

EXHIBIT 6

Application for Receiver

CERTIFICATION

Under CFR Title 47, Part 15.109 and 15.111

GRANTEE: Bob Dickman Tire Center, Inc.

FCC ID: PXZPC433BP

August 12, 2001

Prepared By:

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APPLICATION FOR CERTIFICATION

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TEST: FIELD STRENGTH OF RADIATED EMISSIONS

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Setup:

The equipment under test (EUT) was configured and operated in accordance with the applicable provisions of ANSI C63.4-1992, Section 6, 12. Measurements were made in accordance with applicable paragraphs of Section 8.2.2 and 8.2.3, Section 12.1.1.1 Appendix D, Section 12.1.4 and Appendix H3 and H4.

The EUT was placed on a 1 by 1.5 meter table located 40 cm above a 2-meter diameter non-metallic turntable that sits 40 cm above the 15 X 30 meter ground plane at Spectrum's Open Area Test Site. The bi-conical or log-periodic antenna was mounted on a tower spaced at a three meters distance, and arranged for adjustment in height (1-4 meters) and vertical/horizontal polarization to maximize the emissions levels when combined with turntable rotation of the EUT. The dual ridged guide antenna was mounted on a tripod at one-meter height and adjusted for vertical or horizontal antenna orientation. A HP 8562A spectrum analyzer with a HP 8447F, Option H64 amplifier and a HP 83006A pre-amplifier were used for the peak measuring instrumentation.

Discussion:

No modifications were required prior to the final radiated emissions measurements reported herein.

The EUT is a 433 MHz receiver used in the SmartTire Passenger Car Tire Monitoring System. The receiver would be installed in a vehicle and used to receive signals and display status of tire pressure sensors installed on the wheels. A transmitter/ sensor would be installed for each wheel. Each transmitter reports back to the receiver with pressure status and temperature status. If a change in excess of 1 lb is detected the 4 to 6 minute normal cycle transmit interval is interrupted. The information is transmitted immediately, being considered a safety issue, as in the case of a punctured tire and treated accordingly.

The receiver was powered with a 12-volt external power supply connected to the cigarette lighter plug connector.

Preliminary measurements were made as described in Section 8.3.11 and 13.1.4.1 with the receiver operating as described. During preliminary measurements only two emissions of significance were detected with the receive antenna in close proximity to the EUT. The EUT configuration is detailed in the photographs included with this report.

The final set of measurements as specified in Section 8.3.1.2 and 13.1.4.2 were made as specified in Section 13.1.1. The receiver was observed while positioned in three mutually orthogonal planes with the horizontal position "on its back parallel to ground plane", the worst case. The EUT's cigarette lighter plug 12 VDC power cord and remote cable (for the one version) were manipulated to different positions endeavoring to raise emission levels. The 12 Volt source was an Astron VS-35-M power supply during the measurements. RBW and VBW of 100 kHz were used for measurements below 1 GHz. Above 1 GHz peak measurements were made with a RBW and VBW of 1 MHz. We also endeavored to maximize levels of the emissions with EUT rotation and adjustment of antenna height.

Measurements were made over the frequency range of 30 - 5000 MHz. A HP 8447F pre-amplifier was used during these measurements.

The receiver was operating at its nominal 433.92 MHz.

Field Strength of Radiated Spurious Emissions

Grantee: Bob Dickman Tire Center, Inc.
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June 4, 2001

Freq MHz	Vert dBuV	Horz dBuV	Ant-F dB	Cable Loss	dBuV/m	uV/m	Limit uV/m
433.362	9.83	<u>12.43</u>	22.6	3.3	38.33	82.5	200
866.74	<u>1.33</u>	0.5	27.7	6.5	34.7	59.7	200

Note: No harmonic emissions were measureable between 1 and 5 GHz at 3 meters to report

The receiver antenna conducted emissions measurements under Part 15.111 are plotted on the following pages.

Conclusion:

The Bob Dickman Tire Center, Inc., FCC ID: PXZPC433BP, when operated and measured as discussed above, meets the receiver radiated spurious emissions requirements under Title 47, CFR, Part 15.109(a) and the antenna conducted spurious requirements under Part 15.111. This receiver is *not subject to the transition provisions of Part 15.37*.