

A SYSTEM AND METHOD FOR ALIGNING AN ELONGATED TOOL TO AN OCCLUDED TARGET

ABSTRACT

Systems and methods for aligning an elongated tool to an occluded target and for striking the occluded target using the elongated tool are disclosed. The system for aligning an elongated tool to an occluded target includes an adjustment mechanism configured to adjust an angular orientation of the elongated tool relative to a pivot point spaced from the target; a 3-dimensional (3D) imaging device configured to capture a 3D image of the elongated tool and the occluded target; and a processor communicatively coupled with the adjustment mechanism and the 3D imaging device. The processor is configured to process the 3D image received from the 3D imaging device to obtain location data of the target and the pivot point; and based on the location data of the target and the pivot point, control the adjustment mechanism to adjust the angular orientation of the elongated tool relative to the pivot point to align a longitudinal axis of the elongated tool with the target and the pivot point.

FIG. 1