

ABSTRACT

A three-dimensional imaging method and apparatus, a device, and a storage medium are provided. The method includes: acquiring a target color image and original depth map corresponding to a target shooting scene, where the target shooting scene contains at least one transparent object; inputting the target color image into a preset image processing model and, according to an output of the preset image processing model, obtaining a transparent object segmentation result, a boundary prediction result and a normal vector prediction result; based on the transparent object segmentation result, performing cutting processing on the original depth map to obtain a first depth map without transparent object depth information; based on the first depth map, the transparent object segmentation result, the boundary prediction result and the normal vector prediction result, performing depth map global optimization to determine an optimized second depth map; and, based on the second depth map, determining a target three-dimensional image corresponding to the target shooting scene.

FIG. 1