

## Information about the Applicant

<b>Applicant:</b>	Idmicro, Inc.
<b>Address:</b>	1019 Pacific Avenue, 13th Floor
<b>City, State, Zip</b>	Tacoma, WA 98402
<b>Test Requested By:</b>	Tom Kearns
<b>Model:</b>	4120R
<b>FCC ID:</b>	QYT-4120
<b>Agent</b>	Northwest EMC, Inc.
<b>Approval Type</b>	Class II Permissive Change
<b>Equipment Type</b>	Hybrid spread spectrum transmitter
<b>Rule Part</b>	15.247

## Overview

The equipment operates in the 2.4 GHz band as a hybrid spread spectrum transmitter that utilizes both frequency hopping and direct sequence modulation techniques. It is used as the interrogator for an RF ID tag system. The letter from the grantee describes the Class II permissive changes that were made. In order to differentiate the new configuration from the old, the model number for the new configuration is 4120R.

## Findings

	<p>Section 15.21 Information to user, specifies:</p> <p>The users manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.</p> <p>The above information does not appear in the User's Manual</p>
	The applicant has provided additional explanation of the statements in the manual.
	Section 2.1033 Specifies: A block diagram showing the frequency of all oscillators in the device. The signal path and frequency shall be indicated at each block. The tuning range(s) and intermediate frequency(ies) shall be indicated at each block.
	The applicant only provided evidence of the changes to the digital circuitry. Based upon the applicant explanation of the changes, the radio has not changed.
	<p>The links in Part 2 of 3 of the technical report do not work correctly</p> <p>The applicant has submitted a corrected test report.</p>

## Recommendation

All items have been resolved and completed to my satisfaction; therefore I recommend this application for approval.



November 29, 2004

Dean Ghizzone, President

Date

**Opinion**

Specification Requirements	Description
15.247(a)(1)	Channel Spacing

**Opinion:** The Equipment meets the intent specified by the requirements listed above.

**Discussion:** The Applicant has submitted test results in the form of a test report

**Reference:** Technical Report

Specification Requirements	Description
15.247(a)(1)	Average time of occupancy on any frequency

**Opinion:** The Equipment meets the intent specified by the requirements listed above.

**Discussion:** The Applicant has submitted test results in the form of a test report

**Reference:** Technical Report

Specification Requirements	Description
15.247(b)	At least 75 non- overlapping hopping channels

**Opinion:** The Equipment meets the intent specified by the requirements listed above.

**Discussion:** The Applicant has submitted test results in the form of a test report

**Reference:** Technical Report

Specification Requirements	Description
15.207	Conducted Power Line Emissions

**Opinion:** N/A – Battery powered.

**Discussion:** The Applicant has submitted test results in the form of a test report.

**Reference:** N/A

Specification Requirements	Description
15.247(a)(1)	Bandwidth

**Opinion:** The Equipment meets the intent specified by the requirements listed above.

**Discussion:** The Applicant has submitted test results in the form of a test report

**Reference:** Technical Report

Specification Requirements	Description
15.247(b)(1)	Power Output

**Opinion:** The Equipment meets the intent specified by the requirements listed above.

**Discussion:** The Applicant has submitted test results in the form of a test report

**Reference:** Technical Report

Specification Requirements	Description
15.247(d)	Spurious Emissions, Antenna Conducted

**Opinion:** The Equipment meets the intent specified by the requirements listed above.

**Discussion:** The Applicant has submitted test results in the form of a test report

**Reference:** Technical Report

Specification Requirements	Description
15.247(d)	Spurious Emissions, Radiated Emissions

**Opinion:** The Equipment meets the intent specified by the requirements listed above.

**Discussion:** The Applicant has submitted test results in the form of a test report.

**Reference:** Technical Report

Specification Requirements	Description
15.247(e)	Power Spectral Density

**Opinion:** The Equipment meets the intent specified by the requirements listed above.

**Discussion:** The Applicant has submitted test results in the form of a test report

**Reference:** Technical Report

Specification Requirements	Description
15.247(d)	Band Edge Compliance

**Opinion:** The Equipment meets the intent specified by the requirements listed above.

**Discussion:** The Applicant has submitted test results in the form of a test report.

**Reference:** Technical Report

Specification Requirements	Description
2.1091/15.247(b)(5)	RF Exposure

**Opinion:** The Equipment meets the intent specified by the requirements listed above.

**Discussion:** The Applicant has submitted MPE estimates demonstrating compliance.

**Reference:** RF Exposure Exhibit