

Title (en)

ULTRA WIDEBAND SCRAMBLER FOR REDUCING POWER SPECTRAL DENSITY

Title (de)

ULTRABREITBAND-VERWÜFLER FÜR DIE VERRINGERUNG DER LEISTUNSSPEKTRALDICHTHE

Title (fr)

EMBROUILLEUR A BANDE ULTRALARGE DESTINE A REDUIRE LA DENSITE SPECTRALE DE PUISSANCE

Publication

EP 1712011 A1 20061018 (EN)

Application

EP 05807403 A 20050110

Priority

- US 2005000653 W 20050110
- US 53539204 P 20040109

Abstract (en)

[origin: WO2006022802A1] Scrambling methods for scrambling ultra wideband (UWB) data are disclosed. UWB data (420) having payload data and non-payload data is scrambled (422, 424) by shifting a first bit string (412) a first number of bits, shifting a second bit string (410) a second number of bits, combining (414A - 414N) the first and second shifted bit strings, generating (418) scrambler control bits (416) from the combined first and second shifted bit strings, and scrambling (424) at least a portion of the UWB data responsive to the scrambler control bits. According to another aspect, UWB data is scrambled by scrambling payload data using a pseudo-random number generator having a seed set of multiple seeds having low seed correlation, each seed within the seed set having a predefined number of bits, and selective applying random frame reversion (428, 430) to non-payload data and/or to entire frame of data.

IPC 8 full level

H04B 1/69 (2006.01)

CPC (source: EP)

H04B 1/7176 (2013.01); **H04L 25/03866** (2013.01); **H04B 1/719** (2013.01)

Citation (search report)

See references of WO 2006022802A1

Designated contracting state (EPC)

DE GB

DOCDB simple family (publication)

WO 2006022802 A1 20060302; WO 2006022802 A8 20060526; EP 1712011 A1 20061018; JP 2007518368 A 20070705

DOCDB simple family (application)

US 2005000653 W 20050110; EP 05807403 A 20050110; JP 2006549471 A 20050110