

Title (en)  
DEVICE AND METHOD FOR GENERATING A RANDOM BIT STRING

Title (de)  
VORRICHTUNG UND VERFAHREN ZUR ERZEUGUNG VON ZUFALLSBITFOLGEN

Title (fr)  
DISPOSITIF ET PROCÉDÉ POUR GÉNÉRER UNE CHAÎNE DE BITS ALÉATOIRE

Publication  
**EP 2052319 A1 20090429 (EN)**

Application  
**EP 07805161 A 20070716**

Priority  

- IB 2007052821 W 20070716
- EP 06118182 A 20060731
- EP 07805161 A 20070716

Abstract (en)  
[origin: WO2008015603A1] The invention relates to generating a bit string based on the circumstances of a breakdown of a diode or a number of diodes (11, 21, 31, 41, 51). One or more diodes (11, 21, 31, 41, 51) are fed with a voltage exceeding a breakdown voltage of the diodes (11, 21, 31, 41, 51) connected to a diode breakdown processor (13, 23, 33, 43, 53), which detects the breakdown and optionally relevant circumstances such as an exact breakdown voltage, and generates a bit string based on the detection, which may be used as a unique identifier or as a secret key.

IPC 8 full level  
**G06F 7/58** (2006.01)

CPC (source: EP)  
**G06F 7/588** (2013.01); **H04L 9/0866** (2013.01); **Y04S 40/20** (2013.01)

Citation (search report)  
See references of WO 2008015603A1

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)  
AL BA HR MK RS

DOCDB simple family (publication)  
**WO 2008015603 A1 20080207**; CN 101495957 A 20090729; EP 2052319 A1 20090429; JP 2009545908 A 20091224

DOCDB simple family (application)  
**IB 2007052821 W 20070716**; CN 200780028680 A 20070716; EP 07805161 A 20070716; JP 2009522382 A 20070716