## R6020GW BLACKBERRY WORLD BAND FCC

Page 1(2)

# APPLICATION FOR CERTIFICATION

Author Data	Date	Document No.	
Masud S. Attayi	January 03, 2002	04063-CERT-OPER-010	
Approved	Rev	File / Reference	
		010_OPER.doc	

### List of General Information Required for Certification

In Accordance with FCC Rules and Regulations, CFR 47, Part 2, 15 and 24

### Sub-Part

#### 2.1033 (c) Technical Description of Equipment

#### (1) Name of Applicant:

Research In Motion (RIM) Limited RIM is the applicant and the manufacturer of the device described herein. For mailing address refer to the Form 731

#### (2) FCC Identifier:

L6AR6020GW

#### (3) Operating Manual:

Refer to Exhibit – Users Manual

#### (4) Type of Emission:

270KGXW\*

Two-level Gaussian Minimum Shift Key (GMSK) frequency modulation

#### (5) Frequency Range:

PCS 1900 MHz (NA band)

Tx: 1850-1910 MHz, 200 KHz channel resolution Rx: 1930-1990 MHz, 200 KHz channel resolution

GSM 900 MHz (EU band)

Tx: 880-915 MHz, 200 KHz channel resolution Rx: 925-960 MHz, 200 KHz channel resolution

<sup>\*</sup> Refer to Exhibit - Test Report



### R6020GW BLACKBERRY WORLD BAND FCC APPLICATION FOR CERTIFICATION

THE ELECTION OF CERTIFICATION						
Date	Rev	Document No.				
January 03, 2002		04063-CERT-OPER-010				

### (6) Operating Power Output Levels:

The transmitter is capable of generating RF power at several calibrated levels, ranging from +0 dBm to +30 dBm for PCS and +0 dBm to +33 dBm for GSM band. The range of output power is controlled to discrete levels of 2 dB increments. The power levels are automatically device selected to balance link with receive power. Not user adjustable.

### (7) Maximum Power Rating:

As defined in the applicable parts of the rules:

2.1046 and 24.232 – Mobile/portable stations are limited to 2 Watts EIRP peak power.

Authorization requested (maximum): 1.60 Watts (32.04 dBm)<sup>#</sup>

### (8) Voltages & Currents In All Elements In Final R.F. Amplifying Device:

Final RF amplifying device is a solid state MOSFET hybrid power module. The module generates about 50% more power than required to overcome RF path loss between the module and the output terminal. Bias points are for rated output power at the output terminal. The module has a supply line with bias Vs and Is, and a gain control line with bias Vc and Ic.

Table below is under nominal conditions.

Power Level	Power Level (dBm)	Vs (V)	Is (A)	Vc (V)	Ic (mA)
0	30	3.8	1.21	2.14	2.06
1	28	3.8	.80	1.80	1.56
2	26	3.8	.61	1.69	1.41
3	24	3.8	.47	1.63	1.32
4	22	3.8	.38	1.58	1.26
5	20	3.8	.29	1.53	1.19
6	18	3.8	.24	1.50	1.14
7	16	3.8	.19	1.47	1.10
8	14	3.8	.14	1.44	1.06
9	12	3.8	.13	1.43	1.04
10	10	3.8	.10	1.41	1.01
11	8	3.8	.08	1.38	.97
12	6	3.8	.07	1.37	.95
13	4	3.8	.06	1.35	.92
14	2	3.8	.05	1.33	.90
15	0	3.8	.04	1.30	.86

<sup>\*</sup>Refer to the Exhibit - Test Report, Sub-section 5.5.5.1