DNB ENGINEERING, INC.
"One World, One EMC Solution"

Response Regarding Comments for Application ATCB007525

1. This application will be for the MC1 only. I will submit a separate application for the other transmitter.
2. The FCC Grantee Code Database has been updated to reflect the changes.
3. Internal photos have been uploaded to the application.
4. The user's manual has been updated to include the required statement and uploaded to the application. See page two of the manual.
5. The operating frequency range is 2405MHz to 2480MHz. The incorrect exhibits have been corrected and uploaded to the application.
6. The maximum output power is .1mW. The operational description has been corrected and uploaded to the application.
7. The FCC accepted test procedure is now shown on page 5 of the updated test report which has been uploaded to the application.
8. The list of test equipment is shown on page 4 of the updated test report.
9. A detailed description of the modulation has been added to the description of operation which has been uploaded to the application. The signal was not pulsed during the measurements.
10. Units have been added to the radiated emissions data sheets. A sample calculation is shown on pages 12 and 21.
11. The frequency range of radiated emissions search is 30MHz to 25GHz. This range is now shown in the updated test report.
12. Detector functions and bandwidths are now included in the updated test report.
13. Detector functions and bandwidths are now included in the updated test report.
14. Peak measurements have now been included in the updated test report.
15. The plots in question have been removed from the updated test report.
16. Emission levels in the 2483.5MHz to 2500MHz restricted band have been included in the updated test report. The upper band edge plot has been replaced by a plot showing the restricted band.

17. An FCC – IC cross reference document has been uploaded to the application under additional information.
18. The IC label has been corrected and uploaded to the application.
19. Annex B of RSS-102 has been added to the IC application.
20. A section has been added to the report for receiver spurious emissions.
21. The IC application has been corrected and uploaded to the application.
22. Thank you for converting the files. I made sure to submit everything in pdf this time.

American Telecommunications Certification Body Inc.
6731 Whittier Ave, McLean, VA 22101

April 23, 2009

RE: ATCB007525 – Original Equipment & Single Certification

FCC ID: ULPIQ69 & IC: 8303A-IQ69 for Interactive Technologies, Inc.

I have a few comments on this Application. Please do not put confidential information in your responses to these questions because the response letter will not be held confidential by the FCC. Depending on your answers there may be more questions.

1. This application appears to be for two different transmitters identified in page 3 of the user manual as "MC 10 display unit" and "MC 10 transceiver unit" and in the label, external and internal photo exhibits as "MC1" and "XCVR1". The FCC only allows cordless phones to be approved under one FCC ID number (See 15.214(a) of the FCC Rules). Do you have an interpretation from the FCC allowing approval of these two different transmitters under the same FCC ID number? If you do please provide it. If not, this application will have to be separated into two separate Certification applications, one for each transmitter, with a different FCC ID numbers.

2. Scott Finnell is listed as the contact person for Interactive Technologies, Inc (Interactive) on the FCC Grantee Code Database (See second attachment entitled "_FCC Grantee Code Search.pdf"). As such, he is the authorized person to sign the FCC agent letter for Interactive. Unfortunately Rob Dorrell has signed this letter submitted with this application. Please either provide a letter from Scott Finnell giving Rob Dorrell the authority to sign this letter for Interactive on this application or submit a new agent letter signed by Scott Finnell for this application. Alternatively you can have the FCC Grantee Code Database changed to show Rob Dorrell as the contact person for Interactive. If you need help in getting the FCC Grantee Code Database changed, please contact Ms. Marianne Bosley by email at Marianne@atcb.com. I'd also like to mention that the official FCC address for Grantee Code ULP is not the address shown on the submitted FCC application form. The official FCC address is shown in the second attachment. If you want the grant issued with the address on the FCC application form, you must contact the FCC because that address is pre-filled from their database when I enter the Grantee Code. The address in the FCC database is what appears on the final FCC grant of Certification.

3. Please provide internal photos of the device being approved in this application that show the component location on the printed circuit boards as required by Section 2.1033(b)(7) of the FCC Rules. The photos provided do not show any components on any of the printed circuit boards. Top and bottom of all printed circuit boards should be provided.

4. The submitted user manual is missing the statement required by Section 15.21 of the FCC Rules that shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. Please provide an amended user manual that includes this required statement.

5. There is a discrepancy in the operating frequency range for this device. The FCC application lists 2404 to 2480 MHz as the operating frequency range, the IC application form lists 2405 - 2480 MHz as the operating frequency range, the test report (page 4) lists 2402 to 2480 MHz as the operating frequency range but measurements were made from 2405 to 2480 MHz on the fundamental emissions. Please correct the incorrect exhibits.

6. There is also a discrepancy in the maximum output power for this device. The maximum measured output power from this device in the test report is 0.1 mW but the operational description exhibit lists 1 mW as the maximum output power from this device. Please address this 10 dB discrepancy between the operational description and the measured results.

7. Please identify the FCC accepted test procedure used for measuring emissions from this digital transmission system (DTS) device. Go to http://www.fcc.gov/oet/ea/eameasurements.html to find the test procedure used and provide it in an amended test report.

8. Please provide a list of test equipment used for measuring the emissions from this DTS device. In this list, be sure to include the type device (e.g., amplifier, spectrum analyzer, etc.), the model number, the serial number and the calibration dates.

9. Please describe the signal that this DTS device was transmitting during testing. If the signal was not a CW signal, provide a description of the length of each transmission and the period between transmissions. If the emission was pulsed, provide zero span plots showing the duty cycle of these pulses.

10. There are no units on any of the numbers listed on pages 13, 14 and 15 of the submitted test report. Please provide an amended test report with units attached. Also provide a sample calculation showing how these results are combined for comparison to the respective limit.

11. Please identify the frequency range searched for radiated emission measurements during 15.209 radiated emission measurements listed on pages 13, 14 and 15 of the submitted test report.

12. Please identify the detector function and resolution bandwidth and video bandwidth (if used) during 15.209 radiated emission measurements above 1000 MHz.

13. Please identify the detector function and resolution bandwidth and video bandwidth (if used) during 15.209 radiated emission measurements below 1000 MHz.

14. There are peak limits in Section 15.209 of the FCC Rules. Please describe how the results reported on pages 13, 14 and 15 of the submitted test report, which were compared to the average limits, show compliance with the peak limits.

15. What's the purpose of the plots on pages 16 to 76 of the submitted test report? Weren't these emissions measured during 15.209 radiated emissions testing on pages 13, 14 and 15? If not, why not? (Here's my reasoning on this matter. RF antenna conducted plots show compliance with the – 20 dBC requirement. Only emissions in the restricted bands listed in Section 15.205 need to be measured as radiated emissions from this transmitter for compliance with Section 15.209 limits (74 dBuV/m @ 3m (PK) and 54 dBuV/m @ 3m (AVE)).

16. Please provide a radiated emission level on the 2483.5 to 2500 MHz restricted band emission from this device operating on 2480 MHz. None was provided in this test report. In fact the -20 dBC plot of the 2480 MHz channel was cut off at 2483 and only spanned 3 MHz unlike the plot at the low band edge of 2400 MHz which spanned 15 MHz.

17. For this test report to be used for IC purposes, you will either have to add the IC regulations to the body of the test report or provide a separate reference for each FCC Rule listed in the test report and the corresponding IC regulation. I suggest you provide the reference separate from the test report. This reference will list the FCC Rule in the test report and, opposite it, the corresponding IC regulation.

18. The IC label is incorrect. It is missing a dash (-) between the Company Number 8303A and the Universal Product Number (IQ69). The submitted label(s) (remember the two products being approved under one FCC ID from item 1 above) show(s) the wrong model number(s) (MC1 and XCVR1) from that listed on the IC application form (MC10). Please provide a corrected IC label with the right info on it.

19. The IC application is missing an Annex B from RSS-102. When the output power from a transmitter is so low that it complies with the levels listed in Sections 2.5.1 and 2.5.2, only an Annex B needs to be submitted for showing compliance with the IC Radio Frequency exposure requirements. Please provide a completed Annex B from RSS-102.

20. The submitted test report contains no receiver test results as required by IC. Please provide receiver measurements in a separate section from the transmitter test results for IC purposes.

21. The IC application form lists the transmitter spurious worst case emission as 49.66 dBuV/m @ 3m but there are other reported emissions that are higher than this level in the submitted test report. Please either correct the value or provide justification as to why this lower level is correct.

22. For Your Information – IC only accepts documents in the "pdf" format. Several of the photographs in this application were submitted in the "jpg" format. I have converted these photos into the "pdf" format on this occasion. Please remember this on future IC application filings to avoid delays in submitting documents in the proper format.

Richard Fabina

Examining Engineer

mailto: rfabina@AmericanTCB.com

The items indicated above must be submitted before processing can continue on the above referenced application. Failure to provide the requested information may result in application termination. Correspondence should be considered part of the permanent submission and may be viewed from the Internet after a Grant of Equipment Authorization is issued.

Please do not respond to this correspondence using the email reply button. In order for your response to be processed expeditiously, you must submit your documents through the AmericanTCB.com website. Also, please note that partial responses increase processing time and should not be submitted.

Any questions about the content of this correspondence should be directed to the sender.