Title (en)
USE OF A (DIGITAL) PUF FOR CARRYING OUT PHYSICAL DEGRADATION / TAMPER RECOGNITION OF A DIGITAL ICS

Title (de)
VERWENDEN EINER (DIGITALEN) PUF ZUM REALISIEREN EINER PHYSIKALISCHEN DEGRADATIONS-/TAMPERERKENNUNG EINES DIGITALEN ICS

Title (fr)
UTILISATION D'UNE FONCTION PHYSIQUEMENT NON CLONABLE (NUMÉRIQUE) POUR DÉTECTER UNE DÉGRADATION PHYSIQUE/ FALSIFICATION D'UN CIRCUIT INTÉGRÉ NUMÉRIQUE

Publication
EP 2847707 A1 20150318 (DE)

Application
EP 13729639 A 20130605

Priority
• DE 102012212471 A 20120717
• EP 2013061586 W 20130605

Abstract (en)
[origin: WO2014012701A1] In order to reliably detect a malfunction of an IC, an integrated circuit (IC) comprises an integrity sensor (4) and a test unit (3). The integrity sensor (4) is based on a physical unclonable function (PUF) (24). The test unit (3) is designed to send a challenge signal (C) to the integrity sensor (4) and to determine a piece of information about a degradation of the integrated circuit (IC) on the basis of a response signal (R) subsequently generated by the physical unclonable function (24) and sent by the integrity sensor (4) to the test unit (3).

IPC 8 full level
G06F 21/55 (2013.01)

CPC (source: CN EP US)
G01R 31/2855 (2013.01 - US); **G06F 21/55** (2013.01 - EP US); **G06F 21/86** (2013.01 - CN EP US); **H03K 19/003** (2013.01 - EP US); **H04L 9/3278** (2013.01 - CN EP US); H04L 2209/12 (2013.01 - CN EP US)

Citation (search report)
See references of WO 2014012701A1

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 102012212471 B3 20131121; CN 104471583 A 20150325; EP 2847707 A1 20150318; US 2015192637 A1 20150709; WO 2014012701 A1 20140123

DOCDB simple family (application)
DE 102012212471 A 20120717; CN 201380038061 A 20130605; EP 13729639 A 20130605; EP 2013061586 W 20130605; US 201314415369 A 20130605