

From: James Nolan

To: Behnam Ghaffari

Date: September 14, 2010

Subject: FCC File No. 0255-EX-PL-2010

---

Message:

FCC File No. 0255-EX-PL-2010

Response to FCC e-mail, 17 August 2010

Reference Number: 11716

Dear Mr. Ghaffari,

This correspondence is in response to your inquiry of 17 August, 2010.

To be more specific about InterDigital's plans to avoid licensed users in the TV bands, we plan to do the following:

- a) Our prototypes contain sensing radio HW and SW that will scan for active TV stations as well as active microphones.
- b) Our prototypes support 2 types of filtering to minimize outer-band interference, baseband pulse shaping filters which are designed to meet the adjacent channel interference requirements for in-band signals and analog filters to reduce out of band emissions to achieve acceptable levels imposed by FCC.
- c) We plan to interface directly over an IP connection from our prototype platform to the online database defined by Spectrum Bridge's TVBD interface specification.
- d) In the period during which the TVBD interface specification API is being finalized by Spectrum Bridge and InterDigital, we will consult Spectrum Bridge.com's online TVWS tool: <http://spectrumbridge.com/products-services/spectrumsharing/single-location-search.aspx>.
- e) The results of a search on Sept 7, 2010 for a fixed device show that channels 5 and 6 are available for use in the Melville location and channel 2 for our King of Prussia location; however, we realize that white space is dynamic and will consult the database at least every 24 hours.
- f) For our King of Prussia location, we will use the same equipment with similar capabilities as our Melville location as mentioned in sections a,b,c,d above.
- g) Our focus is indoor operation with all antennas indoors which will help to minimize and contain RF transmissions.
- h) We are flexible in how much bandwidth is required. Our application indicates 6, 12, 18, 22 MHz BW, but, with the exception of the Melville channels identified in e, we do not believe there will be any contiguous channels available in order to achieve greater than 6 MHz BW, so we are developing HW and SW that will aggregate available bandwidth over non-contiguous channels.
- i) Our experimental trials are for a fixed duration after which the equipment will be removed or, if we are validating applications and services, we will replace the equipment with FCC certified equipment at the end of the experiment.