

Title (en)

**MASK GENERATING POLYNOMIALS FOR PSEUDO-RANDOM NOISE GENERATORS**

Title (de)

**MASKENGENERIERENDE POLYNOME FÜR PSEUDOZUFALLS-RAUSCHGENERATOREN**

Title (fr)

**POLYNOMES DE GENERATION DE MASQUES POUR DES GENERATEURS DE BRUIT PSEUDO-ALEATOIRE**

Publication

**EP 0980605 A2 20000223 (EN)**

Application

**EP 99905117 A 19990303**

Priority

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Abstract (en)

[origin: WO9945670A2] A CDMA baseband modern having a PN generator with significant reduction in stored masks is disclosed. Various performance matrices set forth alternative combinations of sequence generation through three parameters: storage, software, and time. Embodiments of this implementation are presented with corresponding hardware complexities. Masks are used to move to a new phase offset sequence. Instead of storing  $2^{<N>}$  masks, less than N masks are required to be stored in ROM because of mask calculation intelligence carried out in the software/software control. Masks are calculated with a mask generating polynomial based upon any degree of characteristic polynomial of a PN generator. Masks for the mask generator are only stored which result in phase shifts of powers of two. The characteristic polynomial of the pseudo-random noise generator and the mask generator are Galois and Fibonacci polynomials.

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**H04K 1/02**

IPC 8 full level

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CPC (source: EP KR)

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