

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
11 July 2002 (11.07.2002)

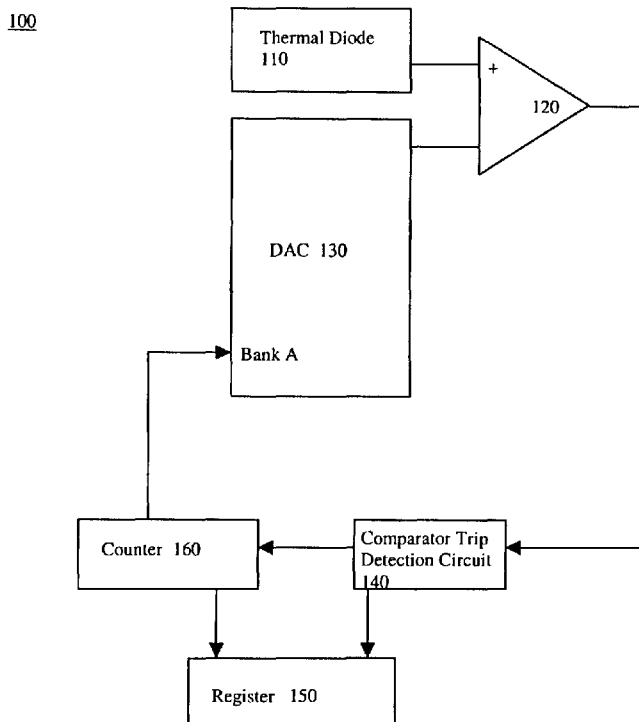
PCT

(10) International Publication Number
WO 02/054209 A3

- (51) International Patent Classification⁷: **G06F 1/20**, 3/05, G01K 3/00, H03M 1/46
- (21) International Application Number: PCT/US01/50661
- (22) International Filing Date:
20 December 2001 (20.12.2001)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
09/751,597 29 December 2000 (29.12.2000) US
- (71) Applicant (for all designated States except US): **INTEL CORPORATION (a Delaware Corporation)** [US/US]; 2200 Mission College Boulevard, Santa Clara, CA 95052 (US).
- (72) Inventors; and
(75) Inventors/Applicants (for US only): **JENSEN, Richard, W.** [US/US]; 8842 Winding Way, #634, Fair Oak, CA 95628 (US). **NALE, William, H.** [US/US]; 814 Orion Way, Livermore, CA 94550 (US).
- (74) Agents: **MALLIE, Michael, J.** et al.; Blakely, Sokoloff, Taylor & Zafman LLP, 7th floor, 12400 Wilshire Boulevard, Los Angeles, CA 90025 (US).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, 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, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

[Continued on next page]

(54) Title: METHOD AND APPARATUS FOR PERIODICALLY SAMPLING COMPUTER SYSTEM DEVICE TEMPERATURE



(57) Abstract: An apparatus for time-multiplexing a thermal sensor includes a digital-to-analog converter. The digital-to-analog converter provides an output to a comparator. The thermal sensor also provides an output to the comparator. A sequencer selects one of several input values to be applied to the digital-to-analog converter input. The sequencer further selects one of several latching devices to latch the output of the comparator. Once the result of the compare operation between the output of the thermal diode and the output of the digital-to-analog converter is latched, then the sequencer selects another one of the several input values and also selects another one of the several latching devices and another comparison is made between the output of the digital-to-analog converter and the output of the thermal sensor. The sequencer continues to select from among the several input values and corresponding latching devices in a rotating fashion.



(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

(88) Date of publication of the international search report:
15 May 2003

Published:

— *with international search report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.