

## 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/

February 7, 2000

Federal Communications Commission Equipment Approval Services P.O. Box 358513 Pittsburgh, PA 15251-5315

Re:

Certification of JCI Transmitter

Model: 120N

FCC ID: CB2120NHL3 CANADA: to be provided

Please find enclosed application materials for certification of Johnson Controls, Inc. (JCI) Universal Garage Door Opener (UDGO). As you will see, this is not a run-of-the-mill transmitter, but one that learns from others and repeats the frequency and the code. This product is a next generation product of one already certified (FCC ID: CB2VA3823); the functionality, including frequency of operation, power output, etc., of the device is similar, but circuitry has been redesigned to improve the product. We tested the device and found it to comply with the Part 15.

Pursuant to 47 CRF 0.459, JCI requests that part of the subject application be held confidential. This includes Exhibits

(5) \*Schematics

(10)

\*Parts List/Tune-up Information

JCI has spent years in developing this product and now expects it to be one of the major product lines. Having the subject information easily available to "competition" would negate the advantage they have achieved by developing this product. Since the UGDO is a major product line for the company, not protecting the details of the design will definitely result in a financial hardship.

If there are any questions regarding the application or testing performed, please contact me at the above address or call 647-647-1792, (lab) 734-483-4211, fax 647-647-2106 or email liepa@umich.edu.

Sincerely,

Valdis V. Liepa Research Scientist

Enclosures:

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February 7, 2000

Certification and Engineering Bureau Industry Canada 3701 Carling Avenue, Bldg. 94 Ottawa, Ontario K2H 8S2

Re:

Certification of JCI Transmitter

Model: 120N

FCC ID: CB2120NHL3 CANADA: to be provided

Please find enclosed application materials for certification of Johnson Controls, Inc. (JCI) Universal Garage Door Opener (UDGO). As you will see, this is not a run-of-the-mill transmitter, but one that learns from others and repeats the frequency and the code. This product is a next generation product of one already certified (CAN: 1763 102 501); the functionality, including frequency of operation, power output, etc., are similar, but circuitry has been redesigned to improve the product. We tested the device and found it to comply with RSS-210. The product is identified as:

Model: 120N

Payment authorization attached to cover: (a) transmitter assessment, \$425.00 (CAN); and (b) transmitter certification, \$45.00 (CAN).

**NOTE:** The format and order of our Exhibits to follow the FCC requirements for their electronic submission. A Table of Contents has been provided up front to identify the attached Exhibits that are on the enclosed CD ROM.

If there are any questions, suggestions, etc., regarding the application or testing performed, please contact me at the above address or call 647-647-1792, (lab) 734-483-4211, fax 647-647-2106 or e-mail liepa@umich.edu.

Sincerely,

Valdis V. Liepa Research Scientist

**Enclosures:** 

Application Form
Payment Authorization
(This) Letter of Transmittal
Summary of Test Results
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Exhibits





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February 7, 2000

Re:

Certification of JCI Transmitter Model: 120N

FCC ID: CB2120NHL3 CANADA: to be provided

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<sup>\*</sup> Filed Confidential