Title (en)

METHOD FOR THE AUTOMATED MANUFACTURE OF AN ELECTRONIC CIRCUIT SUITABLE FOR DETECTING OR MASKING FAULTS BY TEMPORAL REDUNDANCY, AND ASSOCIATED COMPUTER PROGRAMME AND ELECTRONIC CIRCUIT

Title (de)

VERFAHREN ZUR AUTOMATISIERTEN HERSTELLUNG EINER ELEKTRONISCHEN SCHALTUNG ZUR ERKENNUNG ODER MASKIERUNG VON FEHLERN DURCH ZEITLICHE REDUNDANZ UND ZUGEHÖRIGES COMPUTERPROGRAMM SOWIE ELEKTRONISCHE SCHALTUNG

Title (fr)

PROCÉDÉ DE FABRICATION AUTOMATISÉE D'UN CIRCUIT ÉLECTRONIQUE ADAPTÉ POUR DÉTECTER OU MASQUER DES FAUTES PAR REDONDANCE TEMPORELLE, PROGRAMME D'ORDINATEUR ET CIRCUIT ÉLECTRONIQUE ASSOCIÉS

Publication

EP 3161691 A1 20170503 (FR)

Application

EP 15753710 A 20150624

Priority

- FR 1456080 A 20140627
- FR 2015051698 W 20150624

Abstract (en)

[origin: WO2015197979A1] A method for the automated manufacture of an electronic circuit tolerant to faults by temporal redundancy of maximum order N, comprising a step implemented by computer, which involves replacing any memory cell of the circuit with a memory block (40) comprising a chain of memory cells in series, and a selection block which selects, in a temporal redundancy mode of order n1, n1 $\in$ [1,N], as output data of the memory block, the majority content of n1 cells of the block, and can further deliver a fault signal if the content of the n1 cells differs. Said method is characterised in that the inserted memory blocks allow dynamic switching from a temporal redundancy mode of order n1 to any other mode of order n2. Said method for N=2, in association with a recording mechanism with backward recovery, makes it possible to mask an error with only double redundancy instead of triple redundancy.

IPC 8 full level

G06F 17/50 (2006.01); **H03K 3/037** (2006.01)

CPC (source: EP US)

G06F 30/327 (2020.01 - US); **H03K 3/0375** (2013.01 - EP US); G06F 11/183 (2013.01 - US)

Citation (search report)

See references of WO 2015197979A1

Designated contracting state (EPC)

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Designated extension state (EPC)

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DOCDB simple family (publication)

FR 3023038 A1 20160101; **FR 3023038 B1 20160722**; EP 3161691 A1 20170503; US 2017294900 A1 20171012; WO 2015197979 A1 20151230

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