EXHIBIT B

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

"Description of Circuit Functions"

BASE UNIT

1. TEL-LINE INTERFACE
2. RING DETECT
3. POWER SUPPLY
4. AUDIO AMPLIFIER AND COMPANDOR
5. DTMF GENERATOR
6. RSSI CONTROL
7. DATA COMMUNICATION INTERFACE
8. PAGING FUNCTION
9. CALLER IC FUNCTION
10. SPEAKER-PHONE OPERATION
11. BASE RF MODULE

PORTABLE UNIT

1. LOW BATTERY DETECTION CIRCUIT
2. BUZZER
3. INDICATOR CATEGORY
4. AUDIO AMPLIFIER AND COMPANDOR
5. PORTABLE RF MODULE

BASE UNIT

1. TEL-LINE INTERFACE

TEL-LINE INTERFACE CIRCUIT CONSISTS OF A RELAY, (LS1,LS2) DIODE BRIDGE
(D8~D10,D11~D14), TRANSFORMER (T1,T2) AND SPEECH NETWORK CIRCUIT AS FOLLOWS
FIG.1 A DC LOOP IS CONFIGUED WHEN CPU PIN 28 or 27 ARE SET HI.
THE LOOP CURRENT FLOWS AS FOLLOWS :
TIP/RING → F1 → D8,D9,D10,D11→ LS1 → R2 → T1
TIP/RING → F2 → D11,D12,D13,D14 → LS2 → R27 → T2
THE PULSE SIGNAL FROM CPU PIN 28 or 27 ARE TRANSMITTED THROUGH LS1 TO TURN ON
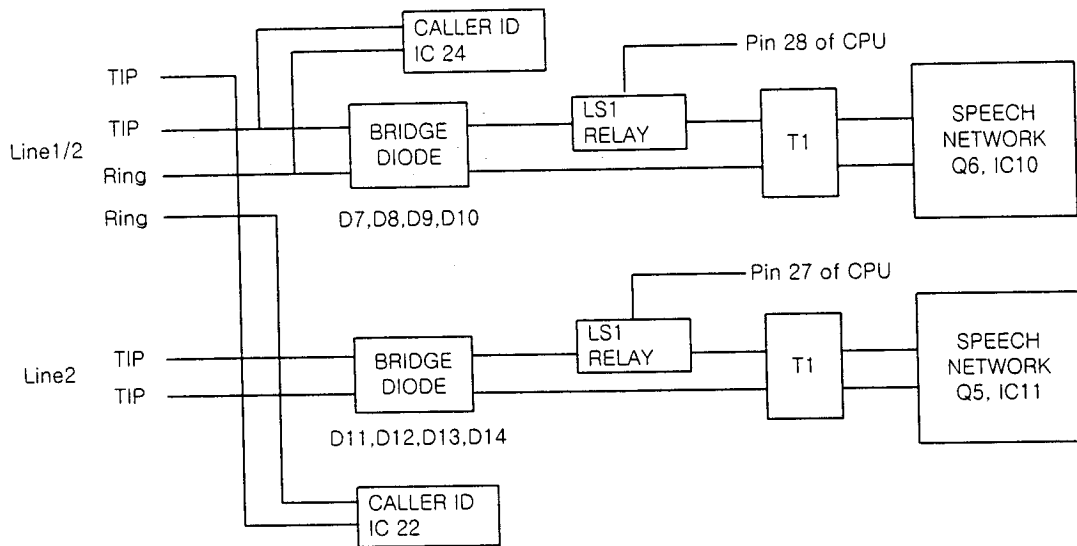AND OFF THE TEL-LINE.

FIG.1

2. RING DETECT

THE RING SIGNAL SUPPLIED BETWEEN T1 or T2 AND RING PASSES
THE FOLLOWING PROCEDURES AND IS DETECTED BY THE CPU.

Line 1 : TIP/RING → F1→ C4 →OPTOCOUPLER (IC1) → CID IC(IC24) → CPU (IC18)

Line 2 : TIP/RING → F2 → C17 → OPTOCOUPLER (IC3) → CID IC (IC22) → CPU (IC18)

Line1 TIP—[F1]— [BRIDGE]

IC1 OPTO COUPER → IC24 CID → CPU

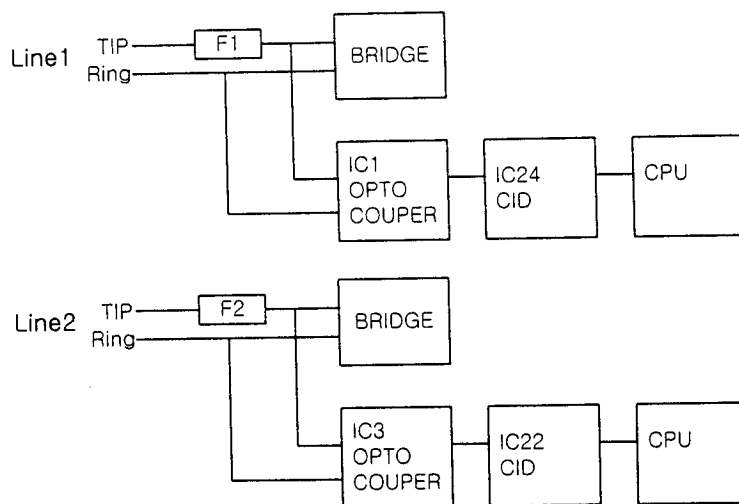Line2 TIP—[F2]— [BRIDGE]

IC3 OPTO COUPER → IC22 CID → CPU

FIG.2

3. POWER SUPPLY

THE OUTPUT VOLTAGE OF IC16,IC7 IS REGULATED 5V and 9V AND THIS VOLTAGE IS
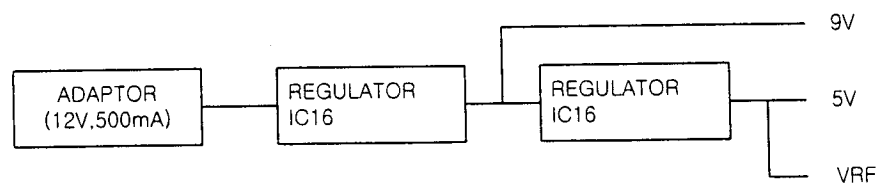USED BY MAIN SUPPLYIING VOLTAGE OF CPU AND TX,RX POWER.

ADAPTOR (12V,500mA) → REGULATOR IC16 → REGULATOR IC16 → 9V / 5V / VRF

FIG.3

4. AUDIO AMPLIFIER AND COMPANDOR

4-1 TX PART:

THE TRANSMITTED SIGNALS FROM TELEPHONE LINE ARE FEED TO COMPANDOR IC(IC15) THROUGH THE AUDIO AMPLIFIER AND THE RECEIVED SIGNALS FROM TELEPHONE LINE ARE ALSO FEED TO AUDIO AMPLIFIER THROUGH THE SPEECH NETWORK CIRCUIT.

Line 1 → Tip Ring → BRIDGE → T1 → SPEECH Q6, IC10 → COMPANDOR IC15 → RF MODULE AT-IN

Line 2 → Tip Ring → BRIDGE → T2 → SPEECH Q5, IC11
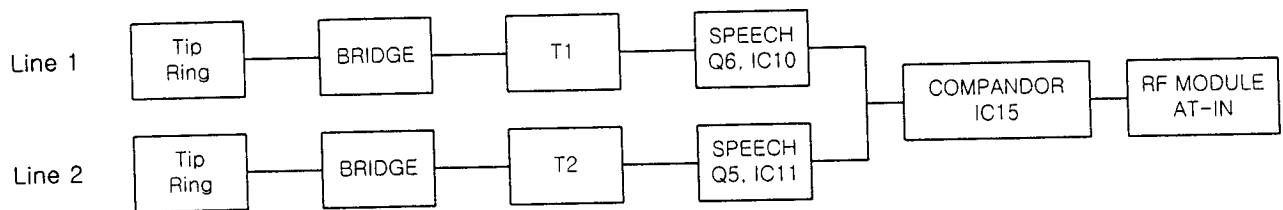
FIG.4

4-2 RX PART:

THE RECEIVED SIGNALS FROM AF OUT OF RF MODULE, FEED TO COMPANDOR FOR NOISE ELIMINATION. THIS SIGNAL THROUGH MATCHING TRANS T1 and T2, ALSO FEED TO TELEPHONE LINE THROUGH THE SPEECH NETWORK CIRCUIT TO. TRANSFER TO OTHER PARTY.
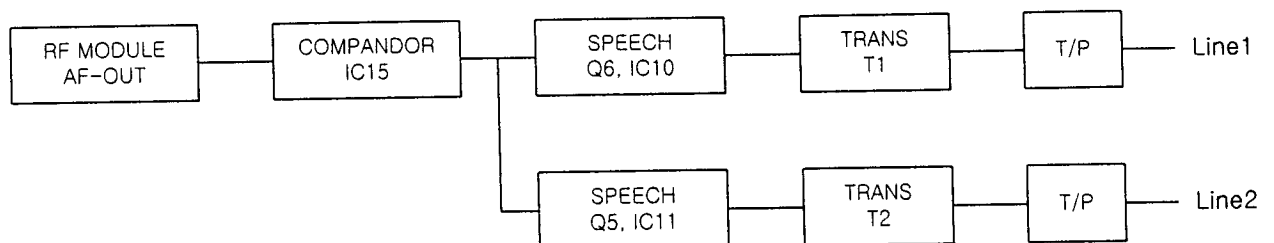
RF MODULE AF-OUT → COMPANDOR IC15 → SPEECH Q6, IC10 → TRANS T1 → T/P → Line1

SPEECH Q5, IC11 → TRANS T2 → T/P → Line2

FIG.5

5. DTMF GENARATOR

THE IC22, IC24 IS INTENDED DTMF GENERATOR TO PROVIDE DUAL-TONE MULTI-FREQUENCY (DTMF) FOR TONE DIALLING SYSTEM.

```
┌──────────┐      ┌──────────┐      ┌──────────┐
│   IC24   │──────│  SPEECH  │──────│  Line 1  │
│          │      │ Q6, IC10 │      │          │
└──────────┘      └──────────┘      └──────────┘

┌──────────┐      ┌──────────┐      ┌──────────┐
│   IC22   │──────│  SPEECH  │──────│  Line 2  │
│          │      │ Q5, IC11 │      │          │
└──────────┘      └──────────┘      └──────────┘
                                    ┌──────────┐
                                    │   IC21   │
                                    │ Audio IC │
                                    └──────────┘
```
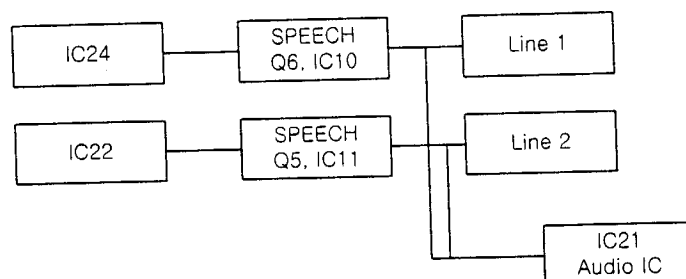
FIG.6

6. RSSI CONTROL

RSSI LEVEL OUTPUT FROM THE IF IC THROUGH IC14-D OP AMP OUT OF IS DETECTING BY PIN 80 OF CPU.

```
BUSY ──────────────┌──────────┐────────────── Pin80 OF CPU
                   │ OP   AMP │
                   │  IC14-D  │
                   └──────────┘
```
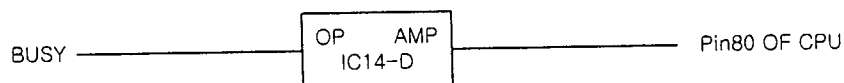
FIG.7

7. DATA COMMUNICATION INTERFACE.

* DATA COMMUNICATION IS OPERATED SERIAL OUTPUT

7-1 PIN 8(RX DATA) OF CPU :

DATA SIGNAL WILL RECEIVE FROM THE PORTABLE UNIT AS THROUGH FILTER CIRCUIT IC14A,B AND DATA SIGNAL INPUT PIN 8 (RX DATA) OF CPU
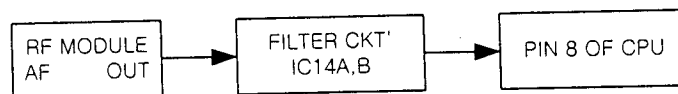
```
┌──────────┐      ┌──────────┐      ┌──────────────┐
│ RF MODULE│ ───▶ │FILTER CKT'│ ───▶ │ PIN 8 OF CPU │
│ AF    OUT│      │  IC14A,B  │      │              │
└──────────┘      └──────────┘      └──────────────┘
```

FIG.8

7-2 PIN 9 (TXDATA) OF CPU :

DATA SIGNAL WILL SEND TO THE PORTABLE UNIT AS THROUGH PIN 27(TX DATA) OF CPU

```
┌──────────────┐      ┌──────────────┐      ┌──────────────┐
│   TX DATA    │ ───▶ │  COMPANDOR   │ ───▶ │  RF MODULE   │
│ PIN 9 of CPU │      │ Pin 40 of IC15│      │   AF – IN    │
└──────────────┘      └──────────────┘      └──────────────┘
```
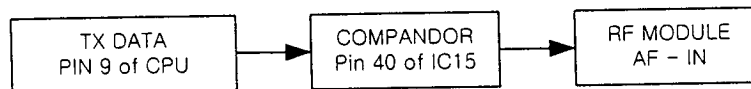
FIG.9

8. PAGING FUNCTION

PAGING FUNCTION CAN BE SELECTED EITHER FROM BASE TO PORTABLE UNIT. THE INTERCOM FUNCTION CAN BE ENABLED BY PRESSING THE PAGING KEY IN THE BASE SET.
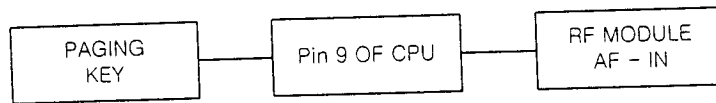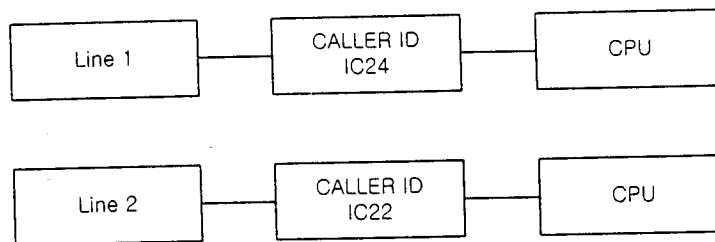
```
┌──────────┐     ┌──────────────┐     ┌──────────────┐
│ PAGING   │─────│ Pin 9 OF CPU │─────│  RF MODULE   │
│  KEY     │     │              │     │   AF − IN    │
└──────────┘     └──────────────┘     └──────────────┘
```

FIG.10

9. CALLER IC FUNCTION

```
┌──────────┐     ┌──────────────┐     ┌──────────┐
│  Line 1  │─────│  CALLER ID   │─────│   CPU    │
│          │     │    IC24      │     │          │
└──────────┘     └──────────────┘     └──────────┘

┌──────────┐     ┌──────────────┐     ┌──────────┐
│  Line 2  │─────│  CALLER ID   │─────│   CPU    │
│          │     │    IC22      │     │          │
└──────────┘     └──────────────┘     └──────────┘
```

10. SPEAKER-PHONE OPERATION

10-1 TX PART:

THE TRANSMITTED SIGNALS FROM TELEPHONE LINE ARE FEED TO SPEAKER-PHONE
IC(IC20) THROUGH THE AUDIO AMPLIFIER AND THE RECEIVED SIGNALS FROM
TELEPHONE LINE ARE ALSO FEED TO AUDIO AMPLIFIER THROUGH THE SPEECH
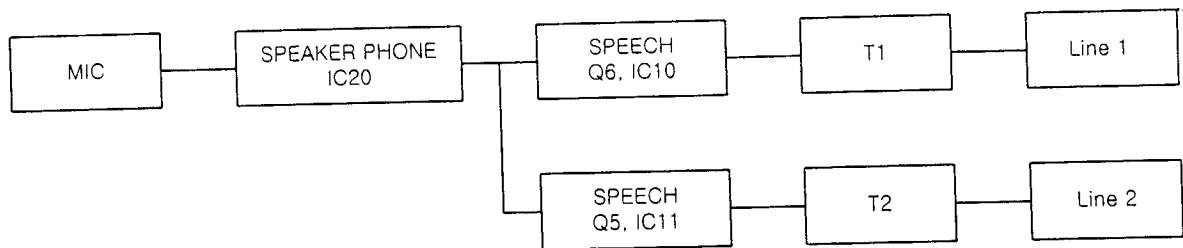NETWORK CIRCUIT.

```
┌──────┐   ┌──────────────┐   ┌──────────┐   ┌──────┐   ┌────────┐
│ MIC  │───│ SPEAKER PHONE│───│  SPEECH  │───│  T1  │───│ Line 1 │
│      │   │     IC20     │   │ Q6, IC10 │   │      │   │        │
└──────┘   └──────────────┘   └──────────┘   └──────┘   └────────┘

                                ┌──────────┐   ┌──────┐   ┌────────┐
                                │  SPEECH  │───│  T2  │───│ Line 2 │
                                │ Q5, IC11 │   │      │   │        │
                                └──────────┘   └──────┘   └────────┘
```

FIG.4

10-2 RX PART:

THE RECEIVED SIGNALS FROM AF OUT OF RF MODULE, FEED TO COMPANDOR FOR
NOISE ELIMINATION. THIS SIGNAL THROUGH MATCHING TRANS T1, ALSO FEED TO
TELEPHONE LINE THROUGH THE SPEECH NETWORK CIRCUIT TO. TRANSFER TO
OTHER PARTY.

```
┌────────┐   ┌──────┐   ┌──────────┐
│ Line 1 │───│  T1  │───│SPEECH CKT│
│        │   │      │   │ Q6,IC10  │
└────────┘   └──────┘   └──────────┘   ┌──────────────┐   ┌─────────┐
                                       │ SPEAKER PHONE│───│ SPEAKER │
┌────────┐   ┌──────┐   ┌──────────┐   │     IC20     │   │         │
│ Line 2 │───│  T2  │───│SPEECH CKT│   └──────────────┘   └─────────┘
│        │   │      │   │ Q5,IC11  │
└────────┘   └──────┘   └──────────┘
```
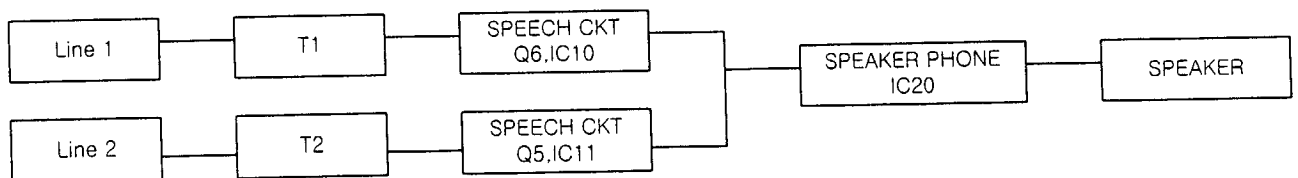
FIG.5

11. BASE RF MODULE

11-1. RX PART

THE RECEIVER FRONT-END CONTAINS A BAND PASS FILTER, AN RF LOW NOISE AMPLIFIER, A ACTIVE TRANSISTOR MIXER, A MONOLITHIC CRYSTAL FILTER AND 10.7MHz IF AMPLIFIER. ALSO IT INCLUDES BUFFER AMPLIFIERS FOR THE GENERATION OF LOCAL OSCILATOR POWER.

THIS FRONT-END RECEIVER RECEIVES AN RF SIGNAL FROM THE ANTENNA. AND RF SIGNALS WITHIN THIS FREQUENCY RANGE IS 926.125MHz~927.675MHz PASS THROUGH RF AMP AND SAW FILTER.

AFTER PASSING THROUGH THE SAW FILTER, THE SIGNAL IS MIXED WITHIN 1'ST LOCAL FREQUENCY FROM VOLTAGE CONTROLLED OSCILLATOR.

THE SIGNAL IS AMPLIFIED ON THE IF AMP TRANSISTOR AND THE SIGNAL PASS THROUGH THE CERAMIC FILTER (10.7MHz).

AFTER THE IF SIGNAL PASS THE CERAMIC FILTER, THE SIGNAL ENTER BY THE FM IF (INTERMEDIATE FREQUENCY) I C.

AND THE SIGNAL IS MIXED IN THE FM IF IC (KA3361).

THE SIGNAL PASS THROUGH THE CERAMIC FILTER (450KHz).

THE OUTPUT SIGNAL IN THE FM IF IC STREAMS FROM THE AF-OUT TEMINAL OF THE CONNECTOR 1 TO THE BASE.
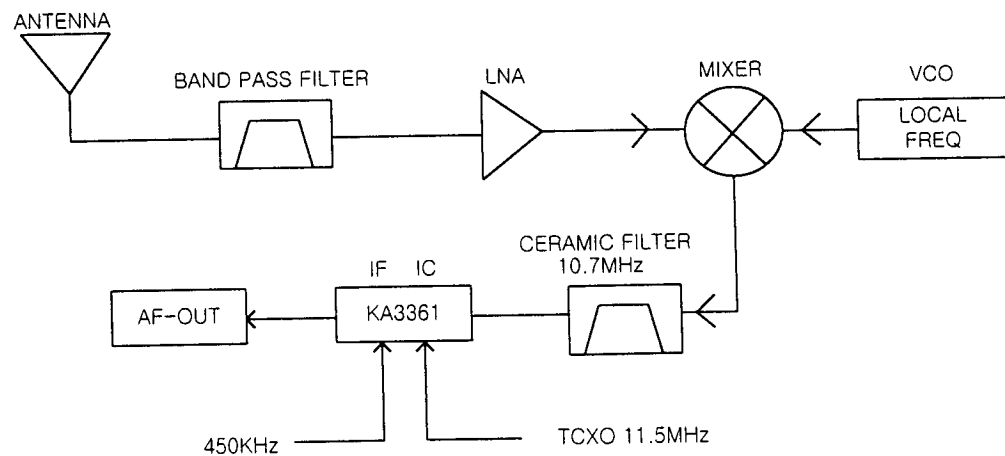

FIG.11

11-2. TX PART

THE SIGNAL IS MADE TO THE BASE, ENTER BY THE AF-IN TERMINAL OF THE CONNECTOR 1.
THE SIGNAL SEND THE MOD TERMINAL OF THE TX VCO.
THE SIGNAL IS MIXED IN THE TX VCO MIXING THE RF SIGNAL, THE RF SIGNAL ADJUST THE
TRIMMER CAPACITOR (VC1).
THE RF SIGNAL ENTER BY THE TRANSMITION POWER AMP TRANSISTOR
THE RF SIGNAL PASS THROUGH THE SAW FILTER, TOWARDS THE ANT.
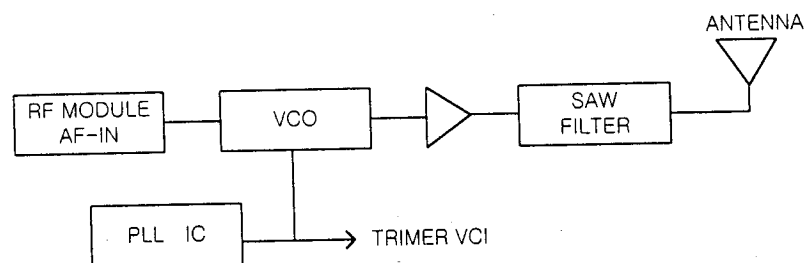THE LAST TRANSMITTION RF SIGNAL IS 902.12MHz~903.98MHz

FIG. 12

PORTABLE UNIT

1. LOW BATTERY DETECTION CIRCUIT

TRANSISTOR Q1,Q3 IS CONTROLLED BY BATTERY VOLTAGE.
IF THE VOLTAGE OF BATTERY PACK IS BELOW 3.3V, CHANGED FROM HIGH TO LOW
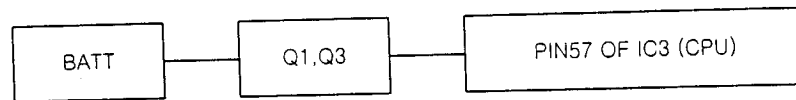AT PIN 57 OF CPU THEN CPU BECOMES TO RECOGNIZE TO LOW VOLTAGE OF
BATTERY PACK

```
┌─────────┐     ┌─────────┐     ┌──────────────────────┐
│  BATT   │─────│  Q1,Q3  │─────│  PIN57 OF IC3 (CPU)   │
└─────────┘     └─────────┘     └──────────────────────┘
```

FIG.13

2. BUZZER

BUZZER IS CONTROLLED BY PIN 49 OF CPU DURING RECEIVED RING SIGNAL AND KEY
INPUT

```
┌──────────────────┐     ┌─────────┐     ┌─────────────┐
│   PIN49 OF CPU    │─────│   Q8    │─────│   BUZZER    │
└──────────────────┘     └─────────┘     └─────────────┘
```

FIG.14

3. INDICATOR CATEGORY

ALL INDICATOR IS DISPLAYED AT LCD WINDOW BY THE CPU CONTRO

4. AUDIO AMPLIFIER AND COMPANDOR

4-1 TX PART

THE TRANSMITTED SIGNALS FROM MIC ARE FEED TO COMPANDOR IC1 THROUGH AUDIO AMPLIFIER IC6A AND SIGNALS INPUT RF MODULE AF-IN

```
┌─────────┐     ┌─────────┐     ┌──────────┐     ┌──────────┐
│   MIC   │─────│  IC6A   │─────│ COMP-IN  │─────│ FIL-OUT  │
└─────────┘     └─────────┘     │ PIN8 OF IC1 │  │ PIN1 OF IC1 │
                                └──────────┘     └──────────┘
                                              MUTE
        ┌─────────────────────┐          ┌──────────────┐
        │  PIN17 OF IC13 (CPU) │─────────│  AF  IN  (RF) │
        └─────────────────────┘          └──────────────┘
```
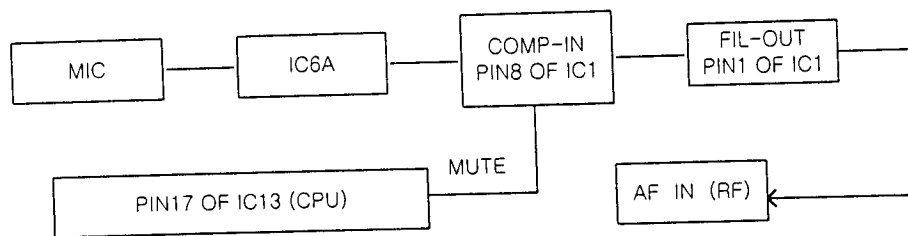
FIG.15

4-2 RX PART

THE RECEIVED SIGNALS FROM AF OUT CONTAIN SIGNALS AND PASS ONLY THROUGH COMPANDOR FOR NOISE ELIMINATION AND SIGNAL INPUT AUDIO AMPLIFIER.
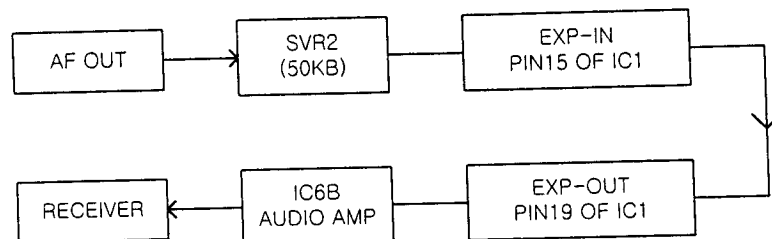
```
┌─────────┐     ┌─────────┐     ┌──────────┐
│ AF OUT  │────▶│  SVR2   │─────│  EXP-IN  │
└─────────┘     │ (50KB)  │     │ PIN15 OF IC1 │
                └─────────┘     └──────────┘

┌─────────┐     ┌─────────┐     ┌──────────┐
│RECEIVER │◀────│  IC6B   │─────│ EXP-OUT  │
└─────────┘     │AUDIO AMP│     │ PIN19 OF IC1 │
                └─────────┘     └──────────┘
```

FIG.16

5. PORTABLE RF MODULE

5-1. RX PART

THE RECEIVER FRONT-END CONTAINS A SAW DUPLEX FILTER, AND RF LOW NOISE
AMPLIFIER, A ACTIVE TRANSISTOR MIXER, A CERAMIC FILTER AND 10.7MHz "IF"
AMPLIFIER. ALSO IT INCLUDES BUFFER AMPLIFIERS OR THE GENERATION OF
LOCAL OSCILATOR POWER.
THIS FRONT-END RECEIVES AN RF SIGNAL FROM THE ANTENNA.
AND RF SIGNALS WITHIN THIS FREQUENCY RANGE IS 902.125MHz~903.98MHz
PASS THROUGH BAND PASS FILTER AND RF AMP .
AFTER PASSING THROUGH THE SAW FILTER, THE SIGNAL IS MIXED WITHIN 1'ST
 LOCAL FREQUENCY FROM VOLTAGE CONTROLLED OSCILLATOR.
THE SIGNAL IS AMPLIFIED ON THE IF AMP TRANSISTOR . AND THE SIGNAL
PASS THROUGH THE MONOLITHIC CRYSTAL FITER (10.7MHz) AFTER THE IF SIGNAL
PASS THE CERAMIC FILTER, THE SIGNAL ENTER BY THE FM IF (INTERMEDIATE
FREQUENCY) IC.
AND THE SIGNAL IS MIXED IN THE FM IF IC (KA3361).
THE SIGNAL PASS THROUGH THE CERAMIC FILTER (450KHz).
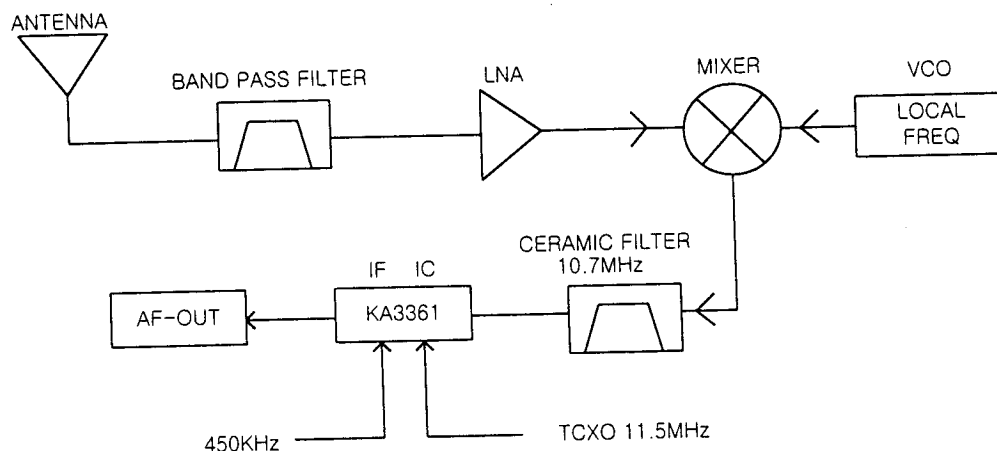THE OUTPUT SIGNAL IN THE FM IF IC STREAMS FROM THE AF-OUT TO AUDIO AMP

FIG.17

5-2. TX PART

THE SIGNAL IS MADE TO THE PORTABLE, ENTER BY THE AF-IN TERMINAL.

THE SIGNAL SEND THE MOD TERMINAL OF THE TX VCO.

THE SIGNAL IS MIXED IN THE TX VCO MIXING THE RF SIGNAL, THE RF SIGNAL

ADJUST THE TRIMMER CAPACITOR (VC1).

THE RF SIGNAL ENTER BY THE TRANSMITION POWER AMP TRANSISTOR (Q8)

THE SIGNAL IS AMPLITUDE IN THE Q8.

ENTER BY THE SAW FILTER.

THE RF SIGNAL PASS THROUGH THE SAW FILTER, TOWARDS THE ANT.

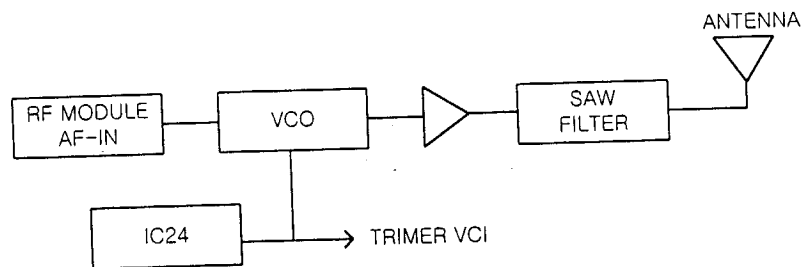THE LAST TRANSMITTION RF SIGNAL IS 926.125MHz~927.675MHz.

FIG. 18

Telian Corporation

NAMJEUN B/D 4F 53-3 HAAN DONG
KWANG MYUNG SI KYUNGGI DO KOREA.
TEL : 82 2 890 0210   FAX : 822 890 0331

STATEMENT OF SECURITY CODE

DATE : JAN. 04. 2000

PREPARED BY :

The cordless phone shall incorporate circuity   which makes use of a digital security
code to provide Protection against unintentional access to the public switched
telephone Network by the base unit and unintentional ringing by the handset.

The 26975   use following approaches for facilitating variation in the geographic
Distribution of individual security codes.

1. We provide a means for the user to readily select from among over 1,048,575
   Possible discrete digital codes.

   The 26975   has continuously the varied initial security code as each telephone is
   Produced

2. We provide a Random code which is continuously varied among 10,048,575
   Discrete digital codes whenever the handset is placed on the cradle of base unit.

TELIAN Corporation

P.H JANG   R & D Manager