

ABSTRACT

A millimetric wave imaging device comprising: a lens antenna that transmits millimetric wave radiated from an object to form an object image using the millimetric wave at a predetermined rear position; a polygon mirror arranged in a proximity of an object image forming position of the lens antenna, a side wall thereof forming a polyhedron around a rotation axis and being formed as a mirror surface reflecting the millimetric wave forming the object image; a receiving portion that receives the millimetric wave reflected on the mirror surface of the polygon mirror to detect a signal level thereof; a scanning unit that reflects the millimetric wave at each position of the object image to the receiving portion by rotating the polygon mirror around the central rotation axis and around an axis perpendicular to the central rotation axis; and an image data generating unit that generates image data representing the object image by receiving a detection signal from the receiving portion while driving the polygon mirror through the scanning unit.