

ABSTRACTDevice for the selective amplification
of radioelectric signals

The device comprises a first amplifier (2), receiving at its input the signal to be amplified. A second amplifier (4) is coupled to the output of the first amplifier (2) via a first band-pass filter (3). A second band-pass filter (5) is coupled to the output of the second amplifier (4) to deliver the resulting filtered signal. The first amplifier has an amplification characteristic determined in such a manner that the ratio between the energies of the signal obtained at the output of the first filter (3) and of the thermal noise existing at the output of the first filter (3) is approximately equal to the ratio which is desired to exist between the energies of the signal and the thermal noise at the output of the second filter (5), the first and second filters (3, 5) having an attenuation value off band which is approximately equal to the value of the noise factor of the second amplifier (4).

Application: intermediate-frequency filtering systems for transmitters.

FIGURE 1