

Abstract

~~GENERAL-PURPOSE TEMPERATURE COMPENSATING CURRENT MASTER-BIAS CIRCUIT~~

A temperature compensating biasing circuit is constructed by first determining a piecewise function substantially describing a required bias current with respect to temperature. Reference signals are created such that each reference signal describes an amount of contributing currents that, when summed together, generate a master biasing current. The biasing current generator is further constructed to create a thermal signal indicating an operating temperature. Each of the reference signals is compared to the thermal signal. The biasing current generator then identifies which of the contributing currents or portions of the contributing currents are being included to generate the master biasing current. The identified contributing currents and the portions of the contributing currents are then summed to form the master biasing current. The master biasing current may be mirrored to form bias currents that have the temperature compensation bias function.

(FIGURE 3 IS SUGGESTED FOR PUBLICATION)