

ABSTRACT

An amplifier is provided which includes: a first variable capacitance device of which capacitance is variable, a second variable capacitance device of which capacitance is variable, electrically connected to the first variable capacitance device, and of an inverse conductivity type from the first variable capacitance device, and a first input unit for selectively inputting a bias voltage and a voltage signal to the first variable capacitance device and the second variable capacitance device, wherein, in the event that the bias voltage and the voltage signal are input to the first variable capacitance device and the second variable capacitance device, the capacitance of the first variable capacitance device and the second variable capacitance device is taken as a first value, and wherein the voltage signal is amplified with the capacitance of the first variable capacitance device and the second variable capacitance device as a second value smaller than the first value.

