

Title (en)

Circuit for producing an electrical voltage reference value depending on an electrical control voltage.

Title (de)

Schaltungsanordnung zur Erzeugung eines elektrischen Spannungs-Sollwertes in Abhängigkeit von einer elektrischen Steuerspannung.

Title (fr)

Circuit produisant une tension de référence en fonction d'une tension de commande.

Publication

EP 0563765 B1 19950823 (DE)

Application

EP 93104805 A 19930324

Priority

CH 107392 A 19920402

Abstract (en)

[origin: EP0563765A2] An RC section (12, 13) connected between feed lines (+, 0) is connected to the first input of a comparator (9). The second input of the comparator (9) is connected to a fixed voltage divider (10, 11). The output of the comparator (9) is connected to the first input via another resistor (16). The capacitor (13) of the RC section is charged up via the resistor (12) of the RC section until the voltage at the first input reaches the fixed voltage at the second input. The output of the comparator (9) then discharges the capacitor (13) via the further resistor (16) whereupon the capacitor (13) is charged up again. The periodic exponential capacitor voltage is supplied to the first input of a further comparator (7), at the second input of which the adjustable control voltage is present. When the voltages are equal, a voltage change occurs at the output of the comparator (7) which is transferred to a switching transistor (23) via an optocoupler (19). The signal present at its output and smoothed forms a voltage reference value which quasi-logarithmically depends on the settings of the control voltage and can be used, for example, for controlling the brightness of low-voltage gas discharge lamps. <IMAGE>

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