

Title (en)

Current source with a given ratio between input and output currents

Title (de)

Stromquelle mit bestimmtem Verhältnis zwischen Eingangs- und Ausgangsströmen

Title (fr)

Source de courant à rapport donné entre courant de sortie et d'entrée

Publication

EP 0479377 B1 19960103 (FR)

Application

EP 91202505 A 19910926

Priority

FR 9012307 A 19901005

Abstract (en)

[origin: EP0479377A1] The invention relates to a current source exhibiting a given ratio (G) between an output current (I) and an input current (i). A first series branch comprises a first resistor (R1) in series with the main current path of a first transistor (T1). A second series branch comprises a second resistor (R3) in series with the main current path of a second transistor (T2). The first (T1) and the second (T2) transistors form a current mirror. A current compensator is arranged in such a way as to produce a compensating voltage drop in the first series branch, equal to: $\frac{I_{S1}}{I_{S2}}$ is1 and is2 designating the characteristic current constants of the first (T1) and second (T2) transistors. <IMAGE>

IPC 1-7

G05F 3/26

IPC 8 full level

G05F 3/26 (2006.01)

CPC (source: EP US)

G05F 3/265 (2013.01 - EP US)

Cited by

EP0608694A3

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

EP 0479377 A1 19920408; EP 0479377 B1 19960103; DE 69116063 D1 19960215; DE 69116063 T2 19960801; FR 2667703 A1 19920410; JP 3272749 B2 20020408; JP H04289905 A 19921014; US 5179357 A 19930112

DOCDB simple family (application)

EP 91202505 A 19910926; DE 69116063 T 19910926; FR 9012307 A 19901005; JP 25523291 A 19911002; US 77289491 A 19911004