

Title (en)

Voltage reference circuit

Title (de)

Referenzspannungsschaltung

Title (fr)

Circuit de tension de référence

Publication

EP 0952509 B1 20070530 (DE)

Application

EP 99105492 A 19990317

Priority

DE 19817791 A 19980421

Abstract (en)

[origin: EP0952509A2] A reference voltage circuit based on a bipolar transistor circuit (T1,T2a,T2b) for supplying a reference voltage (U_{ref}) derived from a summed voltage of first and second voltages, also includes adjustment or compensation devices (Z1-Z3,M1-M10) for adjusting the reference voltage (U_{ref}). The adjustment/compensation devices (Z1-Z3,M1-M10) are arranged and designed so that they adjust the collector current (I_{C1},I_{C2a}) of at least one bipolar transistor (T1,T2a) in the bipolar transistor circuit during activation of the pn-junctions of the transistors (T1,T2a) by forward voltages.

IPC 8 full level

G05F 3/30 (2006.01); **G05F 3/26** (2006.01)

CPC (source: EP US)

G05F 3/30 (2013.01 - EP US); **G05F 3/267** (2013.01 - EP US)

Designated contracting state (EPC)

DE ES FR GB IE IT PT

DOCDB simple family (publication)

EP 0952509 A2 19991027; EP 0952509 A3 20000329; EP 0952509 B1 20070530; DE 19817791 A1 19991028; DE 59914352 D1 20070712; US 6094041 A 20000725

DOCDB simple family (application)

EP 99105492 A 19990317; DE 19817791 A 19980421; DE 59914352 T 19990317; US 29612399 A 19990421