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Thursday, September 21, 2006

To: FCC OET Licensing Department

The following description is provided as part of the request for detail in part 7 of application 0555-EX-PL-2006.

Innovonix LLC is developing a sensor system which will utilize millimeter wave radar centered at 35.5GHz. Each sensor system consists of one or more relocatable sensor employing at least one or more of the following modulation techniques: Frequency Modulated Continuous Wave (FMCW), Stepped Frequencies, Tone Transmission (Doppler) and/or combinations of each.

Per the request in part 7 of the application, the following is a narrative statement describing details on the following:

- a) The program of research and experimentation is centered around the development of a new detection system, which can be utilized in out-door environments for detecting and tracking objects. The sensor development has been offered to the US Air Force in response to a solicitation (RFP FA8728-06-R-0001) and is expected to have commercial applications as well.
- b) Objectives of the experimentation will include measurements of detection distance and sensor sensitivity, detection and penetration of objects covered by foliage. Detection of multiple objects and separation of objects through the combination of modulation techniques and digital signal processing.
- c) The experimentation is expected to result in a family of innovative new sensor systems which are useful for specific types of security requirements, as well as a number of other sensor detection applications.