

## WIDE-BAND AMPLIFIER CIRCUITS

ABSTRACT OF THE DISCLOSURE

A wide-band amplifier circuit comprises first to eighth transistors, a plurality of resistor, a capacitor and an output terminal. The first transistor has its base supplied with an input signal, the second transistor is connected in series through a first impedance circuit portion to a collector-emitter path of the first transistor for functioning as a diode, the third transistor is connected to form a first current mirror circuit portion together with the second transistor and has its collector connected through a first resistor to one end of a power source, the fourth transistor has its base connected to a connecting point between the collector of the third transistor and the first resistor, the fifth transistor has its collector-emitter path connected in series to a collector-emitter path of the fourth transistor, the sixth transistor has its base supplied with the input signal, the seventh transistor connected in series through a second impedance circuit portion including a second resistor and a capacitor to a collector-emitter path of the sixth transistor so as to form a second current mirror circuit portion together with the fifth transistor, and the eighth transistor having its collector-emitter path connected between one end of the second impedance circuit portion and one end of the power source and its base connected to a bias voltage source. A third resistor is connected between the other end of the second impedance circuit portion and the other end of the power source and the output terminal derived from a connection point between the emitter of the fourth transistor and the collector of the fifth transistor.

FIGURE 5

