



Subject: Modular Approval Request
FCC ID: LOBHH200
1/26/2009

Dear Application Examiner,

Cervis Inc. (aka Structured Mining Systems), would like to have authorization for modular approval of the radio portion of SmaRT PTO-206, FCC ID: LOBHH200. This request is being made so that the modular transmitter can be used in other SmaRT hand-held 2.4GHz varieties. While the design specific to the modular transmitter is not expected to change – this includes the electrical schematic, selection of components, and placement of components - the electronic and/or mechanical components associated with other sections of the product may change. There is no intent to modify the footprint of the modular transmitter or the orientation of the components as depicted in the approval. Aspects of the product that may vary include, but are not limited to, the microcontroller, enclosure, input channels, and battery topology. The requirements of 47 CFR Part 15.212 have been met and shown on the following statements.

1. *The radio elements of the modular transmitter must have their own shielding.* The radio portion of this module has been shielded, please see exhibition External Photo. The RF shield for this transceiver is the same for all units covered under this modular approval. As such, the radio portion is limited to the area covered by the shield.
2. *The modular transmitter must have buffered modulation/data inputs (if such inputs are provided) to ensure that the module will comply with Part 15 requirements under conditions of excessive data rates or over-modulation.* The SmaRT PTO-206 contains buffered data inputs; it is integrated in the radio section of the PCB assembly, part number 07100302. The component with buffered data inputs is ATMEL AT86RF230.
3. *The modular transmitter must have its own power supply regulation.* The SmaRT PTO-206 contains a regulator in the DC input port, shown in the schematic as a TI TPS79101. It is expected that the functionality provided by the TI TPS79101 will continue to be utilized throughout the life of this modular transmitter design, even if the specific component chosen is not available.
4. *The modular transmitter must comply with the antenna requirements of section 15.203, 15.204(b) and 15.204(c).* The PTO-206 meets the FCC antenna requirements. The spurious emission, unique antenna connector and photo of antennas are shown in the application exhibits.
5. *The modular transmitter must be tested in a stand-alone configuration, i.e., the module must not be inside another device during testing for compliance with Part 15 requirements.* The PTO-206 was tested in a stand-alone configuration. Please see exhibit "Test Setup Photos".
6. *The modular transmitter must be equipped with either a permanently affixed label or must be capable of electronically displaying its FCC identification number.* Please see exhibit "FCC Label" for the FCC ID of this module.
7. *The modular transmitter must comply with any specific rules or operating requirements that ordinarily apply to a complete transmitter and the manufacturer must provide adequate instructions along with the module to explain any such requirements.* The PTO-206 is compliant with all applicable FCC rules. Detail instructions for maintaining compliance are given in the Users Manual.

8. *The modular transmitter must comply with any applicable RF exposure requirements in its final configuration.* The EUT is compliant with all applicable RF exposure requirements. RF Exposure is addressed in the exhibit “MPE Data”.

Sincerely,

A handwritten signature in black ink, appearing to read "Anthony M. Di Tommaso". The signature is fluid and cursive, with "Anthony" and "Di Tommaso" being the most distinct parts.

Anthony M. Di Tommaso

Manager, Engineering

Cervis, Inc.