

Title (en)
RFID TAG AND METHOD FOR OPERATING AN RFID TAG

Title (de)
RFID-TAG UND VERFAHREN ZUM BETREIBEN EINES RFID-TAGS

Title (fr)
ÉTIQUETTE RFID ET PROCÉDÉ PERMETTANT DE FAIRE FONCTIONNER UNE ÉTIQUETTE RFID

Publication
EP 2891102 A1 20150708 (DE)

Application
EP 13788711 A 20131023

Priority
• DE 102013200017 A 20130102
• EP 2013072191 W 20131023

Abstract (en)
[origin: WO2014106546A1] The invention relates to an RFID tag, which comprises a receiving means, a first and a second verification means, and a transmitting means. The receiving means is designed to receive a challenge message sent by an RFID reading device. Said challenge message comprises a challenge data set, which has a digital certificate issued for the RFID reading device by a certification authority and signed by means of a private key of the certification authority and which has a request message, and a digital signature at least of the request message, which digital signature is generated by means of a private key of the RFID reading device. The first verification means is designed to verify the digital certificate by means of a public key of the certification authority. The second verification means is designed to verify the digital signature by means of a public key of the RFID reading device. The transmitting means transmits a response message to the RFID reading device if the certificate and the digital signature are verified. By verifying the challenge message, the RFID tag can ensure that the RFID tag transmits a response message only to such a requesting RFID reading device that is actually authorized to communicate with said RFID tag.

IPC 8 full level
G06F 21/44 (2013.01)

CPC (source: EP US)
G06F 16/9554 (2018.12 - EP US); **G06F 21/445** (2013.01 - EP US); **G06K 19/07318** (2013.01 - US); **H04L 9/30** (2013.01 - US); **H04L 63/0823** (2013.01 - US)

Citation (search report)
See references of WO 2014106546A1

Cited by
DE102016219926A1; DE102017223099A1; EP3614319A1; WO2020038712A1; EP3509247A1; EP3609148A1; EP3736715A1; DE102016200850A1; EP3598365A1; EP3598364A1; WO2020015977A1; WO2020015978A1; DE102016207635A1; WO2017190857A1; EP3599740A1; WO2020020634A1; EP3687209A1; EP3435272A1; WO2019020234A1; EP3637345A1; WO2020074350A1; EP3252990A1; WO2018069271A1; EP3629332A1; US11288400B2; EP3562090A1; EP3570489A1; WO2019206676A1; DE102016201176A1; DE102016207294A1; EP3502806A1; WO2019120786A1; EP3633914A1; WO2020069912A1; US11662702B2; WO2017137256A1; EP3561709A1; WO2019206674A1; US10489564B2; US11609996B2; DE102016205289A1; WO2017167589A1; EP3561713A1; US10715517B2; US11568088B2; DE102016200907A1; EP3557463A1; WO2019201598A1; EP3598363A1; WO2020015979A1; EP3693918A1; DE102016207642A1; WO2017190890A1; EP3413530A1; WO2018224280A1; EP3562116A1; WO2019206685A1; EP3584654A1; WO2019243201A1; US11196564B2; US11424933B2; DE102016203534A1; WO2017148559A1; DE102016221301A1; EP3503493A1; EP3534282A1; WO2019166456A1; EP3562194A1; EP3609240A1; EP3609211A1; WO2020030540A1; US11882447B2; EP3506143A1; EP3509004A1; EP3514743A1; WO2019120778A1; WO2019129416A1; WO2019141439A1; US11755719B2

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

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
DE 102013200017 A1 20140703; CN 104885091 A 20150902; CN 104885091 B 20180525; EP 2891102 A1 20150708; US 2015341343 A1 20151126; US 9641515 B2 20170502; WO 2014106546 A1 20140710

DOCDB simple family (application)
DE 102013200017 A 20130102; CN 201380069186 A 20131023; EP 13788711 A 20131023; EP 2013072191 W 20131023; US 201314758950 A 20131023