

Title (en)

CASCODE AMPLIFIER WITH A FEEDBACK CIRCUIT FOR PROVIDING A BIAS VOLTAGE

Title (de)

KASKODENVERSTÄRKER MIT EINER RÜCKKOPPLUNGSSCHALTUNG ZUR BEREITSTELLUNG EINER VORSPANNUNG

Title (fr)

AMPLIFICATEUR CASCODE AVEC UN CIRCUIT DE RÉTROACTION POUR FOURNIR UNE TENSION DE POLARISATION

Publication

EP 4158774 A1 20230405 (EN)

Application

EP 20734502 A 20200622

Priority

EP 2020067264 W 20200622

Abstract (en)

[origin: WO2021259442A1] The present disclosure relates to a cascode amplifier (1), CA, for amplifying an input voltage (Vin) to an output voltage (Vout), wherein the CA (1) comprises at least one circuit branch (CB1) comprising a load resistor (RL), a first transistor (Q1) and a second transistor (Q2) in series to each other. The CA further comprises a feedback circuit (2) and a reference voltage generation circuit (3). The feedback circuit (2) is configured to provide a bias voltage (Vbias) to the first transistor (Q1) by comparing a cascode voltage (Vcasc) sensed at a terminal of the first transistor (Q1) with a reference voltage (Vref). The reference voltage generation circuit (3) is configured to generate the reference voltage (Vref) using a voltage divider, such that the ratio between a transistor voltage (Vcel) of the first transistor (Q1) and a transistor voltage (Vce2) of the second transistor (Q2) is kept constant.

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

See references of WO 2021259442A1

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 MK MT NL NO PL PT RO RS SE SI SK SM TR

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DOCDB simple family (publication)

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