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(57) Abstract

A system and a method for transforming an N-bit input value into a transformed N-bit output value which may be used for error correction coding or ciphering of the N-bit input value. In a representative embodiment, the system comprises means (50-54) for providing a set of all possible N-bit values as a plurality of mutually exclusive subsets each containing at least one possible N-bit value; means (56-60) for comparing the N-bit input value with each of the subsets to determine to which one of the subsets the N-bit input value belongs; and means (64) for selecting as the transformed N-bit output value an N-bit value from another one of the subsets. In accordance with the present invention, each of these subsets may be cyclically generated in a linear feedback shift register (LFSR) or, alternatively, stored in a memory.

