

Title (en)  
Integratable current source circuit

Title (de)  
Integrierbare Stromquellenschaltung

Title (fr)  
Circuit source de courant intégrable

Publication  
**EP 0608694 B1 19970806 (DE)**

Application  
**EP 94100236 A 19940110**

Priority  
DE 4302221 A 19930127

Abstract (en)  
[origin: DE4302221C1] The circuit is used to provide an output current (2) proportional to an input current (1), using a current source (3) connected between a reference potential (4) and the emitter of a first transistor (5) and the base of a second transistor (6) of opposite type, which is coupled to the reference potential at its collector. The base of the first transistor is coupled to the collector of a third transistor (7) with the zone conductivity as the second transistor and to the circuit input (8). The base of the third transistor is coupled to the emitter of the second transistor and the base of a fourth transistor (10) of similar type coupled to the circuit output (9) at its collector. The collector of the first transistor and the emitters of the third and fourth transistor are each connected to a common supply potential (11). ADVANTAGE - High accuracy using transistors with low current amplification providing high current amplification control.

IPC 1-7  
**G05F 3/22**; **G05F 3/26**

IPC 8 full level  
**G05F 3/22** (2006.01); **G05F 3/26** (2006.01)

CPC (source: EP US)  
**G05F 3/22** (2013.01 - EP US)

Designated contracting state (EPC)  
DE FR GB IT

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**DE 4302221 A 19930127**; DE 59403586 T 19940110; EP 94100236 A 19940110; US 18303394 A 19940118