

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:

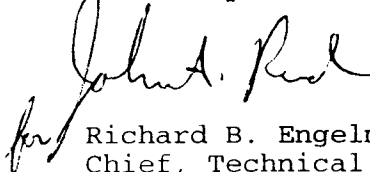
"This device complies with Part 15 of the FCC Rules and with RSS-210 of the Industry Canada. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired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



for Richard B. Engelman
Chief, Technical Standards Branch
Office of Engineering and Technology

Government of Canada
Industry Canada

Gouvernement du Canada
Industrie Canada

FACSIMILE SHEET

FORMULE D'ENVOI PAR TELECOPIEUR

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 : Date & time sent: August 3, 94.
Pages totales: 1 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 Motorola LHJ011 Transmitter
Model: LHJ011
FCC ID: LHJ011
CANADA: to be provided by IC

POWER OF ATTORNEY

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



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REQUEST FOR CONFIDENTIALITY

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

- (5) Schematics
- (10) Parts List (Part of Exhibit only)

Motorola 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 definitely result in a 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
University of Michigan

Comments regarding operation and testing of the DUT

The DUT has been tested for compliance with FCC 15.231(b) and RSS 210; 6.1 and 6.3.

- 1) Per 15.231(b), the DUT initiates transmission when button is depressed and ceases to transmit within 5 seconds of when the button is released.
- 2) Under part 15.231(b)(2) of the FCC rules requires the use of an average detector or Quasi-Peak Detector. Because this is a pulse device, and we the guidelines of section 15.35(c), per 15.231(b), wherein the average measurement is obtained by mathematically averaging the peak value.
- 3) Per 15.231, the DUT transmits only identification and control signals; there is no provision for input of data.



MOTOROLA
*Automotive and Industrial
Electronics Group*

January 7, 2002

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

Re: Letter of Agency for Application Submittals to ATCB for Remote Keyless Entry Systems

I, Alan W. Blair, the Program Manager for the above mentioned systems, 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 Motorola's behalf, until otherwise notified, in front of the American Telecommunications Certification Body, Inc. (ATCB) with respect to all matters relating to the certification of the above said systems.

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 1988, 21 U.S.C. 853(a).

A handwritten signature in cursive script that reads "Alan W. Blair".

Mr. Alan W. Blair
Program Manager



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January 17, 2002

Re: Certification for Motorola LHJ011 Transmitter
Model: LHJ011
FCC ID: LHJ011
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STATEMENT OF MODIFICATIONS

There were no modifications made to the DUT by this test laboratory. (Also see Section 3.1 of the attached Test Report).

Valdis V. Liepa
Research Scientist



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Re: Certification for Motorola LHJ011 Transmitter
Model: LHJ011
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GENERAL PRODUCT INFORMATION

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

Motorola AIEG
4000 Commercial Avenue
Northbrook, IL 60062-1840

Steven Flatt
Tel: 847-480-4137
Fax: 847-205-2503

It will be manufactured by:

Motorola AIEG
4000 Commercial Avenue
Northbrook, IL 60062-1840

Steven Flatt
Tel: 847-480-4137
Fax: 847-205-2503

It will be marketed and serviced by:

GM Dealers of North America