

Title (en)
PROPORTIONAL TO ABSOLUTE TEMPERATURE CURRENT GENERATING DEVICE AND ELECTRONIC DEVICE INCLUDING THE SAME

Title (de)
PROPORTIONAL ZUR ABSOLUTEN TEMPERATURSTROMERZEUGUNGSVORRICHTUNG UND ELEKTRONISCHE VORRICHTUNG DAMIT

Title (fr)
DISPOSITIF DE GÉNÉRATION DE COURANT PROPORTIONNEL À LA TEMPÉRATURE ABSOLUE ET DISPOSITIF ÉLECTRONIQUE LE COMPRENANT

Publication
EP 4345570 A1 20240403 (EN)

Application
EP 23199675 A 20230926

Priority

- KR 20220122686 A 20220927
- US 202318370464 A 20230920

Abstract (en)
A proportional-to-absolute-temperature current generating device includes a differential difference amplifier (DDA) that outputs a comparison signal based on a reference voltage, a first voltage, and a second voltage, a current source that generates a first current and a second current based on the comparison signal, a proportional-to-absolute-temperature voltage (VPTAT) generating unit that generates the first voltage based on the first current, and a complementary-to-absolute-temperature voltage (VCTAT) generating unit that generates the second voltage based on the second current. Each of the first current and the second current is a proportional-to-absolute-temperature current that increases in proportion to a temperature of the proportional-to-absolute-temperature current generating device.

IPC 8 full level
G05F 1/56 (2006.01); **G05F 3/16** (2006.01)

CPC (source: EP)
G05F 1/56 (2013.01); **G05F 3/16** (2013.01)

Citation (search report)

- [I] US 2016352223 A1 20161201 - CHOO GYO-SOO [KR], et al
- [I] US 2017011806 A1 20170112 - GANGASANI VENKATARAMANA [KR], et al

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA

Designated validation state (EPC)
KH MA MD TN

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