

ABSTRACT OF THE DISCLOSURE

A receiving circuit mainly available in a digital modulation type communication system having a plurality of channels, which is capable of reducing power in a receiving system, simplifying the circuit and reducing the power consumption. Upside and downside frequencies corresponding to a central value between channels are separately supplied from a local frequency signal generating circuit 4 to first and second frequency converting circuits 2, 3 so that two output signals are developed with respect to one of a desired wave, upside channel and downside channel. The desired wave present in common in the first and second frequency converting circuits 2, 3 is extracted in a common wave extracting circuit 5, and a frequency offset of ω_0 existing in the output of the common wave extracting circuit 5 is removed a frequency offset circuit 6 and further an unnecessary frequency component is filtered by a filter 8. In addition, the common wave extracting circuit 5 has transformers and, using its inductances, raises the difference between the common wave and the non-common wave within the circuit to more than two times that of a prior art.