

ABSTRACT**AUTOMATIC PASSENGER BOARDING BRIDGE DOCKING SYSTEM**

The present invention provides an improved method and apparatus for automatically aligning and connecting a passenger boarding bridge (PBB) with the passenger door of an aircraft or other vessel. A sensory suite module includes cameras and sensors to scan the apron for obstacles and identify an aircraft based on external features. The sensory suite module also includes one or more high-precision active laser line profilers to detect the vertical and lower edges of an aircraft door. A controller module provides precise control and movement of the distal end of the PBB and guides the distal end of the PBB to the passenger door. The system can be activated by a remote triggering panel module.

FIG. 1 accompanies the abstract.