

Title (en)
TEMPERATURE-COMPENSATED CURRENT REFERENCE CIRCUIT

Title (de)
TEMPERATURKOMPENSIERTE STROMREFERENZSCHALTUNG

Title (fr)
CIRCUIT DE REFERENCE DE COURANT COMPENSE EN TEMPERATURE

Publication
EP 1561153 A4 20070801 (EN)

Application
EP 03749655 A 20030912

Priority
• IT TO20020803 A 20020916
• US 0328835 W 20030912
• US 40762203 A 20030403

Abstract (en)
[origin: WO2004025390A2] A current-reference circuit comprises a CMOS differential amplifier having first output node comprising a drain of a first n-channel MOS transistor and a second output node comprising a drain of a second n-channel MOS transistor. A first p-channel MOS transistor has a source coupled to a supply potential, a gate coupled to the second output node, and a drain. A first PNP bipolar transistor has an emitter coupled to the drain of the first p-channel MOS transistor through a first resistor and to a gate of the second n-channel MOS transistor, and a collector and a base both coupled to ground. A second PNP bipolar transistor has an emitter coupled to the drain of the first p-channel MOS transistor through a second resistor in series with a third resistor, and a collector and a base both coupled to ground. The gate of the first n-channel MOS transistor is coupled to a common node between the second and third resistors. A third n-channel MOS transistor has a drain coupled to the drain of the first p-channel MOS transistor, a source coupled to ground through a fourth resistor, and a gate coupled to either a reference potential or to the common node between the second and third resistors.

IPC 8 full level
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CPC (source: EP KR)
G05F 3/02 (2013.01 - KR); **G05F 3/245** (2013.01 - EP)

Citation (search report)
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• See references of WO 2004025390A2

Designated contracting state (EPC)
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