

ABSTRACT OF THE DISCLOSURE

CONTROL CIRCUIT FOR INCREASING THE OUTPUT IMPEDANCE OF
A TRANSCONDUCTOR

A transconductance circuit having a high output impedance has a dual input differential transconductor (10) with first (14) and second (16) differential inputs and a differential output (18). The first differential input (14) is connected to receive a dc voltage (20). An inverting feedback path is connected between the second differential input (16) and the differential output (18). A differential difference amplifier (24) has a first input (26) connected to receive the dc voltage (20) and a second input (28) connected to the inverting feedback path. A variable resistor (22) is connected across the differential output (18). The output (30) of the differential difference amplifier (24) is connected to control the variable resistor (22) to minimize the output of the differential difference amplifier (24), thereby creating a high output impedance from said transconductor (10).

Figure 1