

Title (en)

AN APPLICATION SPECIFIC INTEGRATED CIRCUIT FOR USE WITH AN IR THERMOMETER

Title (de)

ANWENDUNGSSPEZIFISCHE INTEGRIERTE SCHALTUNG FÜR EINEN INFRAROT-THERMOMETER

Title (fr)

CIRCUIT INTEGRE DE TYPE ASIC, UTILE AVEC UN THERMOMETRE A INFRAROUGES

Publication

**EP 0968405 A1 20000105 (EN)**

Application

**EP 98910481 A 19980313**

Priority

- US 9805298 W 19980313
- US 81949697 A 19970317

Abstract (en)

[origin: WO9841827A1] An application specific integrated circuit (ASIC) for use with an IR thermometer includes a voltage regulator, a power on reset, a current reference, a voltage reference, a bias voltage generator (resistor divider), a constant current source, an ambient sensor amplifier, a pyroelectric sensor amplifier, an analog multiplexer, and an analog to digital converter. A microprocessor is interconnected with the ASIC to process the electrical signals from the ASIC in order to calculate the absolute temperature of the object being measured. The electrical signals provided by the ASIC correspond to a signal generated by the pyroelectric sensor indicative of the temperature of the object being measured and a signal generated by the ambient temperature sensor indicative of the ambient temperature of the pyroelectric sensor.

IPC 1-7

**G01J 5/02**; **G01K 1/20**

IPC 8 full level

**G01J 5/04** (2006.01); **G01J 5/10** (2006.01)

CPC (source: EP US)

**G01J 5/02** (2013.01 - EP); **G01J 5/026** (2013.01 - EP); **G01J 5/04** (2013.01 - EP); **G01J 5/049** (2013.01 - EP); **G01J 5/05** (2022.01 - US); **G01J 5/064** (2022.01 - EP US); **G01J 5/34** (2013.01 - EP US); **G01J 5/90** (2022.01 - US)

Citation (third parties)

Third party :

US 4395139 A 19830726 - NAMIKI MASAYUKI [JP], et al

Designated contracting state (EPC)

AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

**WO 9841827 A1 19980924**; AU 6471498 A 19981012; EP 0968405 A1 20000105

DOCDB simple family (application)

**US 9805298 W 19980313**; AU 6471498 A 19980313; EP 98910481 A 19980313