

EXHIBIT B

[FCC Ref. 2.1033(b)(4)]

"Description of Circuit Functions"

## **21006A Circuit Description :**

The following circuit description for model 21006A is base on the circuit diagram and block diagram of 21006A.

### **21006A Handset :**

#### ***1. Receiving Path***

The receiving path is established by below sections.

##### ***Low Noise Amplifier (LNA), Mixer, Demodulator***

The RF signal filtering by the Band Pass filter 2.457MHz , and input to LNA of IC T2082 transceiver IC . Then though mixer and GFSK data output from demodulator .

##### ***GFSK data demodulate***

The GFSK data is output from IC T2082 transceiver IC, then go to DECT controller chip W93511AF/W93513AF for decode to audio and output on pin 85. And audio signal before output to the handset speaker though audio amplifier .

#### ***2. Transmitting Path***

The transmitting path is established by below sections.

##### ***Mic amplifier and encoder***

Audio pick up by handset microphone is amplified by internal mic amplifier of U2 of WDCT controller chip W93511AF/W93513F , then go to encoding .

##### ***Modulator and RF power amplifier***

The GFSK data output from WDCT controller chip, then input to transceiver IC T2802. The modulated signal go to power amplifier T7024, then though band pass filter to antenna

## **21006A Base Unit :**

### ***1. Receiving Path***

The receiving path is established by below sections.

#### ***Low Noise Amplifier (LNA), Mixer, Demodulator***

The RF signal filtering by the Band Pass filter 2.457MHz , and input to LNA of IC T2082 transceiver IC . Then through mixer and GFSK data output from demodulator .

#### ***GFSK data demodulate***

The GFSK data is output from IC T2082 transceiver IC, then go to DECT controller chip W93510AF/W93523AF for decode to audio and output on pin 85. And audio signal before output to the line interface through audio amplifier .

### ***2. Transmitting Path***

The transmitting path is established by below sections.

#### ***Audio amplifier and encoder***

Audio pick up by line interface is amplified by internal audio amplifier of U1 of WDCT controller chip W93510AF/W93523F , then go to encoding .

#### ***Modulator and RF power amplifier***

The GFSK data output from WDCT controller chip, then input to transceiver IC T2802. The modulated signal go to power amplifier T7024, then through band pass filter to antenna

### ***3. Telephone line interface***

The telephone line interface circuit is established by below sections.

#### ***Audio power amplifier***

Q3, Q4 & Q12 are built as a power amplifier , according to high current output requirement for line interface.

#### ***Line relay & isolation transformer***

T1 is the line isolation transformer , both audio input and output is through this transformer . RL1 is the reed relay for line seize , which is controlled Q2.

***Ring detect circuit***

U5B and U5C are used as a differential amplifier for picks up the ring signal , which is input though two 20M ohm resistor (R16 and R65) as an isolation from the line.

**21006A digital security coding system :**

The handset and base unit of 21006A will registration on both 20 bit digital random generated security code with manufacturer ID code . This is pass to FCC Part 15.214(d) requirement.

**21006A CID system :**

The CID signal through R79, R80, C48 and C49 input U13 CID chip to amplifier and go to WDCT W95310AF/W95323F to demodulate the CID data then displayed on Handset LCD display.

**21006A CW system :**

The CW signal through line isolation transformer input U5A to amplifier and go to WDCT W93510AF/W93523F to demodulate the CW data then displayed on Handset LCD display.