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ABSTRACT

A MODULATION/DEMODULATION APPARATUS FOR THE ENCODING AND DECODING OF DATA AND A METHOD FOR ENCODING AND DECODING DATA

A modulation/demodulation apparatus for the encoding and decoding of data, for example in a Bluetooth/WLAN/PHS multi-mode system based on software defined radio comprises an encoding system to encode data according to a plurality of modulation schemes and a decoding system to decode according to the plurality of modulation schemes the encoded data from the encoding system. The encoding system comprises a number of encoding look-up tables which include encoding data for encoding data according to the plurality of modulation schemes, the encoding data for a plurality of the modulation schemes being identical. Similarly, the decoding system comprises a number of decoding look-up tables for decoding the encoded data received from the encoding system. The decoding look-up tables comprise decoding data for decoding data according to the plurality of modulation schemes, the decoding data for a plurality of the modulation schemes being identical. Also disclosed is a method for encoding/decoding data.

(FIG 1)