

Title (en)  
INTEGRATED CONSTANT-CURRENT SOURCE

Publication  
**EP 0169388 B1 19880928 (DE)**

Application  
**EP 85107776 A 19850624**

Priority  
DE 3426166 A 19840716

Abstract (en)  
[origin: US4651083A] An integrated constant-current source having an operational amplifier with an inverting input to which a reference voltage is feedable, and an output; a first stage to which the output is coupled and by which the output voltage of the operational amplifier is converted to a first current, the first stage being in a circuit wherein a reference resistor is connected from which, for coupling a voltage dropping across the reference resistor, the reference resistor is coupled to a non-inverting input of the operational amplifier; and a second stage coupled to the output of the operational amplifier for converting the output voltage of the operational amplifier to a second current, the second stage being in a circuit wherein a current reflector is connected for supplying an output current which is constant in a first approximation, the integrated constant current source includes a third stage coupled to the output of the operational amplifier and converting the output voltage thereof into another current, the third stage being in a circuit wherein another current reflector is connected, and another stage coupled to the reference resistor, the other current reflector conducting reflected current and having a stage thereof connected in a circuit wherein the other stage coupled to the reference resistor is also connected.

IPC 1-7  
**G05F 1/56**

IPC 8 full level  
**G05F 1/56** (2006.01)

CPC (source: EP KR US)  
**G05F 1/56** (2013.01 - KR); **G05F 1/561** (2013.01 - EP US)

Cited by  
DE102005022612A1; EP0388802A3; EP0268345A3; DE10145034A1; DE10145034B4; US6657479B2; US7740465B2

Designated contracting state (EPC)  
AT CH DE FR GB IT LI NL

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**EP 85107776 A 19850624**; AT 85107776 T 19850624; DE 3565328 T 19850624; JP 15586685 A 19850715; KR 850004763 A 19850703; US 75486385 A 19850712