

Title (en)
METHOD FOR TESTING AN ELECTRICAL CIRCUIT

Title (de)
VERFAHREN ZUM PRÜFEN EINER ELEKTRISCHEN SCHALTUNG

Title (fr)
PROCEDE POUR VERIFIER UN CIRCUIT ELECTRIQUE

Publication
EP 1665105 A2 20060607 (DE)

Application
EP 04786733 A 20040907

Priority
• DE 2004002011 W 20040907
• DE 10343346 A 20030912

Abstract (en)
[origin: WO2005026995A2] The aim of the invention is to create a method for testing an electrical circuit, which does not require a thorough electrical circuit simulation while reliably identifying circuit faults. Said aim is achieved by a method for generating a fault signal that indicates that a given state of the circuit, which is defined by an electrical state variable, could occur in an electrical circuit. According to the inventive method, all electrical components of the electrical circuit are individually treated as short-circuited or non-conducting regarding each pair of connections of the component, an electrical state variable is permanently allocated to at least one network node or a connecting pin of the electrical circuit, all electrical state variables of the network nodes and connecting pins to which the respective network node or the respective connecting pin is connected via the pairs of connections of the components that are to be treated as short-circuited are allocated to each network node and each connecting pin with the exception of the network nodes and connecting pins having a permanently allocated electrical state variable, and an assessment is made at least based on the allocated state variables as to whether the given circuit state can occur.

IPC 1-7
G06F 17/50

IPC 8 full level
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CPC (source: EP US)
G06F 30/33 (2020.01 - EP US)

Citation (search report)
See references of WO 2005026995A2

Citation (examination)
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