



BIOMEDICAL ENGINEERING INTERDEPARTMENTAL PROGRAM  
SCHOOL OF ENGINEERING AND APPLIED SCIENCE  
LOS ANGELES, CALIFORNIA 90095-1594

November 29, 2006

Kevin J. Martin  
Chairman  
Federal Communications Commission  
445 12th Street, SW  
Washington, D.C. 20554

Re: Reply Comments  
ET Docket No. 06-135 & RM-11271

Dear Chairman Martin:

I support the Alfred Mann Foundation's ("AMF") request that the Commission adopt service rules and allocate up to 20 MHz of spectrum to accommodate new wireless wideband microstimulator devices on a secondary basis. My university research laboratory does a lot of work with neural recording and stimulation. The need for wireless devices in this area is tremendous and long-standing. My research on wireless neural devices has been hampered by the lack of a dedicated frequency band for such devices. Establishing a bandwidth allocation is vital to the development of a new generation of wireless wideband medical devices designed to restore sensation and function to paralyzed limbs and organs. These devices offer a safer, less invasive, and more effective treatment option than is available with existing equipment.

The Commission's rules currently do not provide any spectrum to permit operation of new wireless wideband microstimulator devices. Although the Commission has allocated some spectrum for medical telemetry operations and for medical implant communications services, this spectrum is not suitable for wideband medical implant devices that require larger bandwidths to perform more complex functions. Without adequate spectrum and service rules to support the operation of these innovative devices, millions of Americans will be deprived of a safe and effective medical treatment for their debilitating health conditions.

The Commission's notice of inquiry issued in the above-referenced proceeding is an important first step toward adopting the necessary rules to encourage deployment of the next generation of wireless wideband microstimulator devices. Prof. Jack W. Judy urges the Commission to continue its efforts in this area by expeditiously granting AMF's request for commencement of a separate rulemaking.

Sincerely,

A handwritten signature in cursive script that reads "Jack W. Judy".

Jack W. Judy

Associate Professor in the Electrical Engineering Department  
Director of the UCLA Nanoelectronics Research Facility

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cc: Marlene H. Dortch  
FCC Secretary