tor 2SC384, triples the frequency of each local oscillator output to obtain the above-mentioned local oscillator frequencies.

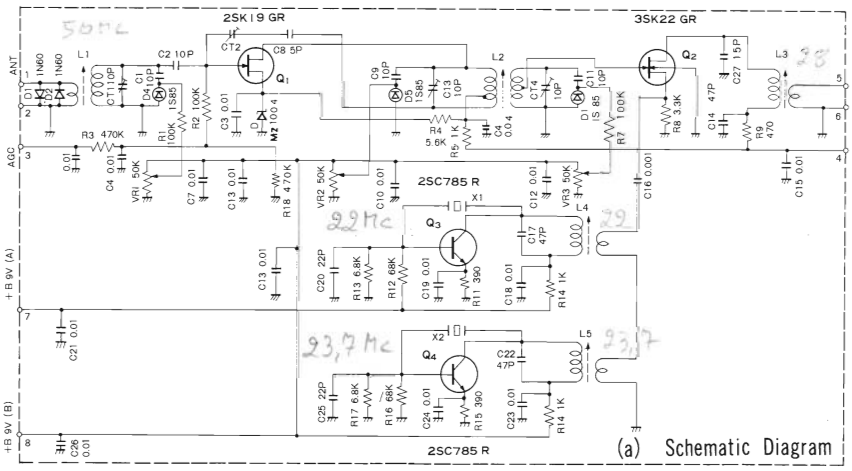
The input signal, i.e. the signal in a receiving frequency range from 144 to 145.7 MHz for channel A or from 145.7 to 147.4 MHz for channel B, is applied from the antenna to the ANT input circuit of the converter, from which it is fed through RF amplifier Q1 to mixer Q2.

Thus, mixer Q2 heterodynes the A channel signal of 144 to 145.7 MHz with the 116 MHz output of tripler Q3, or the A channel local oscillator frequency, into an HF signal of 28 to 29.7 MHz. For the B channel signal of 145.7 to 147.4 MHz, the mixer heterodynes the signal with the 117.7 MHz output of tripler Q3, or the B channel local oscillator frequency, into an HF signal of 28 to 29.7 MHz. These HF signals are then fed to the input circuit of the RF amplifier unit.

A protective circuit comprising diodes D1 and D2 is inserted in the ANT input circuit of this converter for protection of RF amplifier and mixer, comprising an FET respectively.

The RF amplifier stage is operated under an AGC to improve the selectivity.

In addition, a variable capacitor diodes is inserted in each tuning circuit for the RF amplifier and the mixer stages to vary the resonance frequency of tuning circuit and widen its substantial pass band simultaneously with selection of the A or B channel for improvement of the sensitivity and selectivity of the converter (Utility model applied for).



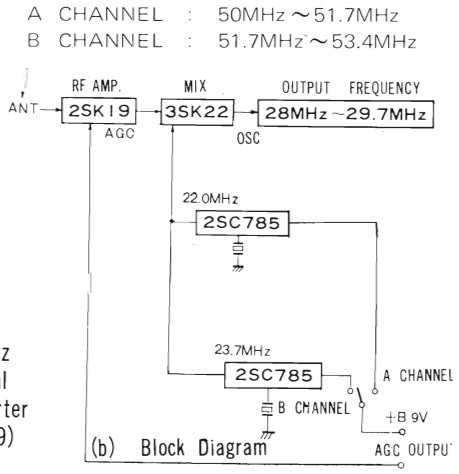
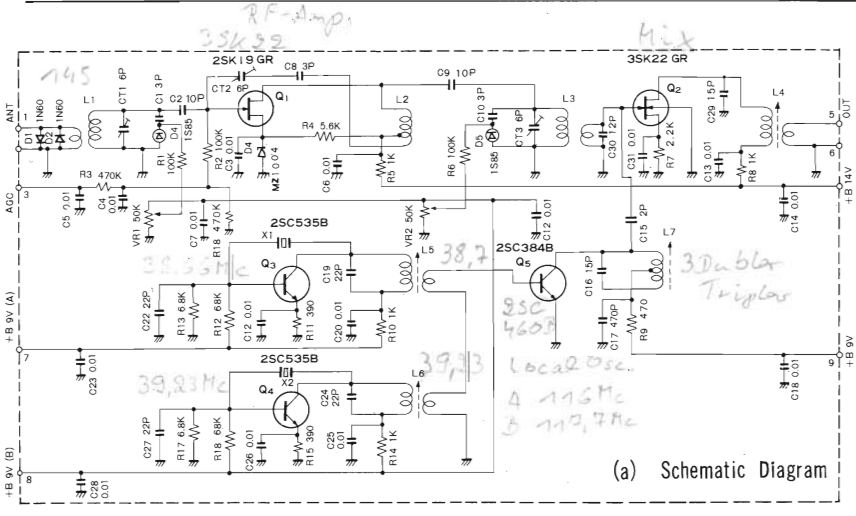


Fig. 2
50 MHz
Crystal
Converter
(CC-69)



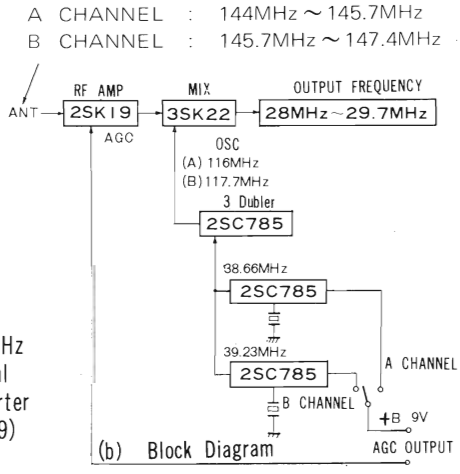


Fig. 3
144 MHz
Crystal
Converter
(CC-29)