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January 25, 2006

American TCB, Inc. 6731 Whittier Avenue Suite C110 McLean, VA 22101

Subject: FCC ID: OWDTR-0023-E

ATCB correspondence of January 23, 2006

The subject device is type certified as an equipment authorization, as specified in the Commission's rules, §2.907.

Paragraph (b) says that subsequent equipment marketed is to remain "... identical (see §2.908) to the sample tested except for permissive changes or other variations authorized by the Commission pursuant to §2.1043."

Remaining electrically identical is not a requirement under a permissive change.

Permissive changes allow a path for product changes within the context of §2.1043, without the need for obtaining a new FCC ID Grant.

"... basic frequency determining and stabilizing circuitry (including clock or data rates), frequency multiplication stages, basic modulator circuit or maximum power or field strength ratings ..." have not been changed which results in a Class II permissive change being allowed. In processing a Class II permissive change, tests for performance characteristics degradation are to be performed. Characteristics are to remain within Commission's minimums.

A test report has been submitted as an exhibit verifying that the changes remain within the Commission's minimums for those areas affected by the change. Revised parts list, schematics and board artwork have been submitted as well.

The added PA gain stage driver is required as the new PA module does not provide a total gain value the previous module did. Conducted power remains the same as a result. There would be no difference between this added on the board and a module that had the additional gain stage incorporated on the hybrid substrate.





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As a similar example, please review publication 208873 from the Commission's Knowledge Data Base (KDB), reproduced below:

Publication
Number: 208873

Rule Parts: Publication Date: 10/19/2005

First Category: Administrative Requirements

Second Category: Permissive Changes Part 2.1043

Third Category: Spread Spectrum devices

**Question:** Class II permissive change, Frequency Hopping Spread Spectrum System (FHSS) -- If a manufacturer had to make substantial changes to the board layout near the power amplifier output to correct aVoltage Standing Wave Ratio (VSWR) problem with a certified FHSS, is a Class II Permissive Change appropriate in accordance with 2.6043? There is no change to the previously reported output power, modulation circuit, frequency determining circuit, etc.

**Answer:** The FCC rules governing changes to previously certified devices are contained in 47 CFR 2.1043, which states that a change to components in the RF chain which results in a change to the circuit design may not be authorized as a Class II permissive change if the previously approved output power is changed. Because output power remains identical to that which was previously approved, the modification may be authorized as a Class II permissive change. The output power and spurious emissions (radiated and conducted) should be retested and those results submitted in the application.

The citation provides similar logic and change scenario as done for our radio product.

Without a permissive change path honored by the Commission, all that would be allowed and issued, would be newly filed Grant's with new FCC ID numbers.

M/A-COM believes the Class II Permissive Change is warranted under the rules and interpretations.

M/A-COM looks forward to a timely forthcoming modified Grant.

Sincerely,

Daryl Popowitch Regulatory Manager, Engineering Project Manager

M/A-COM, Inc. – Lynchburg, VA