

Title (en)

DIFFERENTIAL AMPLIFIER HAVING A RAIL-TO-RAIL INPUT VOLTAGE RANGE

Title (de)

DIFFERENZVERSTÄRKER MIT EINEM RAIL-TO-RAIL-EINGANGSSPANNUNGSBEREICH

Title (fr)

AMPLIFICATEUR DIFFÉRENTIEL AYANT UNE PLAGE DE TENSION D'ENTRÉE "RAIL-TO-RAIL"

Publication

**EP 2529482 A1 20121205 (DE)**

Application

**EP 11711834 A 20110325**

Priority

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Abstract (en)

[origin: WO2011124480A1] The invention relates to a differential amplifier having a rail-to-rail input voltage range, comprising a first differential input stage (11-P), which is connected to a first supply voltage rail via a first power source (12-P), and a second complementary differential input stage (11-N), which is connected to the second supply voltage rail via a second power source (12-N). To this end, switching means (50) are provided, which deactivate the first differential input stage (11-P) and activate the second differential input stage (11-N) when the voltage value of the input voltage signal exceeds a predetermined first voltage threshold (Vlow) in the event of rising input voltage, and which deactivate the second differential input stage (11-N) and activate the first differential input stage (11-P) when the voltage value of the input voltage signal falls below a predetermined second voltage threshold (Vhigh) in the event of falling input voltage. A constant input slope can thus be achieved, having a high phase reserve, which makes the invention particularly applicable in the field of biosensory technology.

IPC 8 full level

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Citation (search report)

See references of WO 2011124480A1

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DOCDB simple family (publication)

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