Method and device for amplitude modulation of an electromagnetic signal emitted by a contactless transceiver system

ABSTRACT

The invention concerns a method for partial amplitude modulation of a carrier wave between 8% and 14%, the carrier wave being emitted by a contactless transceiver device (10) designed to remotely exchange data with a contactless portable object, the method comprising:

a) delivering two digital radiofrequency signals Tx1 (20) and Tx2 (22),

b) phase shifting the second signal Tx2 by 180 degrees in relation to the first signal Tx1 when there is no information to be transmitted (idle state),

c) phase shifting the two Tx2 signals in relation to Tx1 or Tx1 in relation to Tx2 by an additional angle φ when there is information to be transmitted (modulated state),

d) having the digital signals pass through a filtering and adapting stage (13),

e) adding, at the antenna, the first and second filtered and phase-modulated signals (Tx1f and Tx2f) and obtaining an amplitude modulated resultant radiated signal.

Figure 1