

Title (en)
VOLTAGE REFERENCE SOURCE, IN PARTICULAR FOR AMPLIFIER CIRCUITS

Publication
EP 0011704 B1 19830713 (DE)

Application
EP 79104039 A 19791018

Priority
DE 2850826 A 19781123

Abstract (en)
[origin: US4274061A] A reference voltage source, in particular for amplifier circuits, includes a pair of transistors having their bases connected together, one of the transistors being further connected as a diode and the other being operated normally. In the collector circuit of the transistors, a current mirror circuit is connected which includes a further transistor which is connected in series through an additional transistor to a reference potential. The base of the additional transistor is connected with emitter resistors in the emitter circuit of the first-mentioned transistors and the reference voltage is taken off at the connection between the serially connected further and additional transistors. Additional current mirror circuits may be employed for providing a symmetrical operation of the amplifier circuit supplied by the reference voltage source.

IPC 1-7
G05F 3/20

IPC 8 full level
G05F 3/22 (2006.01); **G05F 3/20** (2006.01); **G05F 3/26** (2006.01)

CPC (source: EP US)
G05F 3/265 (2013.01 - EP US)

Cited by
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EP 0011704 A1 19800611; **EP 0011704 B1 19830713**; DE 2850826 A1 19800604; DE 2965866 D1 19830818; JP S5574616 A 19800605; MY 8700876 A 19871231; US 4274061 A 19810616

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EP 79104039 A 19791018; DE 2850826 A 19781123; DE 2965866 T 19791018; JP 15082079 A 19791122; MY 8700876 A 19871230; US 8324979 A 19791010