

Title (en)  
ACTIVE LEAKAGE RESISTANCE CONTROL TO IMPROVE NUMERICAL CONVERGENCE IN AN ELECTRONIC CIRCUIT SIMULATOR WHICH SEEKS CIRCUIT SOLUTIONS ITERATIVELY.

Title (de)  
AKTIVE ABLEITUNGSWIDERSTANDSSTEUERUNG ZUR VERBESSERUNG DER DIGITALEN ANNÄHERUNG IN EINEM ELEKTRONISCHEN SCHALTUNGSSIMULATOR DER WIEDERHOLEND SCHALTUNGSLÖSUNGEN SUCHT.

Title (fr)  
COMMANDE DE RESISTANCE A LA FUITE ACTIVE AFIN D'AMELIORER LA CONVERGENCE NUMERIQUE DANS UN SIMULATEUR DE CIRCUIT ELECTRONIQUE QUI RECHERCHE DES SOLUTIONS DE CIRCUIT DE FA ON HYPERACTIVE.

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Application  
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Abstract (en)  
[origin: WO8504739A1] Operation of an electronic circuit simulator is improved by actively controlling the test leakage resistance values at junctions (12) of active devices while seeking stable circuit solutions of modeled circuitry. By choosing an initial junction leakage resistance value lower than the actual value in each active device being modeled, convergent circuit solutions can be easily obtained, which may in turn be used as initial conditions to achieve the circuit solution for the real circuit with a significantly improved effectiveness.

IPC 1-7  
**G06G 7/48**

IPC 8 full level  
**G06F 19/00** (2006.01); **G06F 17/50** (2006.01)

CPC (source: EP)  
**G06F 30/367** (2020.01)

Citation (search report)

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- [A] AUTOMATION AND REMOTE CONTROL, vol. 38, no. 2, February 1977, pages 290-297, V.I. IL'IN et al.: "Analysis of methods of simulation of MOS transistor characteristics for computer-aided design of integrated circuits"
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- [T] ELECTRONIC DESIGN, vol. 33, no. 24, October 1985, pages 96-106, Hasbrouck Heights, New Jersey, US; M. SCHINDLER: "For circuit and timing simulators, greater speed and accuracy meet the challenge of denser chips"
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- See references of WO 8504739A1

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