

(19) World Intellectual Property Organization
International Bureau



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

PCT

(10) International Publication Number
WO 02/054599 A3

(51) International Patent Classification⁷: H03M 1/00, 1/56

(72) Inventor; and

(21) International Application Number: PCT/US01/50575

(75) Inventor/Applicant (for US only): NALE, William, H.
[US/US]; 814 Orion Way, Livermore, CA 94550 (US).

(22) International Filing Date:

21 December 2001 (21.12.2001)

(74) Agents: MALLIE, Michael, J. et al.; Blakely Sokoloff
Taylor & Zafman, 7th floor, 12400 Wilshire Boulevard, Los
Angeles, CA 90025 (US).

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

09/752,079 29 December 2000 (29.12.2000) 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, ZM, ZW.

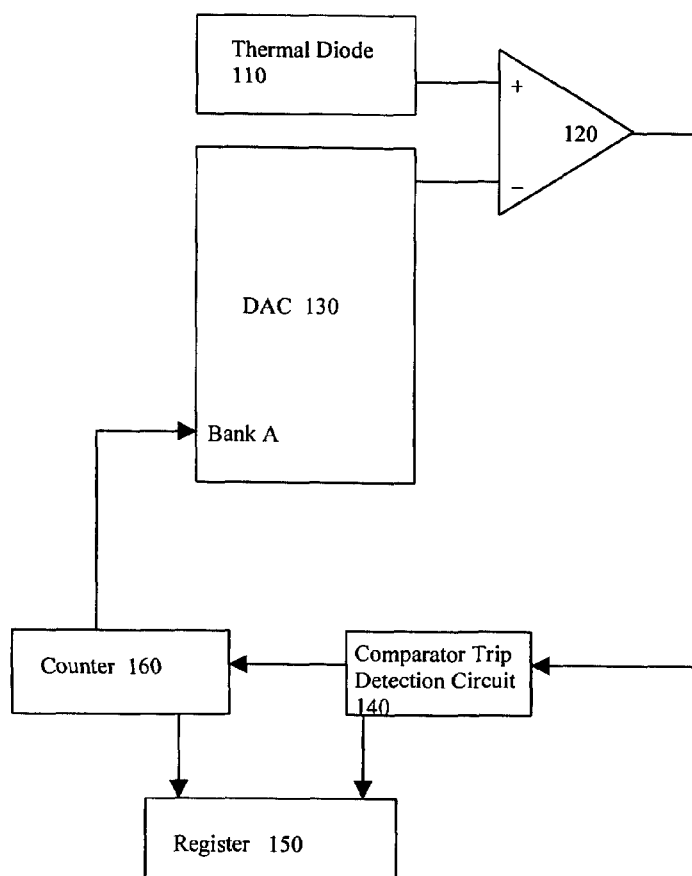
(71) Applicant (for all designated States except US): INTEL
CORPORATION [US/US]; 2200 Mission College Boule-
vard, Santa Clara, CA 95052 (US).

(84) Designated States (regional): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),

[Continued on next page]

(54) Title: METHOD AND APPARATUS FOR TIME MULTIPLEXING A THERMAL SENSOR

100



(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. 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.

WO 02/054599 A3



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).

(88) Date of publication of the international search report:
5 December 2002

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.

Published:

- *with international search report*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*