

200 TOY (HK) LTD.

FCC ID: O4Y10025

EXHIBIT #: 10

APPLICANT : 200 TOY(HK)LTD.

FCC ID. : O4Y10025

Circuit Description

Work mode : Single mode (receive, transmit and change state by switch SW1).

Modulation mode : Amplitude modulation (AM)

Circuit Combination:

High frequency filter : combined by L1, L3, L4,L5, C16, C17,C18 and C19.

Super heterodyne rectifier : combined by L2, Q1, Outer resistors and capacitors.

High frequency vibration and modulation : combined by L2, Q1,XTAL and related bias resistors, capacitors.

Low frequency amplification and modulation : combined by Q2, Q3 ,Q4, T1, bias resistors , coupling capacitors.

Electricity - Sound and Sound - Electricity swapping completed by SP.

Work Processing:

Reception: (Switch automatically recovery at position R), antenna ANT receives the high frequency signal in the air, transmitted through high frequency filter to the super heterodyne rectifier circuit to select frequency and rectifying. The rectified signal then transmitted to the low frequency amplification circuit via coupling capacitor C7,and C9 to amplify the signal , and finally transmitted from T1 to speaker SP.

Transmission: Switch SW1 at position T, speakerSP convert sound wave signal to electrical signal, transmitted to low frequency amplification to amplify the signal then transmitted to the high frequency vibration circuit . The signal is then modulated with the high frequency so as to convert high frequency signal to amplitude modulated high frequency signal . Afterwards, the signal is transmitted to the high frequency filter and finally transmitted to the air through the antenna.