

Title (en)  
METHOD FOR ACCELERATING CALCULATIONS IN MODULAR ARITHMETIC

Title (de)  
KRYPTOGRAPISCHE BERECHNUNG NACH DEM MONTGOMERY-VERFAHREN

Title (fr)  
CALCUL CRYPTOGRAPHIQUE SUIVANT LA METHODE DE MONTGOMERY

Publication  
**EP 1532519 A2 20050525 (FR)**

Application  
**EP 03755658 A 20030729**

Priority  
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Abstract (en)  
[origin: FR2843211A1] Method has the following steps: use of a first algorithm for replacing an argument stored in  $2q$  words by a result which is congruent to modulo  $N$  of the said argument and of which the  $q$  words of low weighting are zero; and use of a first operator for taking two entries each stored in  $q$  words and outputting a number  $W$  also stored in  $q$  words, of which the product multiplied by  $R$  is congruent modulo  $N$  with the product of the two inputs.  $R$  is a power of 2, greater than  $N$ .

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