Title (en)

METHOD FOR ESTIMATING A NOISE GENERATED IN AN ELECTRONIC SYSTEM AND RELATED METHOD FOR TESTING NOISE IMMUNITY

Title (de)

VERFAHREN ZUR SCHÄTZUNG VON IN EINEM ELEKTRONISCHEN SYSTEM ERZEUGTEN STÖRUNGEN UND ENTSPRECHENDES VERFAHREN ZUM TESTEN VON STÖRSICHERHEIT

Title (fr)

PROCÉDÉ D'ESTIMATION D'UN BRUIT GÉNÉRÉ DANS UN SYSTÈME ÉLECTRONIQUE ET PROCÉDÉ DE TEST D'IMMUNITÉ AU BRUIT ASSOCIÉ

Publication

EP 1984857 A2 20081029 (FR)

Application

EP 07731567 A 20070202

Priority

• FR 2007050740 W 20070202
• FR 0650438 A 20060207

Abstract (en)

[origin: WO2007090980A2] The invention concerns a method for testing immunity to noise derived from interferences between components in a mixed analogic and digital electronic system. Said method consists in: determining by simulating the highest-level noise observed in the system, or the worst noise generated by interferences. If a test for noise sensitivity is successful with this injected worst noise, then the system is accepted. In the case where the worst noise test fails, the method consists in calculating by simulating the lowest-level noise observed in said system, or the injected best noise. And if a test for noise sensitivity fails with this injected best signal, then the system is rejected. The invention also concerns extraction of macromodel current sources of the cells for injecting said worst and said best noises. Said extraction is performed based on a detailed model of each cell, by comparing the frequency spectra obtained for different switching patterns applied in input of the circuit cells.

IPC 8 full level

G06F 17/50 (2006.01)

CPC (source: EP US)

G06F 30/367 (2020.01 - EP US)

Citation (search report)

See references of WO 2007090980A2

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 NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

FR 2897178 A1 20070810; **FR 2897178 B1 20080905**; EP 1984857 A2 20081029; JP 2009526285 A 20090716; US 2009192777 A1 20090730; WO 2007090980 A2 20070816; WO 2007090980 A3 20080327

DOCDB simple family (application)

FR 0650438 A 20060207; EP 07731567 A 20070202; FR 2007050740 W 20070202; JP 2008552865 A 20070202; US 22373707 A 20070202