

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
31 March 2005 (31.03.2005)

PCT

(10) International Publication Number
WO 2005/029329 A2

(51) International Patent Classification⁷: **G06F 11/00**

(21) International Application Number:
PCT/US2004/030127

(22) International Filing Date:
13 September 2004 (13.09.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/503,710 15 September 2003 (15.09.2003) US
10/740,779 18 December 2003 (18.12.2003) US
10/740,722 18 December 2003 (18.12.2003) US
10/740,721 18 December 2003 (18.12.2003) US
10/740,723 18 December 2003 (18.12.2003) US
10/876,340 23 June 2004 (23.06.2004) US

(63) Related by continuation (CON) or continuation-in-part (CIP) to earlier application:
US 60/503,710 (CON)
Filed on 15 September 2003 (15.09.2003)

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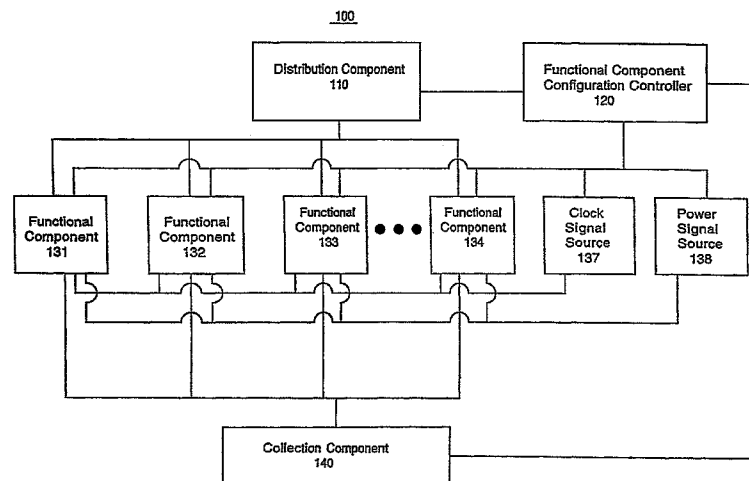
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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,

[Continued on next page]

(54) Title: A SYSTEM AND METHOD FOR TESTING AND CONFIGURING SEMICONDUCTOR FUNCTIONAL CIRCUITS



(57) Abstract: Disclosed here are systems and methods to enable configuration of functional components in integrated circuits. A present invention system and method can flexibly change the operational characteristics of functional components in an integrated circuit die based upon a variety of factors including manufacturing defects, compatibility characteristics, performance requirements, and system health (e.g., the number of components operating properly). Functional component operational behavior is tested and analyzed at various levels of configuration abstraction and component organization (e.g., topological inversion analysis). The testing and analysis can be performed in parallel on numerous functional components. Functional component configuration related information is presented in a graphical user interface (GUI) at various levels of granularity and in real time. The graphical user interface can facilitate user interaction in recognizing failure patterns, production test tuning and field configuration algorithm adjustment. The testing and analysis information can also be organized in a variety of convenient database formats.

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ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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