Electronic Submission

Office of the Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Pocatello, Idaho
November 29, 2006

Comments filing in matter of:	**NOTICE OF PROPOSED RULEMAKING NOTICE OF INQUIRY AND ORDER**
Reference:	**ET Docket No: 06-103**
Release date:	**JULY 18, 2006**

Dear Sir/Madam,

On October 30, 2006, AMI Semiconductor, Inc. (AMIS) provided comments to the notice of proposed rule making (FCC 06-103) to add two 1MHz wide "wing" bands (also referred to as MedRadio) to the current Medical Implantable Communication Standard (MICS) band of 402 MHz to 405 MHz. AMIS hereby wishes to file additional comments to the above referenced matter, to further clarify its position on the subject.

AMIS requests that the FCC make the proposed MICS band changes more robust and usable and thereby capable of providing significant improvements for the quality of life for a larger number of users. AMIS also requests that the FCC reduce the differences in allowed operation between the central MICS band and the newly proposed "wing" bands.

In the comments submitted on October 30, 2006, AMIS made the following general statement;

> Body-worn devices should be allowed to operate anywhere within the entire band (401 MHz to 406 MHz). These external devices should be limited to a transmit power of 250 nW. If these devices are used within the original MICS band, LBT protocols must be used. Single channel, as well as frequency agile operation, should be allowed for these devices. They would, however, be restricted from continuous operation in the 403.65 MHz +/- 150 kHz band, where low power/low duty cycle restrictions would be imposed.

AMIS has determined that the proposed power levels of 250 nW for implantable and body worn low duty cycle devices are too low to ensure adequate robustness in the communication link under the wide variety of operating conditions these device will be subjected to. For many patients these devices will be continuously worn while they go about their normal day-to-day activities. The proposed 250 nW transmitted power level will be insufficient for reliable communications, considering the many possible combinations of body position, transmitter or receiver location or orientation, and the proximity of external RF absorbing/reflecting materials. Any or all of these factors can have a significant effect on the radiated or received

power levels. The lack of reliable communications would severely reduce the effectiveness of such devices that are capable of providing significant quality of life improvements.

AMIS proposes that the allowed transmit power level for low duty cycle operation in the "wing" bands be increased to that of the current MICS band allowance of 25 µW. The same transmit power level would then be consistent throughout the MICS band and the new "wing" or MedRadio bands, minimizing potential confusion. For both implants and body worn devices, operation in the wing bands of 401 MHz to 402 MHz and 405 MHz to 406 MHz would be restricted to low duty cycle operation and, within the original 402 MHz to 405 MHz band, operation would be restricted to LBT with the exception of the allowance of a low duty cycle mode at 403.65 MHz +/- 150 kHz which has been proposed for use as a "beacon" channel to establish communications between devices. The 403.65 MHz low duty cycle operation should also be allowed to operate at transmit power levels of up to 25 µW to ensure reliable communications between controller and implant devices during the critical initial wake up "beacon" or acquisition of signal.

Increasing the maximum transmit power for the low duty cycle devices poses little risk of harmful interference with other users of these frequencies. These devices should be considered short-range devices, as their radiated energy is low enough that their range of operation and potential interference will be limited to a few meters. The very low duty cycle mode of operation proposed for the "wing" band as well as the 403.65MHz channel pose little risk of interference with LBT MICS devices due to the difference in frequency assignments and low duty cycle for the "beacon mode". Interference between other low duty cycle devices will be minimized due to their very short operational duty cycle.

Sincerely,

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