

APPLICANT:
Ericsson Radio System AB

FCC ID NO.
B5KKRC12103-31

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 Block RXRF (1911-ROZ 104 11)

N600 ASIC ULLA, Downconverter
N610 Filter
N620 Filter

T610 Transformer
T611 Transformer
T620 Transformer
T621 Transformer

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 13)

N903 PLL Synthesizer
N904 Oscillator 1787 - 1847 MHz
N905 Amplifier
N906 Direction Coupler

V923 Voltage Regulator
V924 Voltage Regulator
V925 Voltage Regulator

Function Block LX (1911-ROZ 104 14)

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

V403 Driver
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 15)

N502	Direction Coupler
N503	Direction Coupler
N510	Temperature Sensor
V501	1 st Amplifier
V502	2 nd Amplifier
V503	3 rd Amplifier
V504	4 th Amplifier
V505	4 th Amplifier
V506	Bias V503
V507	Bias V502
V508	Bias V505
V509	Voltage - Compare
V510	Bias V503
V511	Bias V502
V512	Voltage - VSWR Compare
V513	Bias V504
V514	Bias V501
V516	Bias V501
V517	Voltage - Compare
V518	Bias V505
V519	Voltage - VSWR Compare
V520	VSWR Alarm
V584	Bias V504

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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

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 280 milliwatts to a maximum of 28 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.