ANTENNA WITH LOW-COST STEERABLE SUBREFLECTOR

Abstract

Methods of antenna pointing and antenna assemblies implementing those methods are disclosed. An example method includes providing a user terminal antenna assembly including an antenna and an auto-peak device. The antenna includes a reflector, a subreflector, and a feed, the feed oriented relative to the reflector and the subreflector to produce a beam. The antenna further includes a tilt assembly to tilt the subreflector relative to the reflector and the feed. The method further includes providing a control signal to tilt the subreflector in a plurality of tilt positions to move the beam while measuring corresponding signal strength of a signal communicated via the antenna at each of the plurality of tilt positions. Additionally, the method includes selecting a tilt position from the plurality of tilt positions based on a measured signal strength, and providing the control signal to tilt the subreflector to the selected tilt position.

[Figure 4]