

ABSTRACT

An encoder includes: a disk; a track having reflectors arranged along a measurement direction on the disk; a light source configured to emit light to the reflectors; a light receiving array configured to receive light which is emitted by the light source and reflected at the track; and a hub arranged on an opposite side of the light source of the disk and having a taper which is inclined to a light axis of the light source at least in a position on the light axis.

Fig. 2