**SYSTEMS AND METHODS FOR ALIGNING AND LOCALIZING A TOOL**

Abstract of the Disclosure

A maintenance tool and alignment system are provided having a first optical device and a second optical device. The tool includes the at least two optical devices such that they do not occupy the same space or interfere with the tool's function. In some embodiments, the first and second optical devices define or project a first viewing plane and a second viewing plane. The first viewing plane and second viewing plane are transverse to one another and intersect within a field of view of the first optical device creating an intersection. The intersection of the first and second viewing planes allows for the tool, via a processor or a control device, to alignment the tool within a workspace without a dependence on an estimation of a distance of the tool relative to the workspace.

[Figure 1]