

Title (en)

TRIMMABLE CIRCUIT GENERATING A TEMPERATURE-DEPENDENT REFERENCE VOLTAGE

Publication

**EP 0217225 B1 19910828 (DE)**

Application

**EP 86112803 A 19860916**

Priority

DE 3534891 A 19850930

Abstract (en)

[origin: US4751454A] Circuit for generating a temperature-independent reference voltage includes transistors forming current sources, and a band gap circuit having bipolar transistors and being supplied by the current sources, the ratio of the emitter currents of the bipolar transistors being adjustable. The current sources may further include a first current source and a second current source parallel with the first current source.

IPC 1-7

**G05F 3/00**; **G05F 3/30**

IPC 8 full level

**G05F 3/00** (2006.01); **G05F 3/30** (2006.01)

CPC (source: EP US)

**G05F 3/30** (2013.01 - EP US); **Y10S 323/907** (2013.01 - EP US)

Citation (examination)

- EP 0075221 A2 19830330 - SIEMENS AG [DE]
- U. Tietze, Ch.Schenk, "Halbleiter - Schaltungstechnik", Springer-Verlag, 6. Auflage, Berlin, Heidelberg, Tokio, 1983, Seiten 532-537
- IEEE Journal of Solid-State Circuits, Band SC-13; Heft 6, 1978, Seiten 873-881, IEEE, New York, US; D.M. Monticelli: "A Versatile Monolithic IC Building - Block for Light-Sensing Applications;

Cited by

EP0632357A1; EP0396996A3; EP0360887A1; WO9305465A1; WO9734212A1

Designated contracting state (EPC)

AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)

**EP 0217225 A1 19870408**; **EP 0217225 B1 19910828**; AT E66756 T1 19910915; DE 3681107 D1 19911002; JP S6279515 A 19870411; US 4751454 A 19880614

DOCDB simple family (application)

**EP 86112803 A 19860916**; AT 86112803 T 19860916; DE 3681107 T 19860916; JP 23108186 A 19860929; US 91341386 A 19860929