

TO: Joe Dichoso  
jdichoso@fcc.gov  
FCC Application Processing Branch

Re: FCC ID EO9PET

Applicant: Itron Inc  
Correspondence Reference Number: 12433  
731 Confirmation Number: EA95767  
Date of Original E-Mail: 03/02/2000

Mr Dichoso

On March 10, I thought I had uploaded a reply to your referenced email. I was wondering why you had not responded. However, while following up and looking at the list of filed exhibits today, I found none of the files that I thought I had submitted in reply to your Correspondence Reference Number: 12433. I am not sure what I did wrong unfortunately. So if there are any duplicate files you will know why.

The following information has been uploaded and I will have viewed the files under the filed exhibits list to confirm a successful upload before also forwarding this to you by email.

In reply to you're the first question in your email we have uploaded a copy of this letter into the Cover Letter folder.

In response to your first concern we have uploaded into the Attestation Statements folder: 1.) A New Hop table sequence, with examples of the hop pattern sequences, 2.) PET hop sequence cross correlator which checks the cross correlation between hop sequences, 3.) PET hop sequence generator.

In reply to your second question we have uploaded into the RF Exposure folder two new manual pages, a new table of contents page and the Section 1.2 which has the statement Kwok Chan requested to be placed in the manual. A copy of his email reply to me is also copied below for your reference.

Thank you for your work on this application.

Best Regards,

Rod Munro

***Original email text copy Joe Dichoso.***

Subject:

Date: Thu, 2 Mar 2000 12:08:24 -0500

From: oetech@fccsun07w.fcc.gov (OET)

To: rmunro@spectrumti.com

To: ROD MUNRO, SPECTRUM TECHNOLOGY INC

From: Joe Dichoso

jdichoso@fcc.gov

FCC Application Processing Branch

Re: FCC ID EO9PET

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1) The pseudorandom sequence submitted does not meet the test of a Frequency hopping systems as defined in Section 2.1. "The test of a frequency hopping system is that the near term distribution of hops appears random, the long term distribution appears evenly distributed over the hop set, and sequential hops are randomly distributed in both direct and magnitude of change in the hop set."

Sequence 0 is not pseudorandom as you are using a constant increment on sequential hops. After a few hops, Sequence 1 hops increments of -1 then +3, then again -1 then +3 till the end of the sequence. Subsequent sequences also follow this pattern where sequential hops are decreased, then increased by the same direction and magnitude.

The hop sequence will have to be changed. Please submit a description of how the new sequence will be derived and provide examples of the hop pattern of the new sequences. Otherwise, the application will be dismissed.

2) Also address the RF safety requirements in Section 15.247(b)4. Contact Kwok Chan at KChan@fcc.gov before you submit an exhibit in the RF exposure info folder.

The items indicated above must be submitted before processing can continue on the above referenced application. Failure to

provide the requested information within 60 days of the original e-mail date may result in application dismissal pursuant to Section 2.917 (c) and forfeiture of the filing fee pursuant to section 1.1108.

DO NOT reply to this e-mail by using the Reply button. In order for your response to be processed expeditiously, you must upload your response via the Internet at [www.fcc.gov](http://www.fcc.gov), Electronic Filing, OET Equipment Authorization Electronic Filing. If the response is submitted through Add Attachments, in order to expedite processing, a message which informs the processing staff that a new exhibit has been submitted must also be submitted via Submit Correspondence. 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.

***Original email text copy from Kwok Chan***

Subject: Re: Part15.247(b)(4)

Date: Fri, 10 Mar 2000 08:23:50 -0500

From: "Kwok Chan" <kchan@fcc.gov>

To: rmunro@spectrumti.com

CC: KCHAN@fcc.gov

Your first paragraph indicates 15.247(b)(1), should this be 15.247(b)(4) ?

Your second paragraph indicates this is an unintentional radiator. Your e-mail subject has 15.247, which is for intentional radiators and the output limits do not match requirements of 15.247? I cannot clearly identify the applicable rule parts for your device.

If it is a 15.247 spread spectrum device, operating at 40 mW peak output with a duty factor not exceeding 50 ms in any 10 minutes, all you need to do is to include in the filing as supporting info indicating it is mounted at permanent locations that are at least 20 cm from all persons and the device will never exceed that duty factor. Installers should be informed about the 20 cm requirement for satisfy FCC RF exposure compliance, which could be included in installation instructions or manuals etc. A copy of the relevant pages of the manual should be uploaded. I will take care of the rest on this end.

Kwok Chan

>>> Rod Munro <rmunro@spectrumti.com> 03/08/00 05:27PM >>>  
Mr. Kwok Chan,

We presently have an application filed with the Lab and today were asked by Mr. Dichoso to contact you regarding addressing the requirements of Part 15.247(b)(1).

We were unaware that a 40 mw unintentional radiator was subject to the rule SAR requirements when the rule Part allows up to 250 mw and 500 mw.

The transmitter in question is a permanently installed utility sub metering transmitter typically installed on a building adjacent to the utility meter, (i.e.. water, electric) and transmits for 50 ms once every 10 minutes. It is not likely to be in close proximity to humans as it will be installed on or adjacent to the utility meters.

Attached is some additional information regarding the calculated power density. Would you please advise if the submitted data is satisfactory or if you require additional information to be submitted. And if so what additional information do you require to be submitted?

Thank you for your consideration. Please let us know at your earliest convenience.

Best Regards,

Rod Munro