EP 99973856 A 19990518**

Priority  
US 9910929 W 19990518

Abstract (en)  
[origin: CA2371446A1] Plaintext elements and masking array elements are converted into digits in another base (step 2). The resulting digits are combined modulo the new number base and the result is converted back into elements using the original number base resulting in ciphertext elements (step 4). For recovery of the plaintext, the ciphertext elements and masking array elements are converted again into digits in the same number base as used for encryption and a reverse arithmetic combination of these digits is employed, modulo the new number base, and the result of the combination is converted back into elements in the original number base resulting in the original plaintext elements.

IPC 1-7  
**H04L 9/06**

IPC 8 full level  
**G09C 1/00** (2006.01); **H04L 9/06** (2006.01); **H04L 9/22** (2006.01); **H04L 9/28** (2006.01)

Citation (search report)  
• [X] US 5717760 A 19980210 - SATTERFIELD RICHARD C [US]  
• See references of WO 0070818A1

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)  
CA 2371446 A1 20001123; EP 1183819 A1 20020306; EP 1183819 A4 20030416; JP 2003500898 A 20030107

DOCDB simple family (application)  
CA 2371446 A 19990518; EP 99973856 A 19990518; JP 2000619155 A 19990518