FEDERAL COMMUNICATIONS COMMISSION WASHINGTON, D.C. 20554

SEP 1 1994

IN REPLY REFER TO:

31030/EQU/4-2-4 1300B4

Mr. Valdis V. Liepa University of Michigan Radiation Laboratory NASA/Center for Space Terahertz Technology 3228 EECS Building Ann Arbor, MI 48109-2122

Dear Mr. Liepa:

This is in reply to your facsimile transmission of August 2, 1994, regarding the labelling of a low power communication device that will be marketed within the U.S. and Canada. You request approval to combine the labels for both countries, permitting a single label to be employed. As indicated, this combined label would read as follows:

"This device complies with Part 15 of the FCC Rules and with RSS-210 of the Industry Canada. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation."

According to Section 15.19(a) of our rules, a low power communications device operating under Part 15 must be labelled with the specific statement contained in paragraph (a)(3). The only difference between the statement required under our rules and your proposed statement is the addition in the first sentence of the phrase "... and with RSS-210 of the Industry Canada."

I note that Kwai Lum of Industry Canada, in a facsimile to you on August 3, 1994, has already given permission to use this combined label. I also agree that the use of this combined label, as shown above, is acceptable under our regulations. This label conveys the desired information and is essentially identical to our requirement. As expressed by Mr. Lum, text denoting compliance with the standards for both countries was not stated in our rules as "it would be too presumptuous [to assume] that all products are for both markets."

I trust that the above responds to your inquiry. Additional questions should be directed to John Reed, 1300B4, at the address on the letterhead or at (202) 653-7313.

Sincerely,

Richard B. Engelman

Chief, Technical Standards Branch
Office of Engineering and Technology

Government of Canada Industry Canada FACSIMILE SHEET FORMULE D'ENVOI PAR TELECOPIEUR

Gouvernement du Canada

TO/A:

Name/Nom....: Mr Valdis V. Liepa

Office/Bureau.: Radiation Lab, University of Michigan, USA

Tel. No./No. de tél.:

Fax: 313-747-2106

FROM/DE:

Name/Nom....: Kwai Lum

Manager, Radio Equipment Standards,

300 Slater Street, 13th Floor,

Ottawa, Canada, K1A 0C8

Phone: 613-990-4699; Fax: 613-952-5108

Total pages : Pages totales:

Date & time sent: August 3, 94.

Date & heure envoyé:

Our_Ref : DGEP-5630-1 (RSS-210 Labelling)

This is to respond to your fax of August 1, 94 requesting that we permit a combined statement for FCC and Industry Canada on the equipment labels.

We wish to assure you that your suggested combined label that you submitted in your fax is acceptable to Canada since our standard (section 5.8 of RSS-210) allows (to quote) "....equivalent statement...".

We have made our labelling statement as close as we can to Part 15.19(3); the differences are : we left out the word "harmful" because of difficulties in defining what is harmful. We added the phrase "of the device" to remove any possible misunderstanding.

To re-capitulate, although your proposed statement uses FCC text except for the mention of "RSS-210 of Industry Canada", we consider it to be equivalent. Our preferred text is per RSS-210; the next best is to add the word "harmful" to meet FCC requirements.

Since FCC and Industry Canada are from different countries, we do not consider it necessary to state in our separate standards a combined text. In any case it would be too presumptuous that all products are for both markets.

Our equipment certification staff will be informed of the above. We will also copy this to Mr Reed of the FCC since you said that you sent a similar fax to him.

Regards,

Kwai Lum

cc Mr John Reed (FCC OET fax 202-653-8773).

cc R. Corey (Equipment Certification).



University Of Michigan

COLLEGE OF ENGINEERING THE RADIATION LABORATORY DEPARTMENT OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCE

3228 EECS BUILDING 1301 BEAL AVENUE ANN ARBOR, MICHIGAN 48109-2122 734 764-0500 FAX 734 647-2106 http://www.eecs.umich.edu/RADLAB/

Re: Certification for Fidelity Comtech FCI-2400 Transmitter

Model(s): FCI-2401, 2401i, 2405, 2405i, 2451

FCC ID: Q2A-FCI2400 IC: 4569A-FCI2400

POWER OF ATTORNEY

A letter granting Valdis V. Liepa the Power of Attorney is on file and can be provided when so requested.

UNIVERSITY OF MICHIGAN

COLLEGE OF ENGINEERING THE RADIATION LABORATORY DEPARTMENT OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCE

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FCC ID: Q2A-FCI2400 IC: 4569A- FCI2400

REQUEST FOR CONFIDENTIALITY

Pursuant to 47 CRF 0.459, Fidelity Comtech, Inc. requests that a part of the subject application be held confidential. This comprises Exhibits

- **Schematics** (5)
- Parts List (Part of Exhibit only) (10)
- Description of Operation (Part of Exhibit only) (12)

Fidelity Comtech, Inc. has spent substantial effort in developing this product and it is one of the first of its kind in industry. Having the subject information easily available to "competition" would negate the advantage they have achieved by developing this product. Not protecting the details of the design will result in financial hardship.

If there are any questions regarding this request, please contact me at the above address or call 734-483-4211, fax 734-647-2106 or e-mail liepa@umich.edu.

Sincerely,

Valdis V. Liepa Research Scientist

Vald? V. Liga

University of Michigan



University Of Michigan

COLLEGE OF ENGINEERING THE RADIATION LABORATORY DEPARTMENT OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCE

3228 EECS BUILDING 1301 BEAL AVENUE ANN ARBOR, MICHIGAN 48109-2122 734 764-0500 FAX 734 647-2106 http://www.eecs.umich.edu/RADLAB/

March 31, 2003

Re: Certification for Fidelity Comtech FCI-2400 Transmitter

Model(s): FCI-2401, 2401i, 2405, 2405i, 2451

FCC ID: Q2A-FCI2400 IC: 4569A- FCI2400

STATEMENT OF MODIFICATIONS

During the course of testing, an amplifier and antenna were selected and then the available channels for the particular configuration were reduced (if necessary) to meet the band-edge and harmonic emission limits.

In addition, it was recommended to the manufacturer that RF absorbing material be added to the FCI-2401, 2401i, 2405, 2405i amplifier chassis to decrease an existing 2nd harmonic resonance within the structure. RF absorber (LS-26, ARC Technologies, ½ inch) is used. For the FCI-2451 EMI gasketing (Laird Elastomeric Silicone) and copper tape (generic) were added to the Witch's Hat configuration to help contain existing 2nd harmonic emissions. All EMI relevant modifications can be seen in the internal photographs exhibit. (Also see Section 3.1 of the attached Test Report).

Valdis V. Liepa

Research Scientist



12 January 2003

American Telecommunications Certification Body, Inc. 6731 Whittier Avenue Suite C110 McLean, VA 22101

To Whom It May Concern:

I, Joseph M. Carey, President of Fidelity Comtech, Incorporated, of Boulder, Colorado, do hereby authorize Professor Valdis V. Liepa of the University of Michigan, Department of Electrical Engineering and Computer Science, Ann Arbor, Michigan, to act on Fidelity Comtech's behalf for applications submitted to American Telecommunications Certification Body (ATCB)

Anti-Drug Abuse Certification:

I further certify that no party (as defined in 1.2002 of CFR47, 1992) to this application including myself is subject to a denial of federal benefits, that includes FCC benefits, pursuant to Section-5301 of the Anti Drug Abuse Act of 1998, 21 U.S.C. 853(a)

Sincerely,

Joseph M. Carey
Joseph M. Carey

UNIVERSITY OF MICHIGAN COLLEGE OF ENGINEERING THE RADIATION LABORATORY DEPARTMENT OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCE

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Re: Certification for Fidelity Comtech FCI-2400 Transmitter

Model(s): FCI-2401, 2401i, 2405, 2405i, 2451

FCC ID: Q2A-FCI2400 IC: 4569A- FCI2400

GENERAL PRODUCT INFORMATION

The device, for which certification is pursued, has been designed by:

Fidelity Comtech, Inc. 5485 Conestoga Court, Suite 237 Boulder, Colorado 80301

> Joseph Carey Tel: 303-786-8048 Fax: 303-415-1113

It will be manufactured by:

Fidelity Comtech, Inc. 5485 Conestoga Court, Suite 237 Boulder, Colorado 80301

> Joseph Carey Tel: 303-786-8048 Fax: 303-415-1113

Canadian Contact:

Dan Carey 2961 W. 42nd Vancouver, BC V6N 3G8 Tel: 604-731-4048