## **Re:** Questions from the FCC (FCC ID: JOYKC-SSSD-66K)

Dear Mr. Coperich,

Pursuant to your E-Mail of Correspondence Reference Number "8410" sent us on June 24, 1999, I would like to forward to you our responses.

> To: Nobuyuki Hayashida, Kyocera Corporation Frank Coperich > From: fcoperic@fcc.gov > FCC Application Processing Branch > > > Re: FCC ID JOYKC-SSSD-66K > Applicant: Kyocera Corporation > Correspondence Reference Number: 8410 > 731 Confirmation Number: EA94173 > Date of Original E-Mail: 06/24/1999 > > > >This is the Kyocera Satellite handset, EAS 94173, for a Class II Permissive Change > 1. They are replacing the antenna, from a patch to a helix. Other modifications > include case dimensions but no change in electronic circuits except in the > antenna section. The highest antenna gain data has increased from 2.4 dBic > to 2.8 dBic (I don't know what dBic is, just comparing numbers here), and also > adding an external antenna jack to the modified unit. From a practical point, > it would be better if this unit uses a new FCC ID to separate the old from the > new, since there is quite a bit of change in the antenna and radiation pattern. > You will need to decide if CLASS II or new ID is appropriate. If they have > not sold any old units, we could replace the old grant with a new one. >

We believe our modification has perfectly conformed with the paragraph (a) and (b) in 47C.F.R. §2.1001 Changes in type accepted equipment. Therefore, we think that Class II Permissive Change is appropriate. In addition, we have scarcely sold the old terminals in the United States.

The Iridium System uses Right Hand Circular Polarized RF Wave to communicate between a satellite and a terminal. The dBic is a unit to represent an antenna gain for circular polarized wave.

If each antenna gain for horizontal polarized wave and vertical polarized wave is -3 dBi when the phase difference between both wave is 90 degrees, then we define that it is equal to the antenna

gain of 0 dBic for circular polarized wave.