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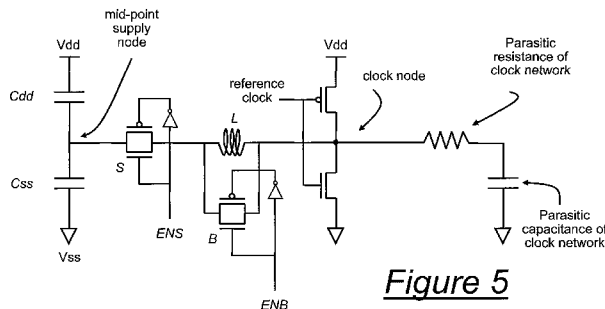
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(54) **Title:** ARCHITECTURE FOR OPERATING RESONANT CLOCK NETWORK IN CONVENTIONAL MODE



**Figure 5**

(57) **Abstract:** An architecture for resonant clock distribution networks is proposed. The proposed architecture allows for the energy-efficient operation of the resonant clock distribution network in conventional mode, so that it meets target specifications for the clock waveform. Such an architecture is generally applicable to semiconductor devices with multiple clock frequencies, and high-performance and low-power clocking requirements such as microprocessors, ASICs, and SOCs. Moreover, it is applicable to at-speed testing and to binning of semiconductor devices according to achievable performance levels.

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**A. CLASSIFICATION OF SUBJECT MATTER****G06F 1/04(2006.01)i, G06F 1/06(2006.01)i**

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

G06F 1/04; H03K 3/00; H03K 19/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) &amp; Keywords: clock, resonant, non-resonant, inductor, switch, etc.

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6882182 B1 (ROBERT O. CONN et al.) 19 April 2005 See column 5 line 25 - column 7, line 13; and figure 3(b).	1
A	US 05734285A A (HARVEY; GEOFFREY P.) 31 March 1998 See column 9 lines 5 - 35, column 11, line 64 - column 12, line 7; and figure 4, 9, 22, 29.	1
A	US 2009-0027085 A1 (ISHII ALEXANDER T. et al.) 29 January 2009 See paragraphs [0026]-[0037]; and figures 1-11.	1
A	US 2008-0150605 A1 (CHUEH JUANG-YING et al.) 26 June 2008 See paragraphs [0019]-[0051]; and figures 1-4.	1

 Further documents are listed in the continuation of Box C. See patent family annex.

\* Special categories of cited documents:

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**INTERNATIONAL SEARCH REPORT**

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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