Rimage Corporation, FCC ID: QT5-RAS26E, Assessment NO.: AN10T0150, Notice#1

5 messages

tim.dwyer@ccsemc.com <tim.dwyer@ccsemc.com> **Tue, Mar 2, 2010 at 8:50 PM**
To: Naoki.Sakamoto@jp.ul.com
Cc: tim.dwyer@ccsemc.com, mika.kaneko@ccsemc.com, claire.hoque@ccsemc.com

Dear Naoki,

You are identified as the contact person for this application. The technical review is complete. There is one issue that must be addressed before this application can be completed.

1. Compliance with the FHSS requirements of FCC 15.247(a)(1), 15.247(g) and 15.247(h) were not documented in the operational description or test report. Please provide additional statements to document compliance with each of these sections. Please note that some sections have more than one requirement.

15.247(a)(1) ....The system shall hop to channel frequencies that are selected at the system hopping rate from a pseudo randomly ordered list of hopping frequencies. Each frequency must be used equally on the average by each transmitter. The system receivers shall have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shall shift frequencies in synchronization with the transmitted signals.

15.247(g) Frequency hopping spread spectrum systems are not required to employ all available hopping channels during each transmission. However, the system, consisting of both the transmitter and the receiver, must be designed to comply with all of the regulations in this section should the transmitter be presented with a continuous data (or information) stream. In addition, a system employing short transmission bursts must comply with the definition of a frequency hopping system and must distribute its transmissions over the minimum number of hopping channels specified in this section.

15.247(h) The incorporation of intelligence within a frequency hopping spread spectrum system that permits the system to recognize other users within the spectrum band so that it individually and independently chooses and adapts its hopsets to avoid hopping on occupied channels is permitted. The coordination of frequency hopping systems in any other manner for the express purpose of avoiding the simultaneous occupancy of individual hopping frequencies by multiple transmitters is not permitted

The items indicated above must be submitted before processing can continue on the above referenced application. Failure to provide the requested information within 30 days of the original e-mail date may result in application dismissal and forfeiture of the filing fee. 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 e-mail address listed below the name of the sender.

Best regards,

Tim Dwyer
Technical Reviewer
UL-CCS

Aya.Hiraga@jp.ul.com <Aya.Hiraga@jp.ul.com> **Wed, Mar 3, 2010 at 3:35 AM**
To: tim.dwyer@ccsemc.com
Cc: mika.kaneko@ccsemc.com, claire.hoque@ccsemc.com, Yoshinobu.Asai@jp.ul.com, Naoki.Sakamoto@jp.ul.com

Dear Mr.Tim Dwyer

Hello. I am Aya Hiraga, working for UL Japan, Inc. I am sending this e-mail instead of Naoki.

Thank you very much for your comment.

We send a document for the pseudorandom frequency hopping sequence. Please confirm an attachment(Pseudorandom Frequency Hopping Sequence.pdf).

If there is no further problem, please issue FCC grant with this document.

Thank you for your cooperation.

Best regards,

Aya Hiraga
UL Japan, Inc.

----- Forwarded by Naoki Sakamoto/ISE/ULI on 2010/03/03 10:51 -----

<tim.dwyer@ccsemc.com>
2010/03/03 10:46

To
<Naoki.Sakamoto@jp.ul.com>
cc
<tim.dwyer@ccsemc.com>, <mika.kaneko@ccsemc.com>, <claire.hoque@ccsemc.com>
Subject
Rimage Corporation, FCC ID: QT5-RAS26E, Assessment NO.: AN10T0150, Notice#1

[Quoted text hidden]

Pseudorandom Frequency Hopping Sequence.pdf
172K

Tim Dwyer <tim.dwyer@ccsemc.com> **Wed, Mar 3, 2010 at 10:04 AM**
To: Aya.Hiraga@jp.ul.com
Cc: mika.kaneko@ccsemc.com, claire.hoque@ccsemc.com, Yoshinobu.Asai@jp.ul.com, Naoki.Sakamoto@jp.ul.com, Mike Kuo <mike.kuo@ccsemc.com>

Dear Aya Hiraga,

I have reviewed your attachment. It completes some of the issues I sent in the notice. Several others are still not complete.

To help understand the requirements, I have separated the requirements further below. Items with COMPLETE are covered already by your Pseudorandom attachment.

For the NOT COMPLETE items, if you make a statement in this email after each item, the email will be submitted with the FCC application as documentaion of compliance.

Please understand that FCC requires the TCB to confirm compliance with these requirements. If you include these items in your future FHSS test reports, this will help to delays in processing time.

15.247(a)(1)

Q1: ....The system shall hop to channel frequencies that are selected at the system hopping rate from a pseudo randomly ordered list of hopping frequencies. COMPLETE

Q2: Each frequency must be used equally on the average by each transmitter. NOT COMPLETE. (Depends on answer to Q4.)

Q3: The system receivers shall have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shall shift frequencies in synchronization with the transmitted signals.NOT COMPLETE.

15.247(g)

Q4: Frequency hopping spread spectrum systems are not required to employ all available hopping channels during each transmission. However, the system, consisting of both the transmitter and the receiver, must be designed to comply with all of the regulations in this section should the transmitter be presented with a continuous data (or information) stream. NOT COMPLETE. (Reviewer note: Please state whether the transmitter always uses all hopping channels during each transmission. If not, then provide more detail on how it operates)

Q5: In addition, a system employing short transmission bursts must comply with the definition of a frequency hopping system and must distribute its transmissions over the minimum number of hopping channels specified in this section. NOT COMPLETE. (Reviewer note: Please state whether the transmitter always uses all hopping channels during each transmission. If not, then provide more detail on how it operates)

15.247(h)

Q6: The incorporation of intelligence within a frequency hopping spread spectrum system that permits the system to recognize other users within the spectrum band so that it individually and independently chooses and adapts its hopsets to avoid hopping on occupied channels is permitted. NOT COMPLETE. (Reviewer note: State whether the system has the capability to recognize an occupied channel and adapt the hop-set or skip a channel)

Q7: The coordination of frequency hopping systems in any other manner for the express purpose of avoiding the simultaneous occupancy of individual hopping frequencies by multiple transmitters is not permitted
NOT COMPLETE. (Reviewer note:

Best regards,

Tim Dwyer
Technical Reviewer

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Tim Dwyer
Quasi-Peak Wireless
766 Pucker Street
Coventry, CT 06238 USA
(860) 558-1791

email: tdwyer@quasi-peak.com
timothy_dwyer@ieee.org
web: www.quasi-peak.com

Aya.Hiraga@jp.ul.com <Aya.Hiraga@jp.ul.com> **Thu, Mar 4, 2010 at 9:10 AM**
To: tim.dwyer@ccsemc.com
Cc: mika.kaneko@ccsemc.com, claire.hoque@ccsemc.com, Yoshinobu.Asai@jp.ul.com, Naoki.Sakamoto@jp.ul.com, Mike Kuo <mike.kuo@ccsemc.com>, rfspectrum@gmail.com

Dear Mr.Tim Dwyer

Thank you very much for your prompt action and cooperation.
We are working on a response with our client.
First, please find our reply in the below "==>".

Thank you again and Best regards,

Aya Hiraga (Ms.)
UL Japan, Inc.

To : Aya.Hiraga@jp.ul.com
CC : mika.kaneko@ccsemc.com,claire.hoque@ccsemc.com,Yoshinobu.Asai@jp.ul.com,Naoki.Sakamoto@jp.ul.com,Mike Kuo <mike.kuo@ccsemc.com>
Sent by rfspectrum@gmail.com on 2010/03/04 0:04:42

Dear Aya Hiraga,

I have reviewed your attachment. It completes some of the issues I sent in the notice. Several others are still not complete.

To help understand the requirements, I have separated the requirements further below. Items with COMPLETEare covered already by your Pseudorandom attachment.

For the NOT COMPLETEitems, if you make a statement in this email after each item, the email will be submitted with the FCC application as documentaion of compliance.

Please understand that FCC requires the TCB to confirm compliance with these requirements. If you include these items in your future FHSS test reports, this will help to delays in processing time.

15.247(a)(1)

Q1: ....The system shall hop to channel frequencies that are selected at the system hopping rate from a pseudo randomly ordered list of hopping frequencies. COMPLETE

Q2: Each frequency must be used equally on the average by each transmitter. NOT COMPLETE. (Depends on answer to Q4.)

=>Each frequency is used equally on the average by each transmitter. We added this statement in attachment. Please confirm it.

Q3: The system receivers shall have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shall shift frequencies in synchronization with the transmitted signals.NOT COMPLETE.

=>IC chip of RF Tag doesn't have power supply. And also it operates by receiving the radio wave of the transmitter.

When IC chip of RF Tag receives the radio wave, it automatically returns same frequency of the transmitter.

15.247(g)

Q4: Frequency hopping spread spectrum systems are not required to employ all available hopping channels during each transmission. However, the system, consisting of both the transmitter and the receiver, must be designed to comply with all of the regulations in this section should the transmitter be presented with a continuous data (or information) stream. NOT COMPLETE.
(Reviewer note: Please state whether the transmitter always uses all hopping channels during each transmission. If not, then provide more detail on how it operates)

=>The transmitter always uses all channels (22 channels) during each transmission.
We added this statement in attachment.Please confirm it.

Q5: In addition, a system employing short transmission bursts must comply with the definition of a frequency hopping system and must distribute its transmissions over the minimum number of hopping channels specified in this section. NOT COMPLETE.(Reviewer note: Please state whether the transmitter always uses all hopping channels during each transmission. If not, then provide more detail on how it operates)

=>The transmitter always uses all channels (22 channels) during each transmission.
We added this statement in attachment.Please confirm it.

15.247(h)

Q6: The incorporation of intelligence within a frequency hopping spread spectrum system that permits the system to recognize other users within the spectrum band so that it individually and independently chooses and adapts its hopsets to avoid hopping on occupied channels is permitted. NOT COMPLETE.
(Reviewer note: State whether the system has the capability to recognize an occupied channel and adapt the hop-set or skip a channel)
Q7: The coordination of frequency hopping systems in any other manner for the express purpose of avoiding the simultaneous occupancy of individual hopping frequencies by multiple transmitters is not permitted
NOT COMPLETE. (Reviewer note:

=>This product doesn't have the carrier sense function.
However, it is the following specifications.
The power supply of RF Tag is based on the radio wave of the transmitter.
Therefore, the communication distance between the antenna and RF TAG is about 2-3cm.
Additionally, the setting of the output can be communicated only by a short distance because the antenna is in the bobbin.
Even if the product and another product are used in the vicinity, this equipment never causes interference.

(Rev)Pseudorandom Frequency Hopping Sequence.pdf.pdf
43K

Tim Dwyer <tim.dwyer@ccsemc.com> **Thu, Mar 4, 2010 at 9:25 AM**
To: Aya.Hiraga@jp.ul.com
Cc: mika.kaneko@ccsemc.com, claire.hoque@ccsemc.com, Yoshinobu.Asai@jp.ul.com, Naoki.Sakamoto@jp.ul.com, Mike Kuo <mike.kuo@ccsemc.com>

Dear Ms. Aya Hiraga,

Thank you for your reply. I have reviewed it and all questions have been answered. I expect to issue the grant today.

Best regards,

Tim Dwyer
Technical Reviewer
UL-CCS TCB
[Quoted text hidden]