SIX-DEGREES-OF-FREEDOM OBJECT PERCEPTION SYSTEM AND METHOD

ABSTRACT OF THE DISCLOSURE

The present disclosure provides a 6DoF object perception system including an object determination device, a contour detection device and a pose estimation device. The object determination device is configured for receiving an RGBD image and determining whether there is an object in the RGBD image, and the RGBD image includes a depth data. The contour detection device performs a contour detection on the RGBD image to obtain a contour of the object. The pose estimation device obtains a coordinate information of a plurality of corners of the object and obtains an orientation information of the plane, and the pose estimation device generates a 6DoF of the object according to the coordinate information and the orientation information. The 6DoF of the object is used to determine at least one picking position for picking the object.

FIG. 1