APPLICANT:
Ericsson Radio System AB

FCC ID NO.
B5KKRC12110-21

# EXHIBIT 10 - COVER SHEET

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# FUNCTION OF ACTIVE CIRCUIT DEVICES

2.1033 (c)(10) Function of Active Circuit Devices

Function Block Digital Control (1911-ROZ 104 03)

| | |
|---|---|
| D1 | 8XLINEDRIVER TS |
| D2 | PLD |
| D4 | ASIC TRISTAN, CONTROL Radio & Synthesizer |
| D6 | DSP, PLL- & PCM-link Control |
| D8 | SRAM 64k16 |
| D9 | FLASHROM 256k16 |
| D100 | DSP, Receiver |
| D101 | SRAM 64k16 |
| D102 | ASIC ISOLET, RSSI Receiver, IfA- & IfB-Receiver |
| D104 | DSP, Receiver |
| D201 | FlipFlop P-edge Trigger |
| D202 | Inverter |
| D203 | D-type FlipFlop |
| D204 | Inverter |
| D206 | Inverter |
| D300 | D-type FlipFlop |
| N1 | Reset Circuit |
| N100 | VCO 27.300 MHz |
| N200 | ASIC ADDA, A/D-converter, D/A-converter |
| N203 | Voltage Reference |
| N204 | VCO 19.44 MHz |
| N300 | Switch Regulator |
| N301 | Switch Regulator |
| V3 | Driver FlashROM VPP |
| V4 | Driver FlashROM VPP |
| V6 | LED Driver |
| V8 | LED Driver |
| V200 | Voltage Regulator |
| V201 | Voltage Regulator |
| V202 | Voltage Regulator |
| V203 | Voltage Regulator |
| V204 | Voltage Regulator |
| V205 | Voltage Regulator |

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# FUNCTION OF ACTIVE CIRCUIT DEVICES

2.1033 (c)(10) Function of Active Circuit Devices

Function Block RXRF (1911-ROZ 104 04)

| | |
|---|---|
| N602 | ASIC ODEN, Downconverter |
| T601 | Balun |
| T621 | Balun |
| T622 | Balun |
| V650 | Voltage Regulator |
| V651 | Voltage Regulator |

Function Block RXIF (1911-ROZ 104 05)

| | |
|---|---|
| N801 | ASIC FREJA, If Circuit |
| N810 | BandPassFilter 62.94 MHz |
| N820 | BandPassFilter 62.94 MHz |
| N811 | BandPassFilter 455 kHz |
| N821 | BandPassFilter 455 kHz |
| T800 | Transformer |
| V800 | Voltage Regulator |
| V801 | Voltage Regulator |

Function Block IFLO (1911-ROZ 104 06

| | |
|---|---|
| N700 | Voltage Regulator |
| N701 | PLL Synthesizer |
| N702 | PLL Synthesizer |
| N750 | Voltage Regulator |
| V703 | Amplifier |
| V707 | Amplifier |
| V710 | Voltage Regulator |
| V711 | Voltage Regulator |
| V712 | Voltage Regulator |
| V753 | Amplifier |
| V757 | Amplifier |
| V760 | Voltage Regulator |
| V761 | Voltage Regulator |
| V762 | Voltage Regulator |

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2.1033 (c)(10) Function of Active Circuit Devices

Function Block FG (1911-ROZ 104 07)

| | |
|---|---|
| N903 | PLL Synthesizer |
| N905 | Amplifier |
| N907 | Oscillator 761 – 786 MHz |
| V923 | Voltage Regulator |
| V924 | Voltage Regulator |
| V925 | Voltage Regulator |

Function Block LX (1911-ROZ 104 08)

| | |
|---|---|
| D401 | Inverter |
| N401 | Differential Amplifier 4pcs |
| N402 | ASIC GLEIPNER, Linearization |
| N403 | Band Pass Filter |
| N404 | Amplifier |
| N407 | Voltage Regulator |
| N408 | Voltage Regulator |
| N409 | Voltage Reference |
| N411 | ASIC RIO, Serial/Parallel Interface |
| N415 | Amplifier |
| N416 | Voltage Regulator |
| T401 | Transformer |
| T402 | Transformer |
| T403 | Transformer |
| T404 | Transformer |
| V411 | VSWR Alarm Driver |
| V412 | Voltage Regulator |
| V413 | Voltage Regulator |
| V420 | Power Setting Driver |
| V421 | Power Setting Driver |
| V422 | Power Setting Driver |

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# FUNCTION OF ACTIVE CIRCUIT DEVICES

2.1033 (c)(10) Function of Active Circuit Devices

Function Block TXPA (1911-ROZ 104 09)

| | |
|---|---|
| N503 | Direction Coupler |
| N504 | Controllable Voltage Regulator |
| N511 | Temperature Sensor |
| | |
| V501 | 1st Amplifier |
| V502 | 2nd Amplifier |
| V511 | Bias V501 |
| V512 | Bias V502 |
| V514 | VSWR Alarm |
| V515 | Driver Controllable Voltage Regulator |

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# TUNE-UP PROCEDURE

2.1033 (c)(9) Tune-Up Procedure

All the necessary adjustments will be set in the factory, and should need no adjustments out in the field (pre-tuned coils are used, etc.). If the TRX is not able to maintain the requirements for power output, frequency stability, etc., the Switch will give an indication that the TRX needs service. If it is a great failure, the EMRPS will shut down the TRX without confirmation from the Switch.

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CIRCUIT AND DEVICE DESCRIPTIONS

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2.1033 (c)(9,10) Power Tune-Up – Power Limiting

The EMRPS function allows the RF power output to be set from 0 dB to – 20 dB attenuation in 0.2 dB steps from the MSC (Mobile Switching Center). The power levels can be in the range from a minimum of 110 milliwatts to a maximum of 11 watts at the output of the TRX.
The EMRPS supervises the feedback loop (RFF) From the Coupler stage to Linearization by checking the baseband signals. If the power output changes, the EMRPS will adjust the gain in the exciter amplifier.
If some fault happens in the output power circuits, the EMRPS will compare the fault with prestored values and report the fault to the Switch via alarm codes in different levels. The highest alarm level is a serious fault and this alarm will get the EMRPS to shut down the output power stages without confirmation from the Switch.