

Title (en)
METHOD AND APPARATUS FOR AMPLITUDE-MODULATING AN ELECTROMAGNETIC SIGNAL EMITTED BY A CONTACTLESS EMISSION/
RECEPTION SYSTEM

Title (de)
VERFAHREN UND VORRICHTUNG ZUR AMPLITUDE-MODULIERUNG EINES VON EINEM KONTAKTLOSEN SEND/EMPFANGSSYSTEM
GESENDETEN ELEKTROMAGNETISCHEN SIGNALS

Title (fr)
PROCEDE ET DISPOSITIF DE MODULATION EN AMPLITUDE D'UN SIGNAL ELECTROMAGNETIQUE EMIS PAR UN SYSTEME D'EMISSION/
RECEPTION SANS CONTACT

Publication
EP 2705468 A1 20140312 (FR)

Application
EP 12726150 A 20120502

Priority
• FR 1101354 A 20110502
• FR 2012000171 W 20120502

Abstract (en)
[origin: US2012280794A1] 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.

IPC 8 full level
G06K 19/07 (2006.01); **H04B 5/48** (2024.01); **H04L 25/49** (2006.01); **H04L 27/04** (2006.01); **H04L 27/20** (2006.01)

CPC (source: EP KR US)
G06K 7/10009 (2013.01 - EP US); **H04L 25/49** (2013.01 - KR); **H04L 25/4906** (2013.01 - EP US); **H04L 27/04** (2013.01 - EP KR US); **H04L 27/20** (2013.01 - KR); **H04L 27/2046** (2013.01 - EP US); **H04B 5/24** (2024.01 - EP); **H04B 5/72** (2024.01 - US)

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
US 2012280794 A1 20121108; US 9094255 B2 20150728; BR 112013028032 A2 20170110; CA 2834112 A1 20121108;
CN 103620623 A 20140305; CN 103620623 B 20180410; EP 2705468 A1 20140312; FR 2974962 A1 20121109; FR 2974962 B1 20131018;
IL 228888 A0 20131231; IL 228888 A 20170529; JP 2014519237 A 20140807; KR 20140020997 A 20140219; MX 2013012394 A 20140131;
TW 201301822 A 20130101; WO 2012150388 A1 20121108

DOCDB simple family (application)
US 201213462085 A 20120502; BR 112013028032 A 20120502; CA 2834112 A 20120502; CN 201280021410 A 20120502;
EP 12726150 A 20120502; FR 1101354 A 20110502; FR 2012000171 W 20120502; IL 22888813 A 20131015; JP 2014508852 A 20120502;
KR 20137029180 A 20120502; MX 2013012394 A 20120502; TW 101115711 A 20120502