

ABSTRACT

Embodiments of the present invention provide a LiDAR system and a laser ranging method. The LiDAR system includes: a laser scanning component and a rotary component; where the laser scanning component includes an emitter assembly, an emitter lens, a receiver lens and a receiver assembly. The emitter assembly includes a plurality of laser emitters and a first optical fiber array, and the receiver assembly includes a plurality of receivers and a second optical fiber array. With the LiDAR system according to the embodiments of the present invention, by using an optical fiber array as a laser emitter end of an emitter assembly, and a reflected light incident end of a receiver assembly, the size of the LiDAR may be reduced, and the production and calibration cost may be lowered.

Fig. 1