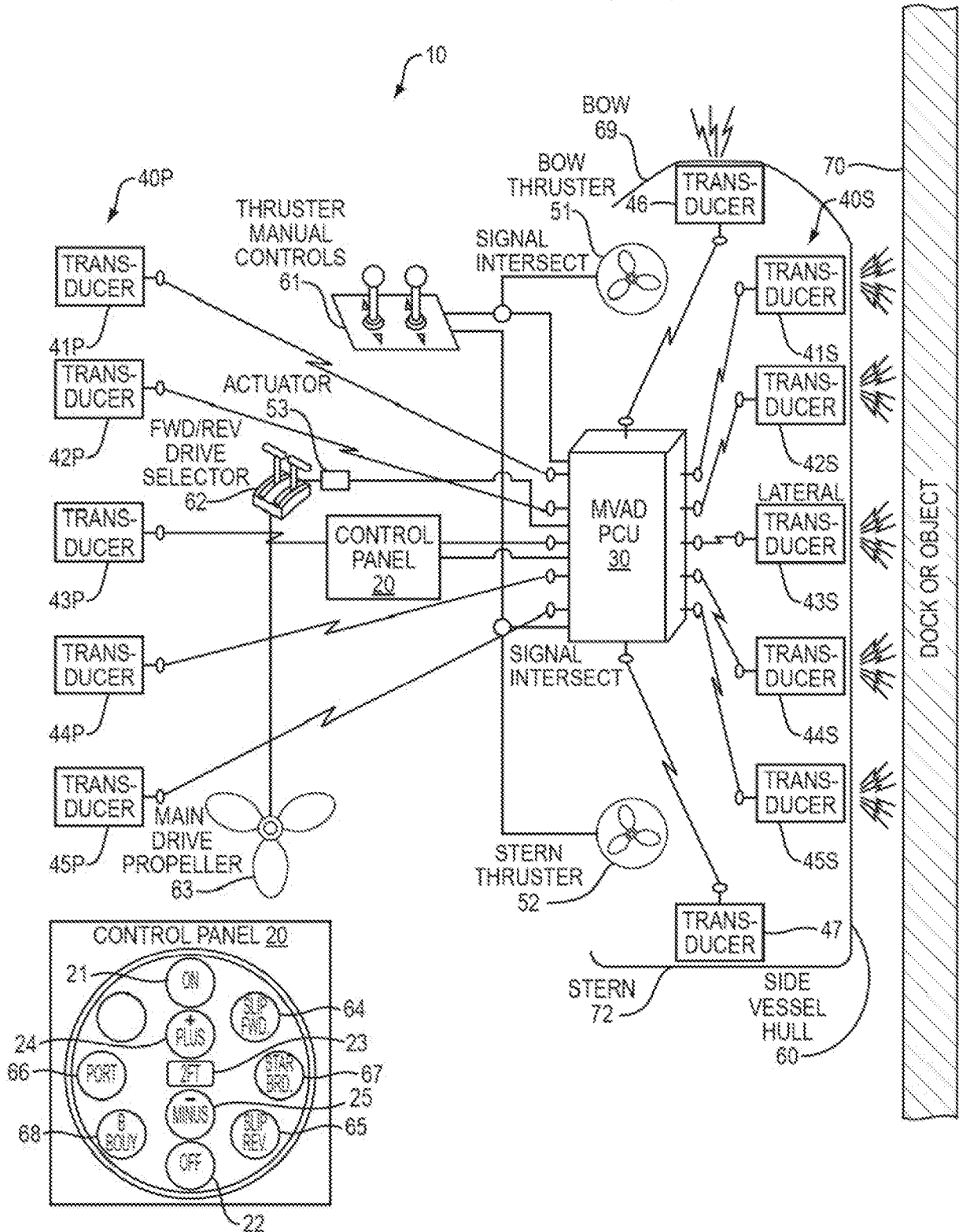


AUTOMATICALLY LOCATE VESSEL ADJACENT TO DOCK OR OBJECT
MARINE VESSEL AUTOMATIC DOCKING (MVAD)



AUTOMATIC ACCIDENT AVOIDANCE IN MARINAS AND DOCKING AREAS
MARINE VESSEL AUTOMATIC DOCKING (MVAD)

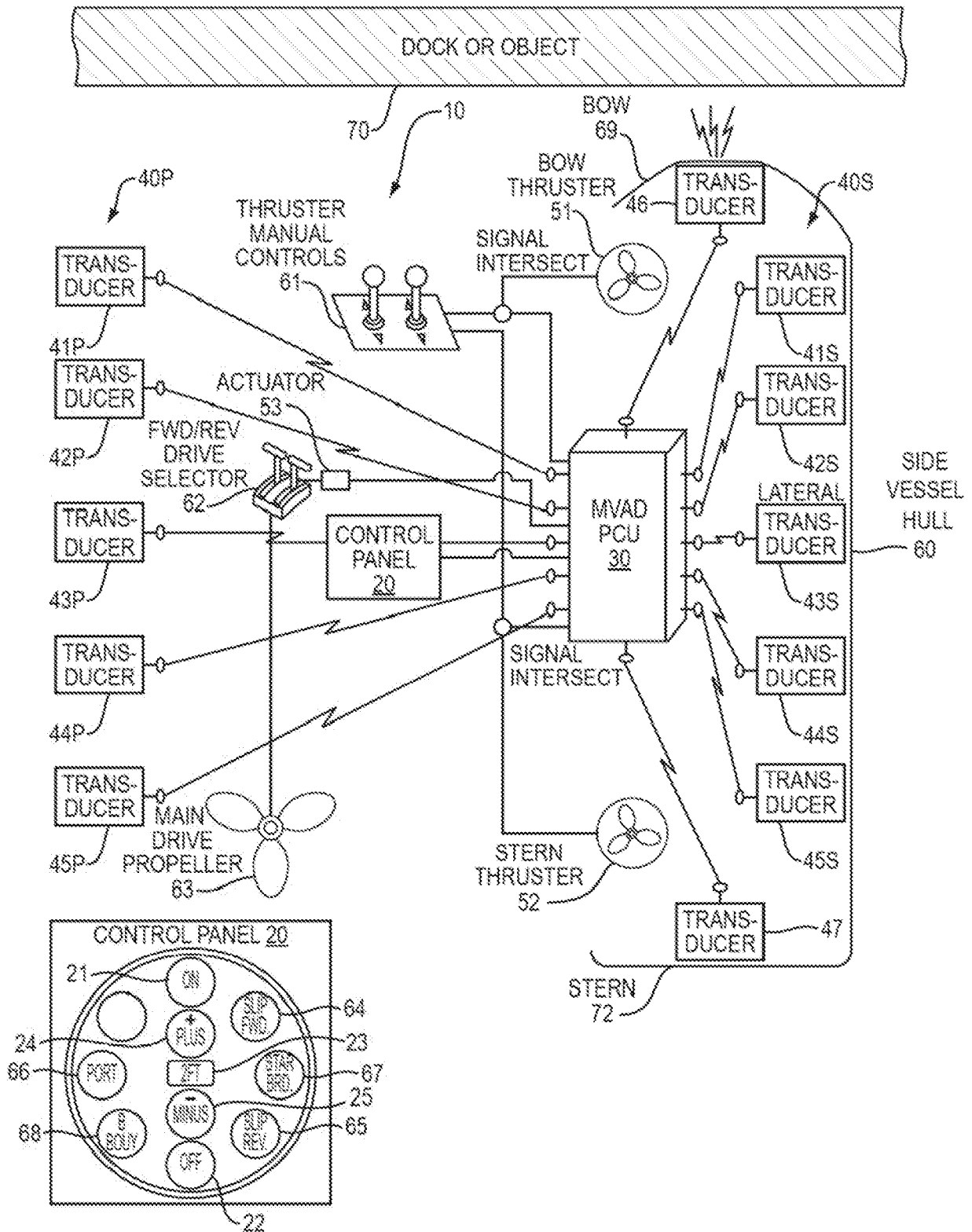


FIG. 2

PARKING VESSEL AUTOMATICALLY IN SLIP AREA MARINE VESSEL AUTOMATIC DOCKING (MVAD)

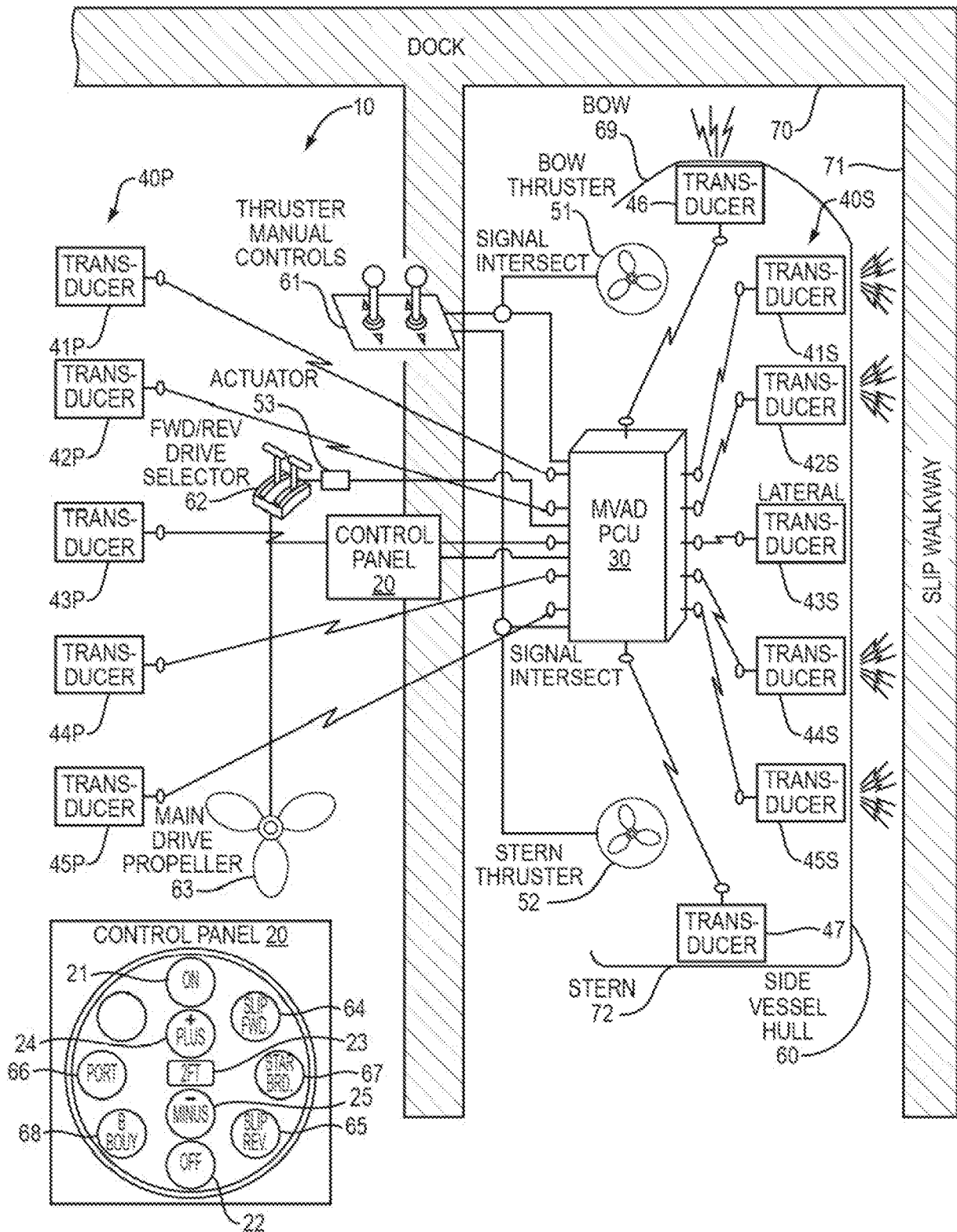


FIG. 3

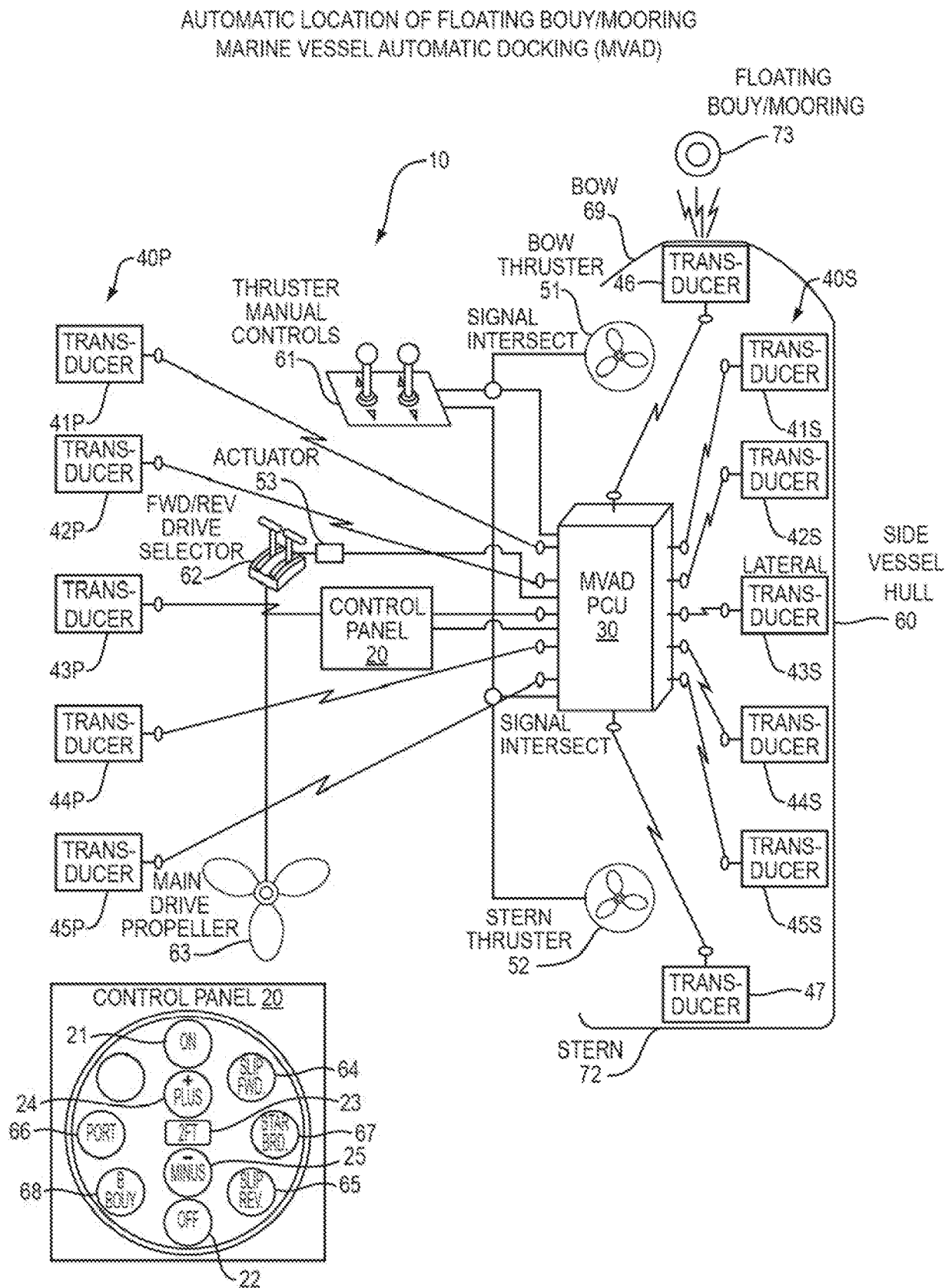


FIG. 4

DOCKING SYSTEM FLOW DIAGRAM

THE FOLLOWING DIAGRAM IS STARBOARD SELECTION AS DISPLAYED IN PATENT APPLICATION FIG.1. FOR EXAMPLE PURPOSES: DOCKING A MARINE VESSEL TO A STARBOARD SIDE EXTERNAL OBJECT.

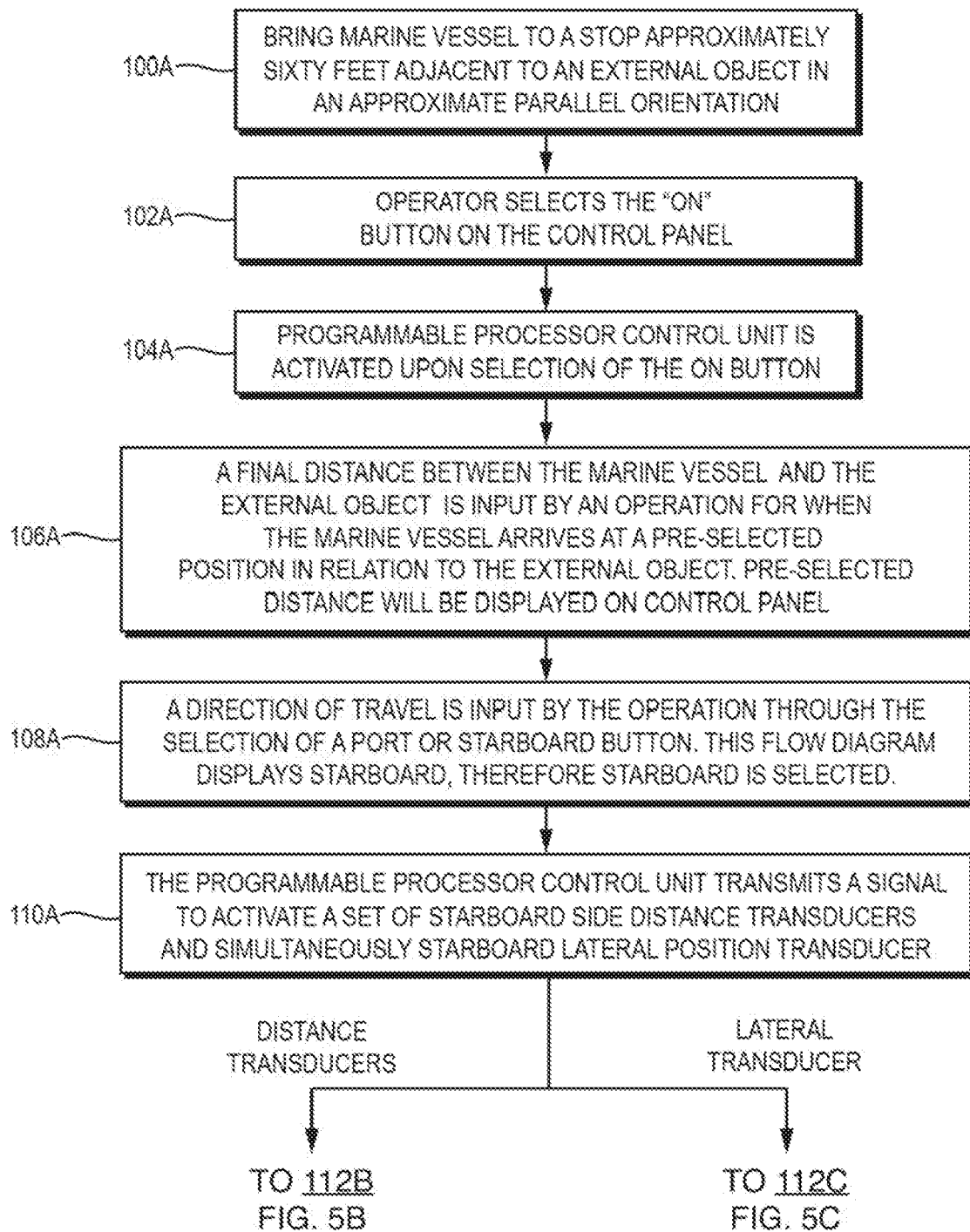


FIG. 5A

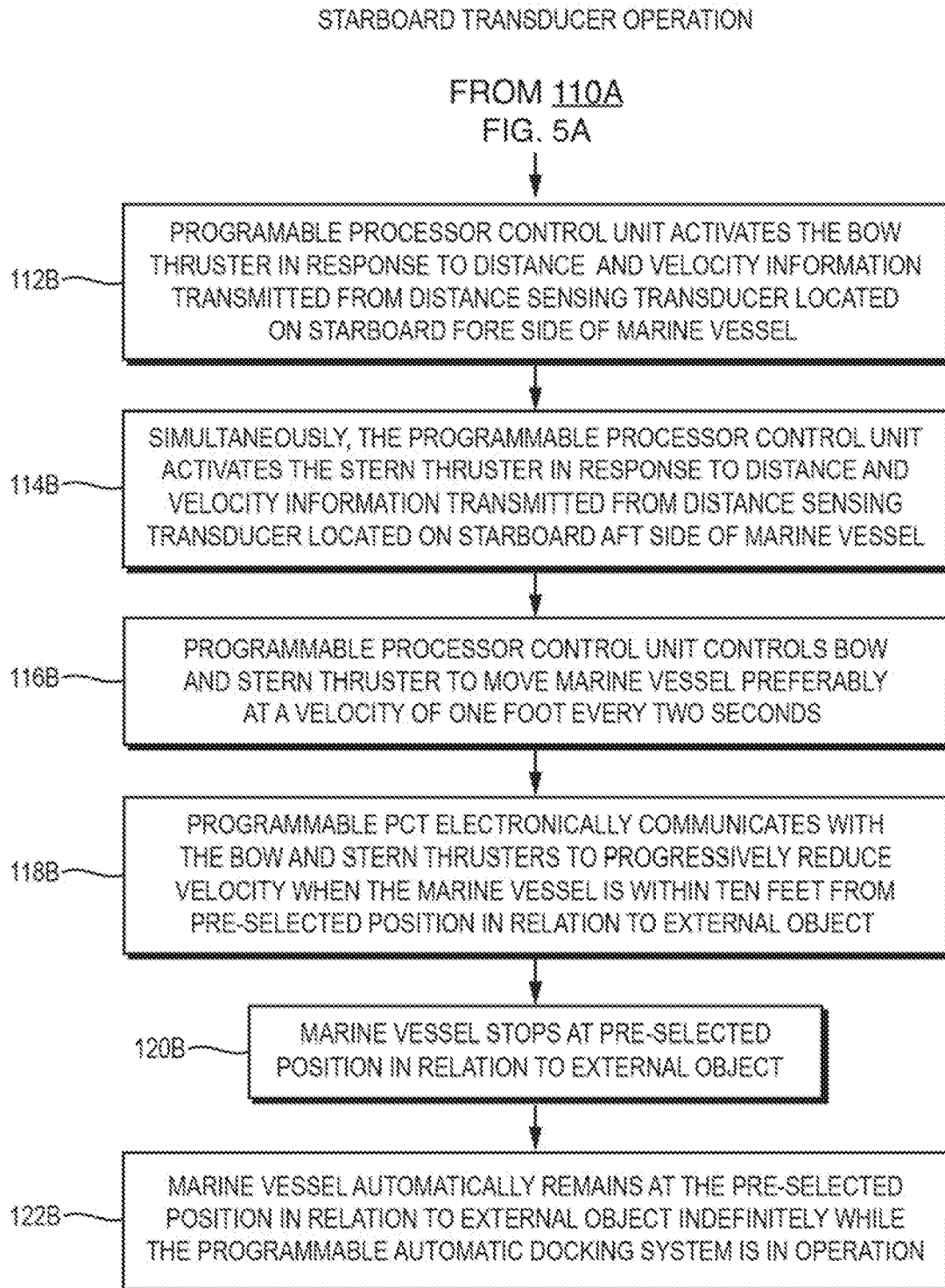


FIG. 5B

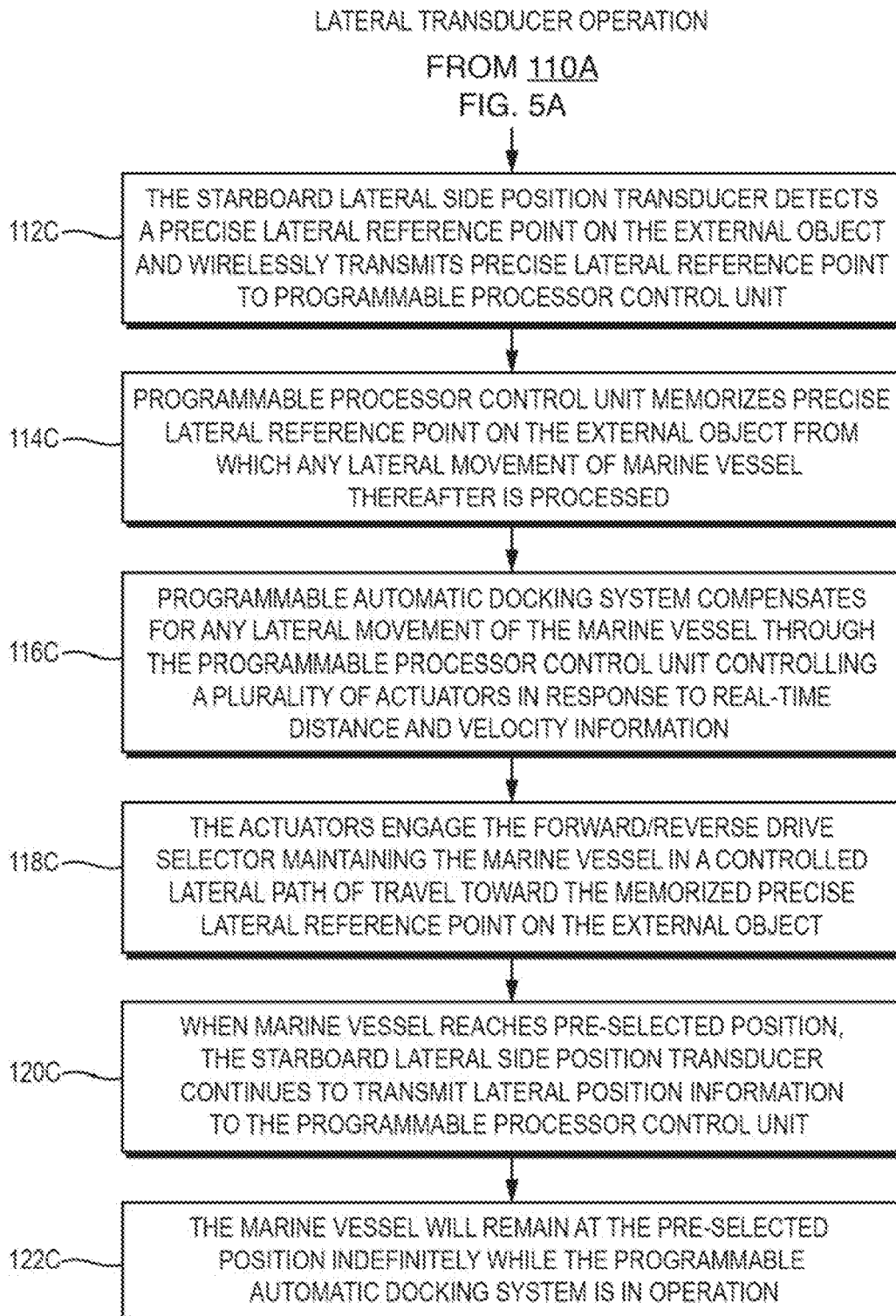


FIG. 5C

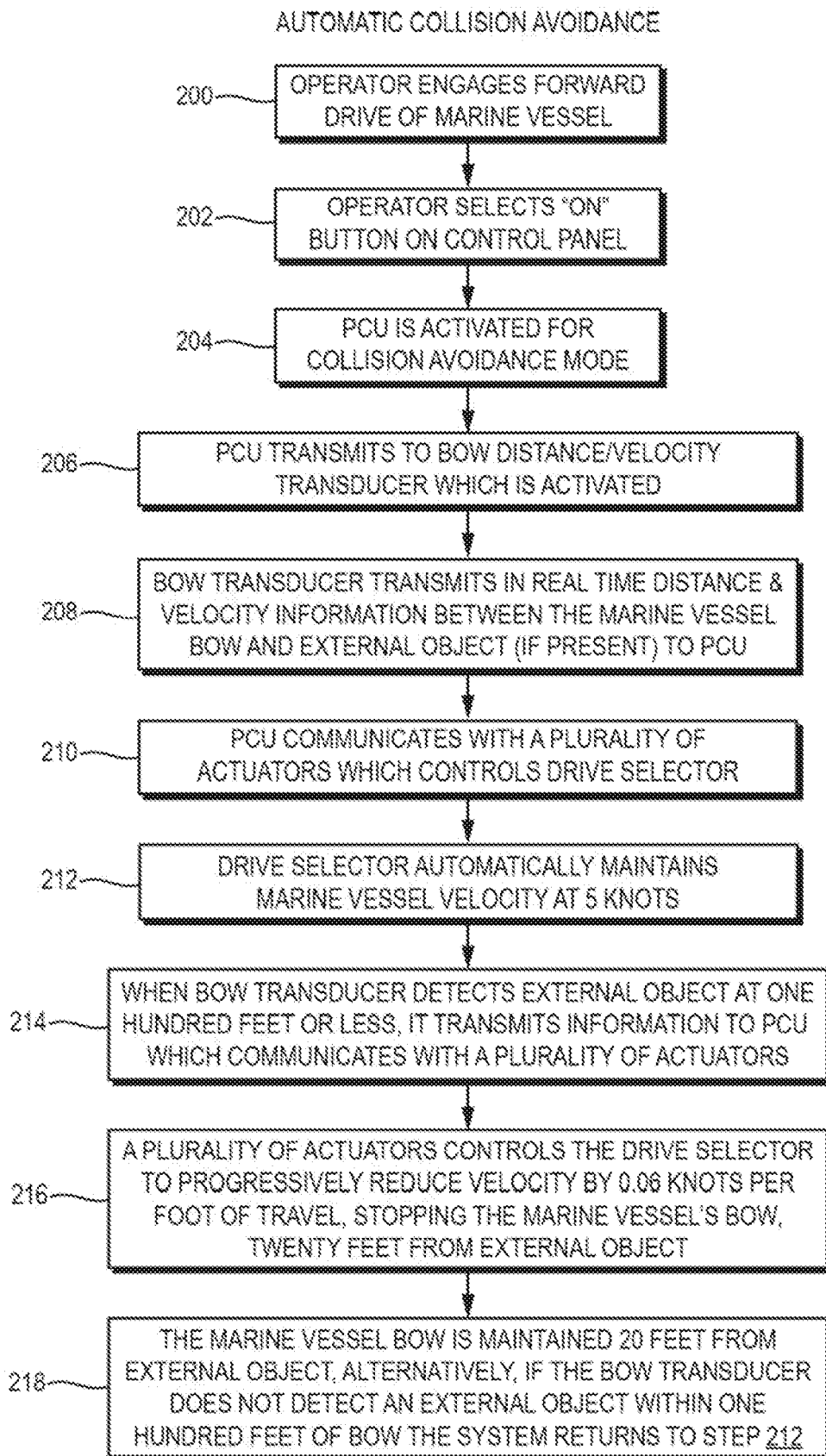


FIG. 6

DOCKING SYSTEM FLOW DIAGRAM

AUTOMATIC MANEUVERING A MARINE VESSEL INTO A SLIP

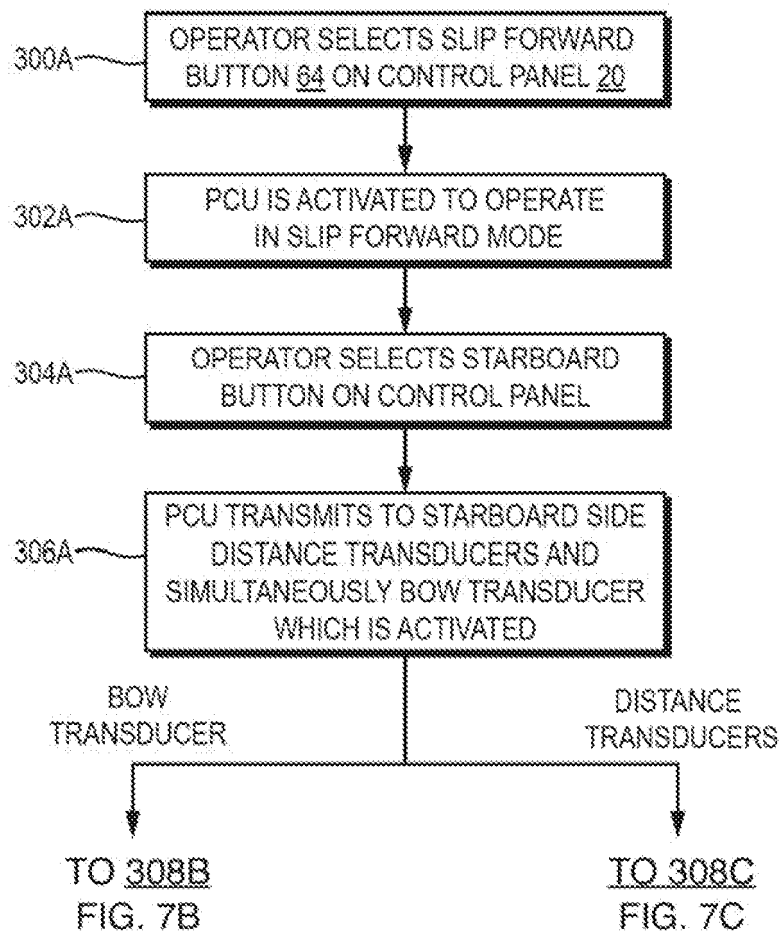
FLOW DIAGRAM FOR EXAMPLE DEMONSTRATES FORWARD
MOVEMENT WITH STARBOARD SELECTION

FIG. 7A

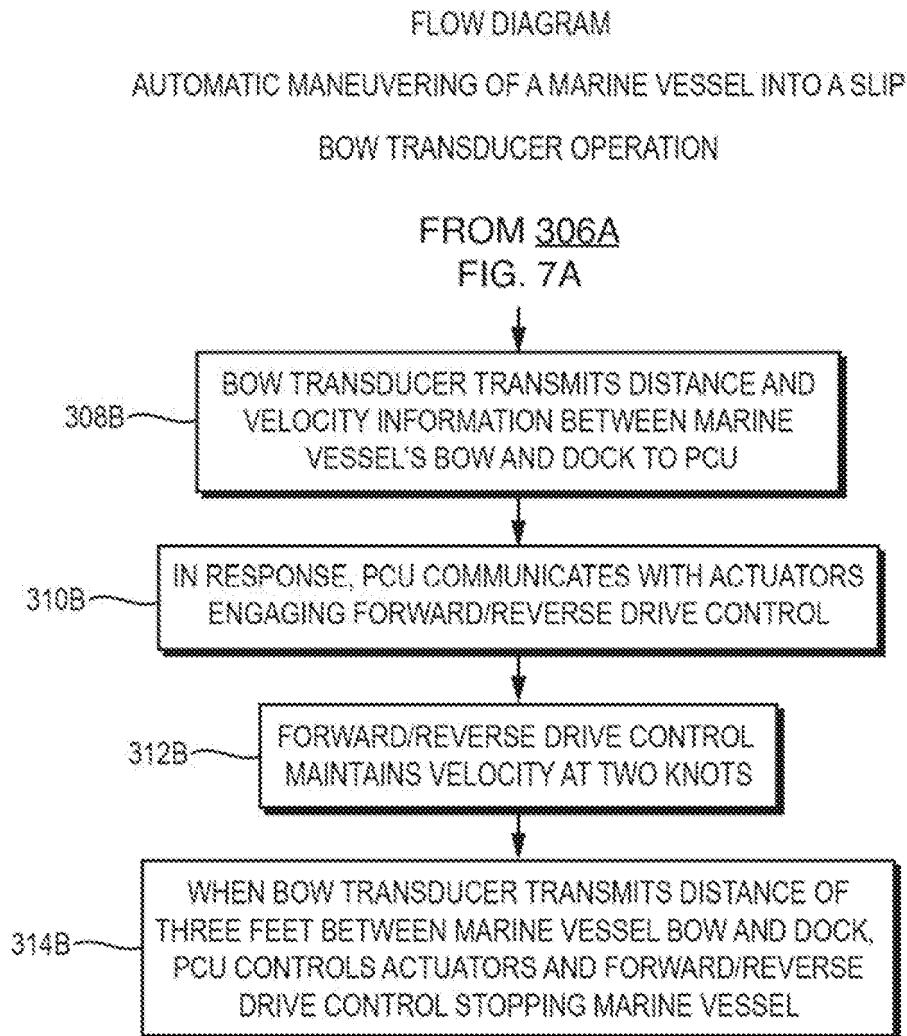


FIG. 7B

DOCKING SYSTEM FLOW DIAGRAM
AUTOMATIC MANEUVERING OF A MARINE VESSEL INTO A SLIP
DISTANCE TRANSDUCER OPERATION

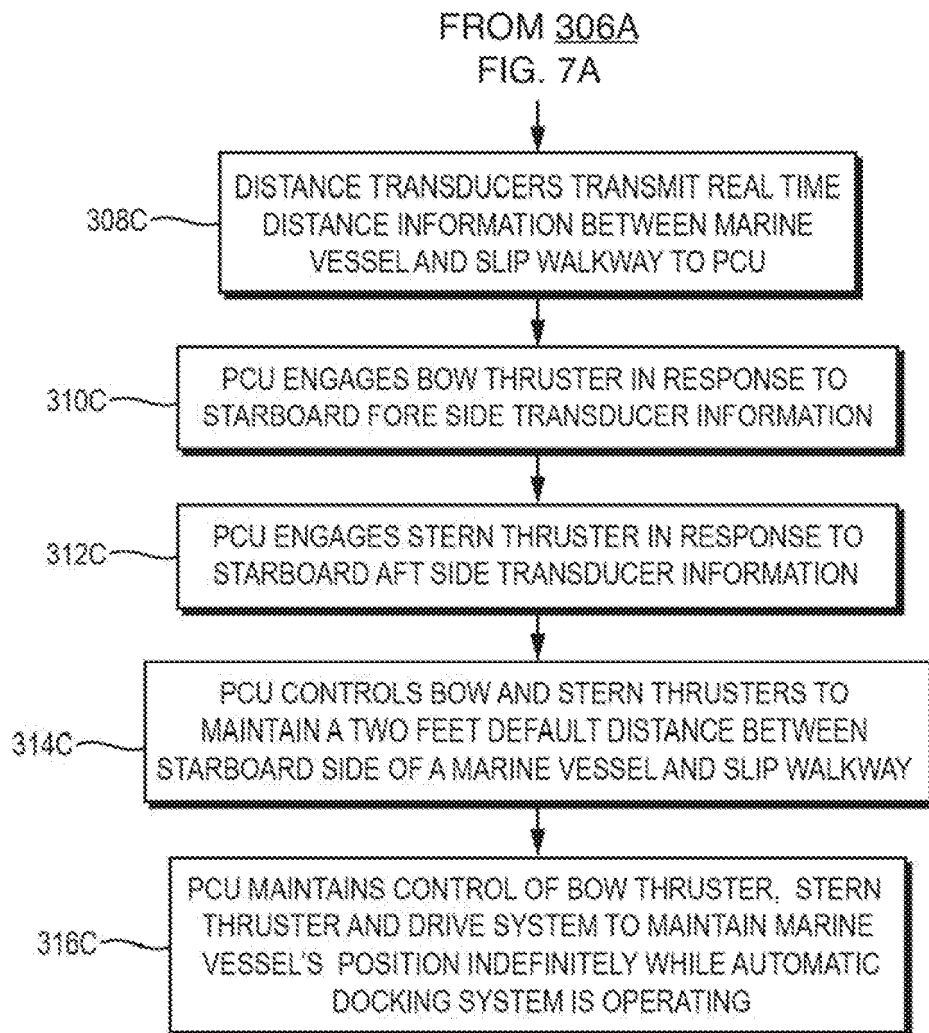


FIG. 7C

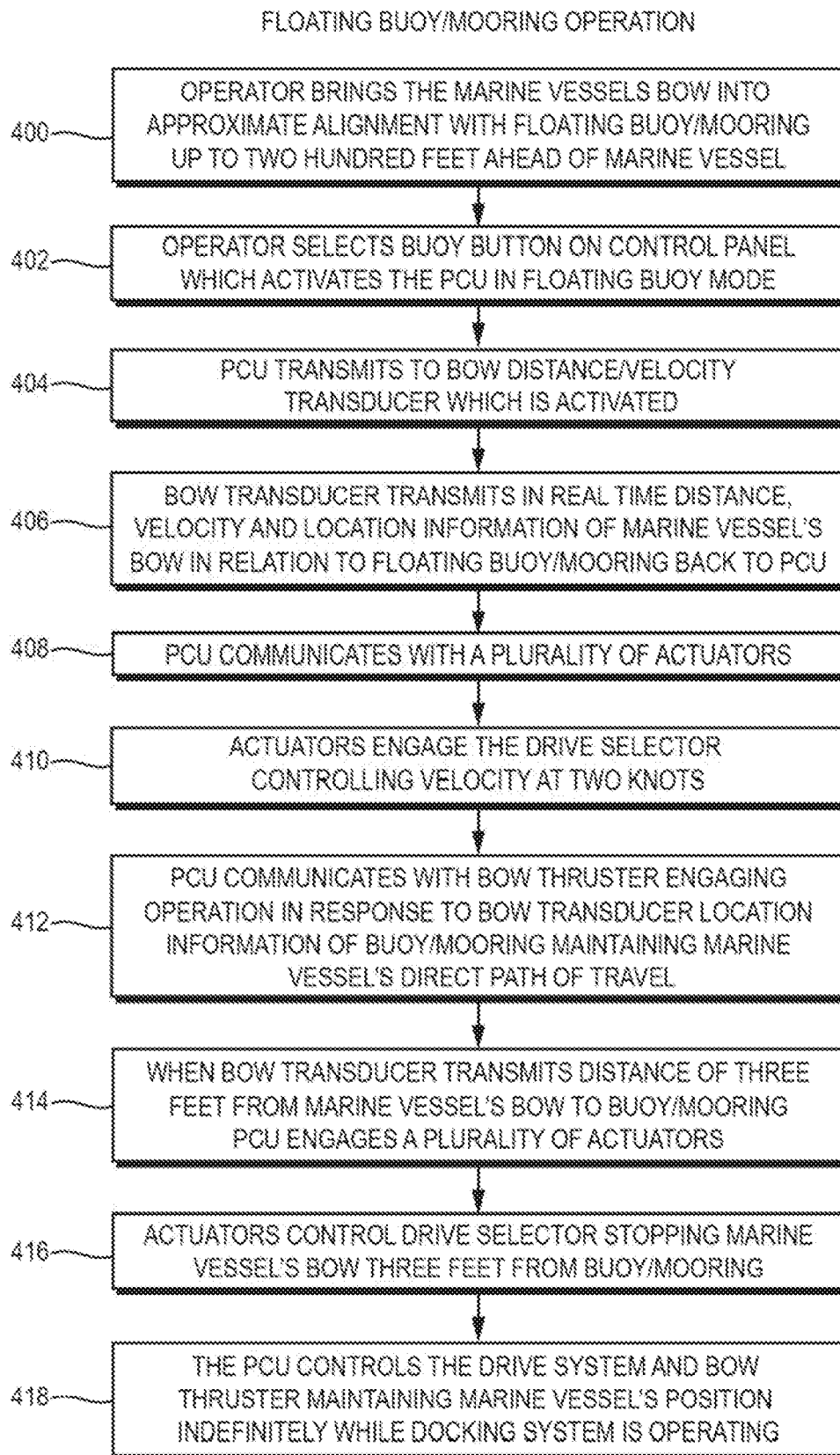
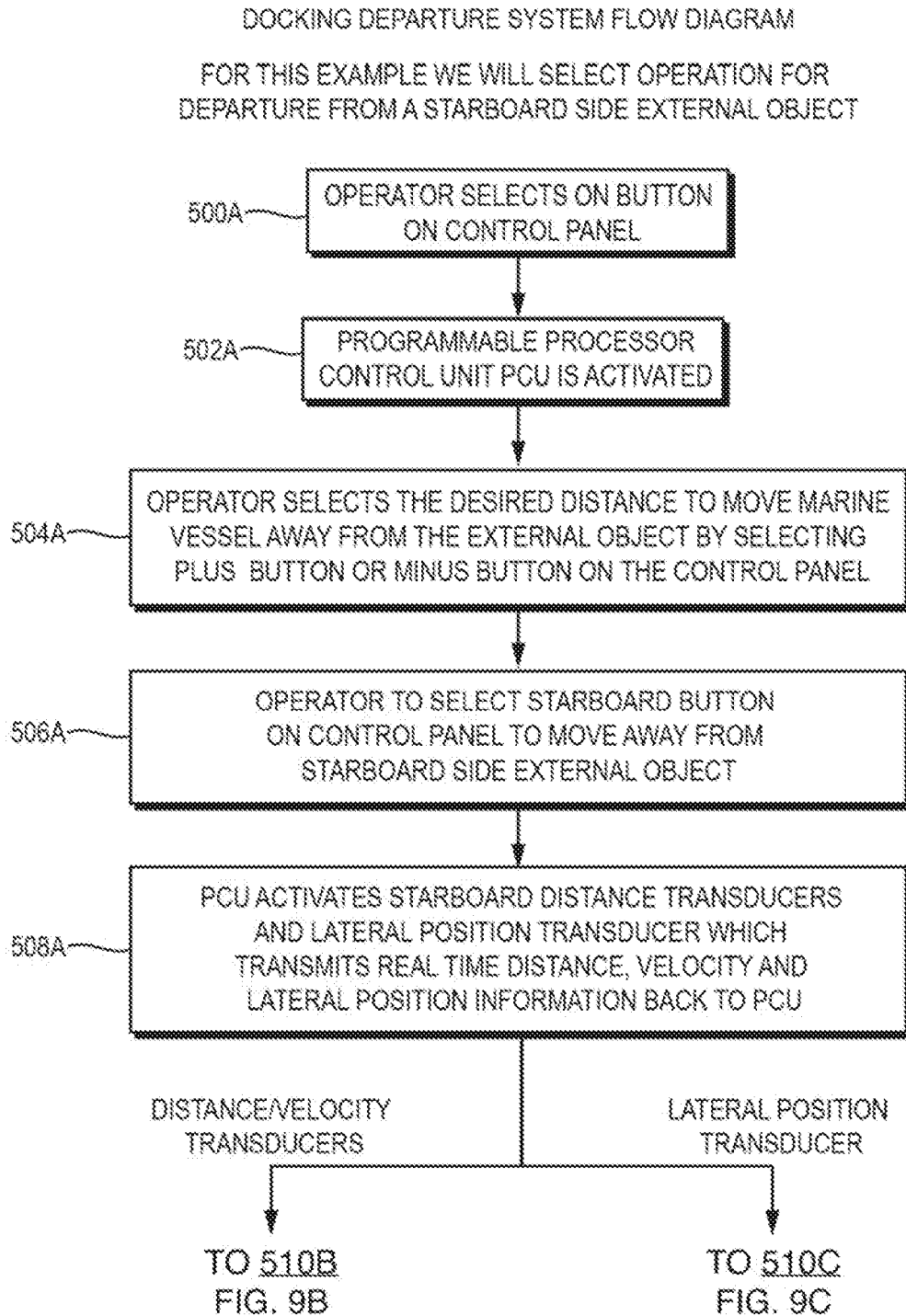


FIG. 8



DOCKING DEPARTURE FROM EXTERNAL OBJECT
STARBOARD DISTANCE TRANSDUCER OPERATION

FROM 508A
FIG. 9A

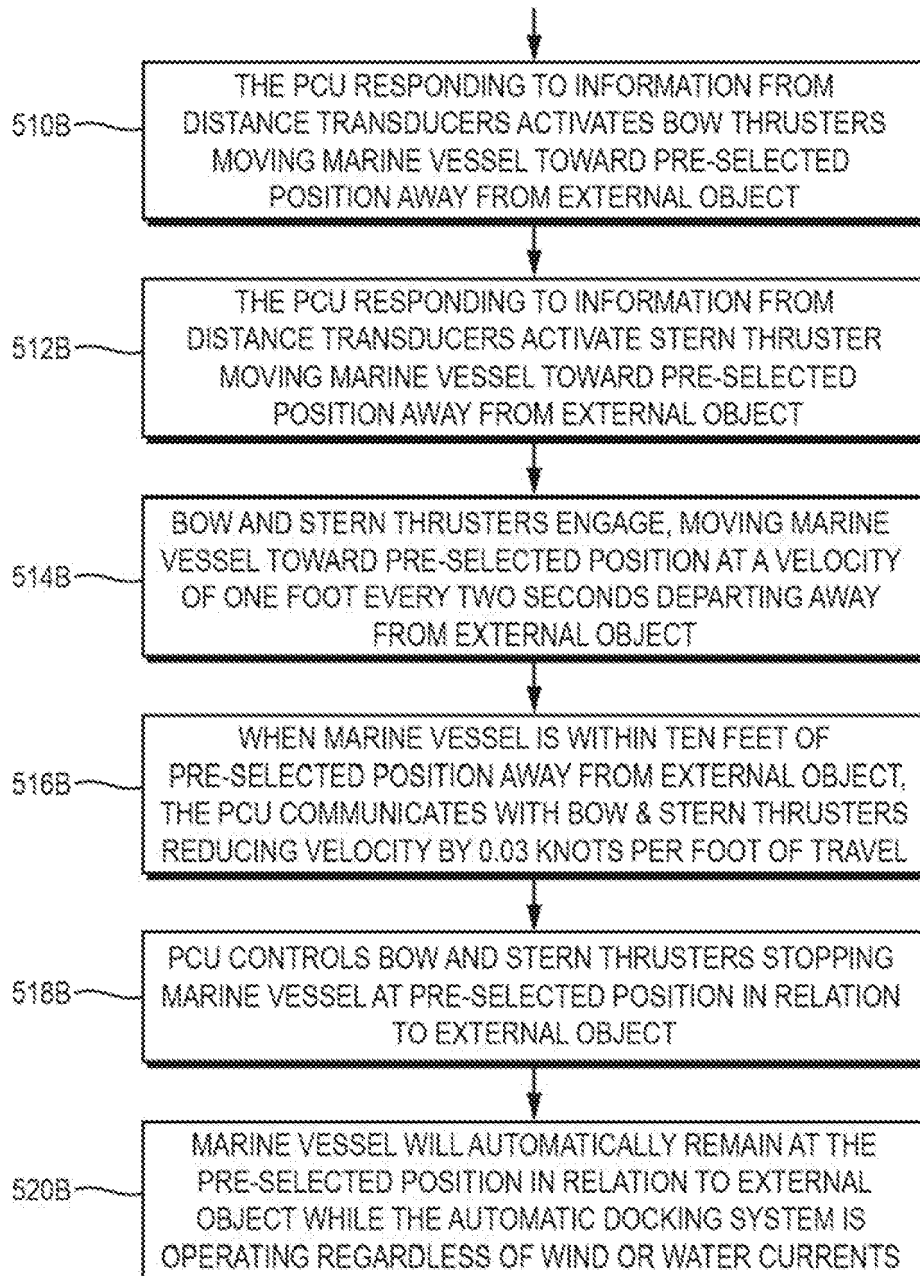


FIG. 9B

DOCKING SYSTEM DEPARTURE FROM EXTERNAL OBJECT
FOLLOWING EXAMPLE: MARINE VESSEL DEPARTING STARBOARD EXTERNAL OBJECT
FLOW DIAGRAM LATERAL POSITION TRANSDUCER OPERATION

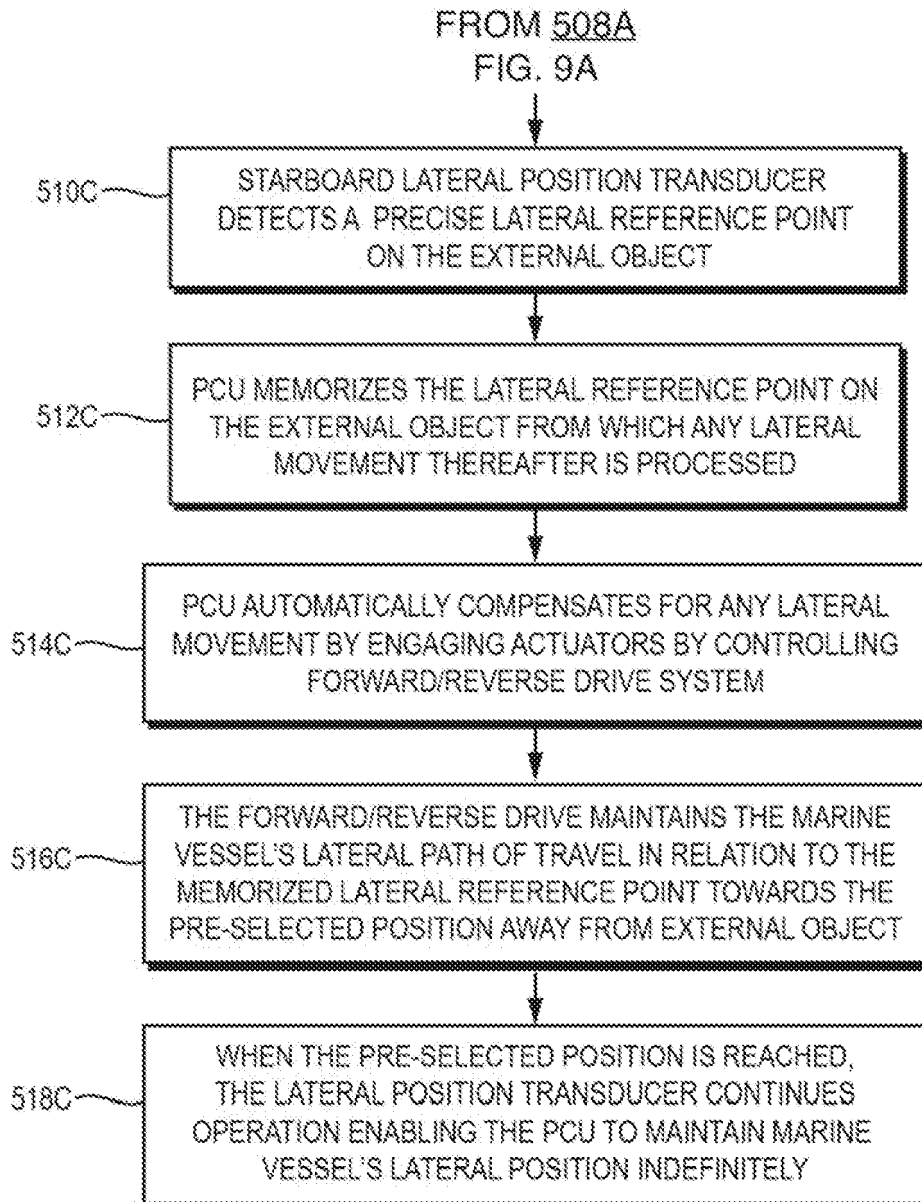


FIG. 9C

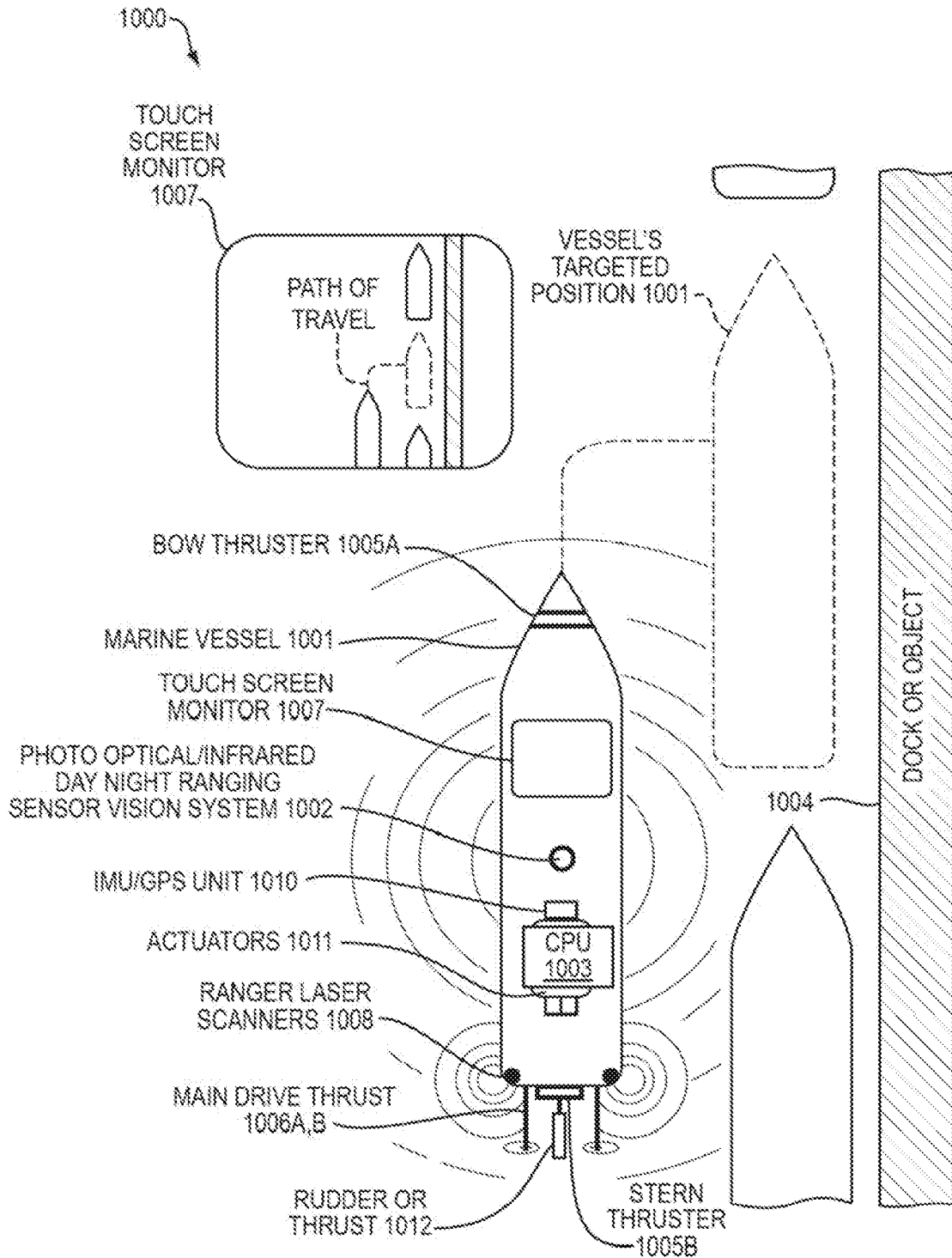


FIG. 10A

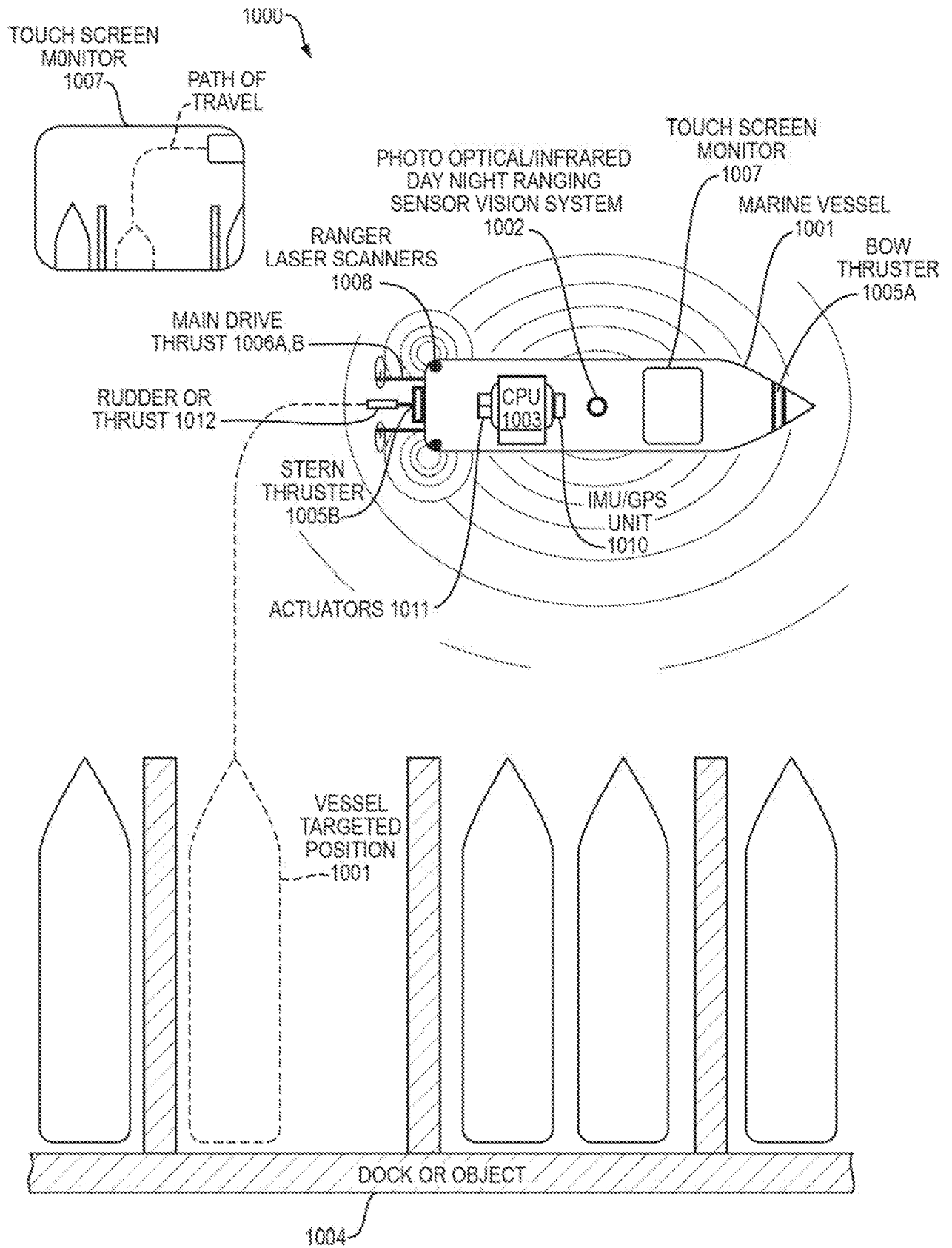


FIG. 10B

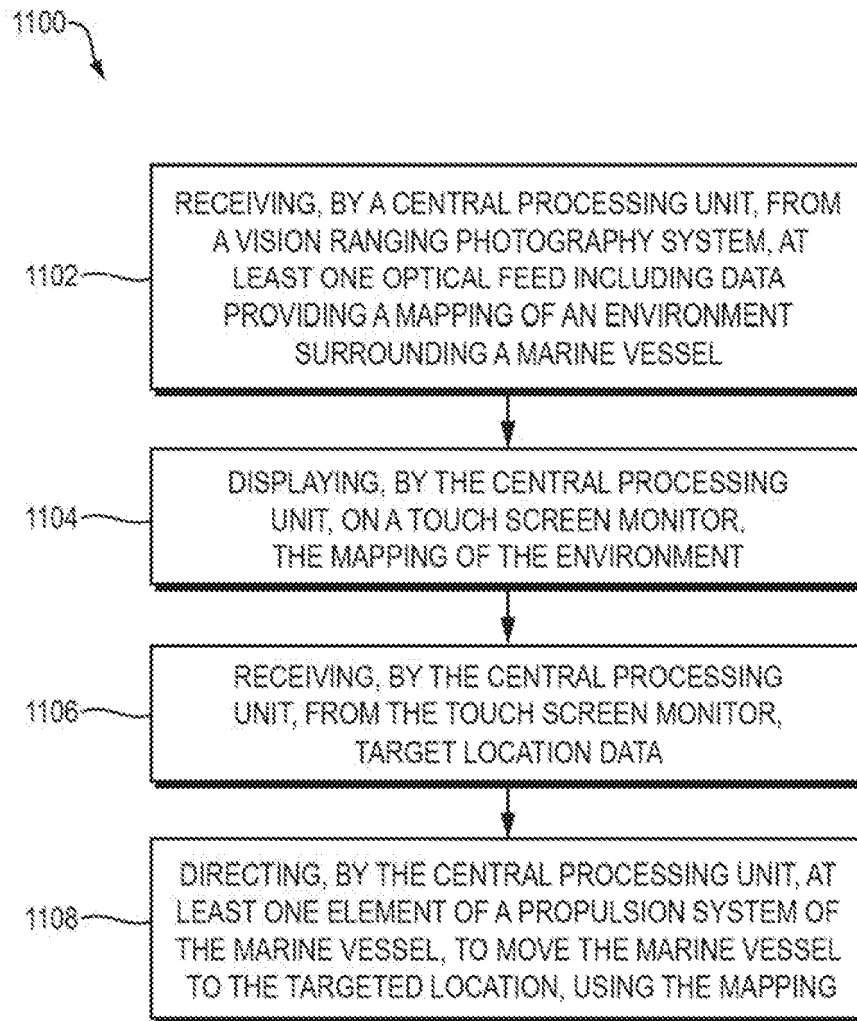
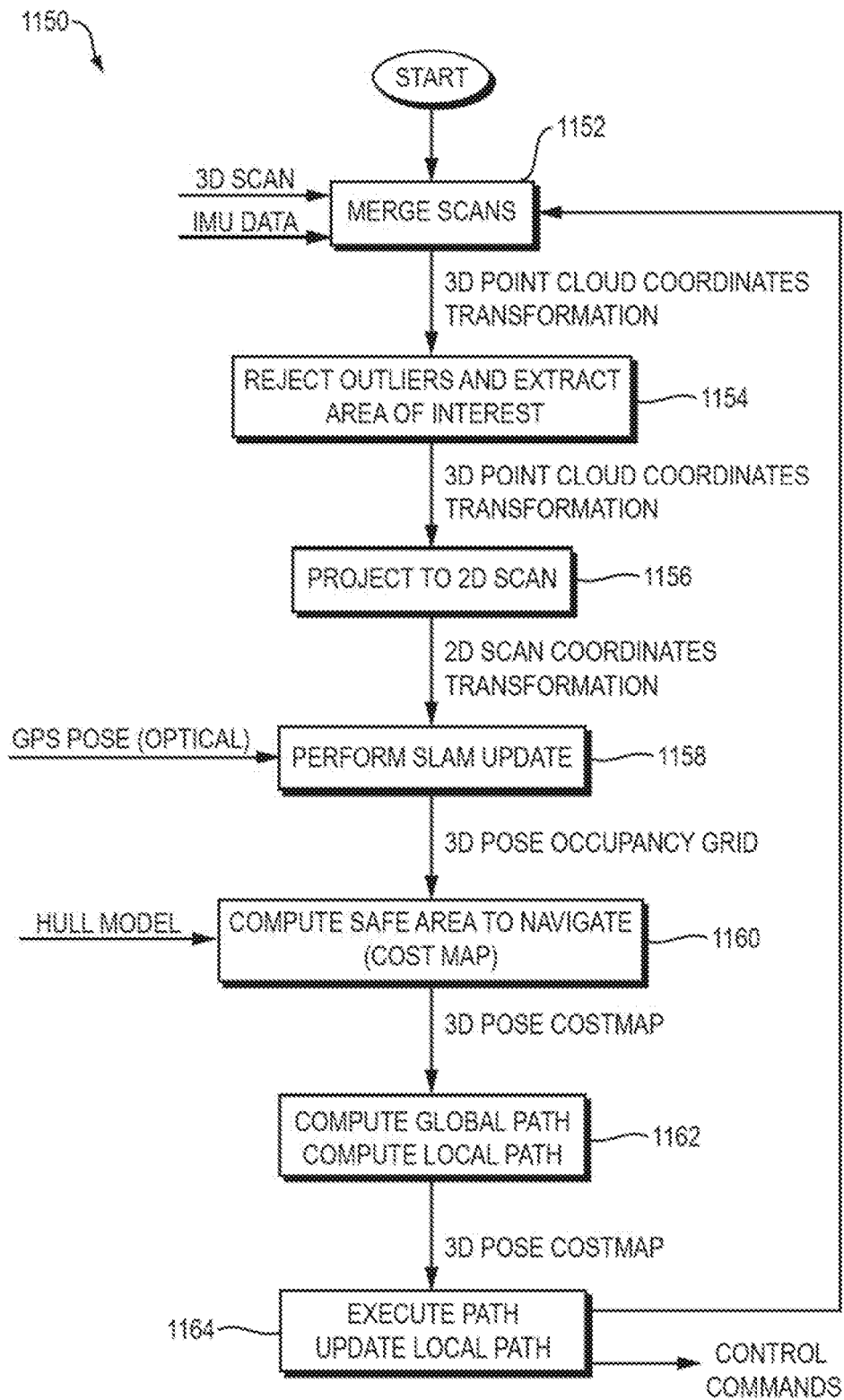


FIG. 11A



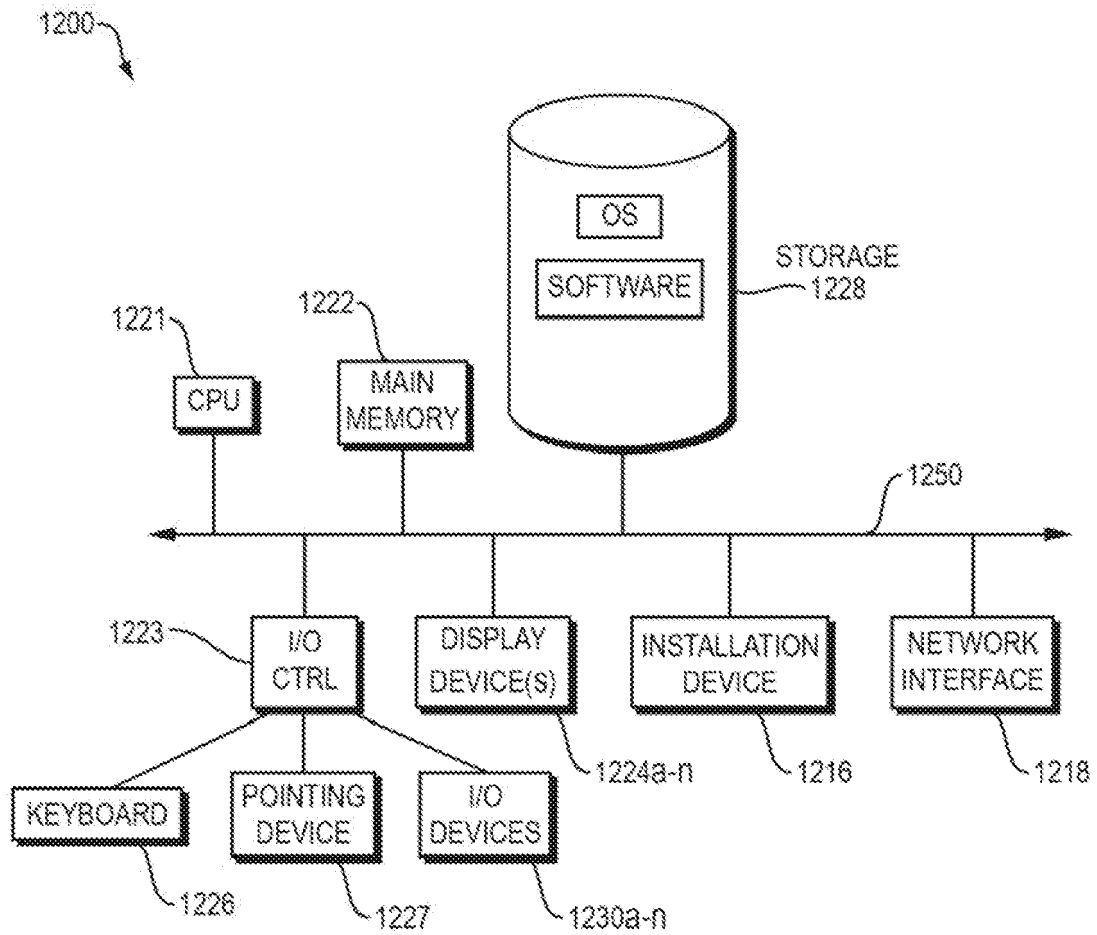


FIG. 12A

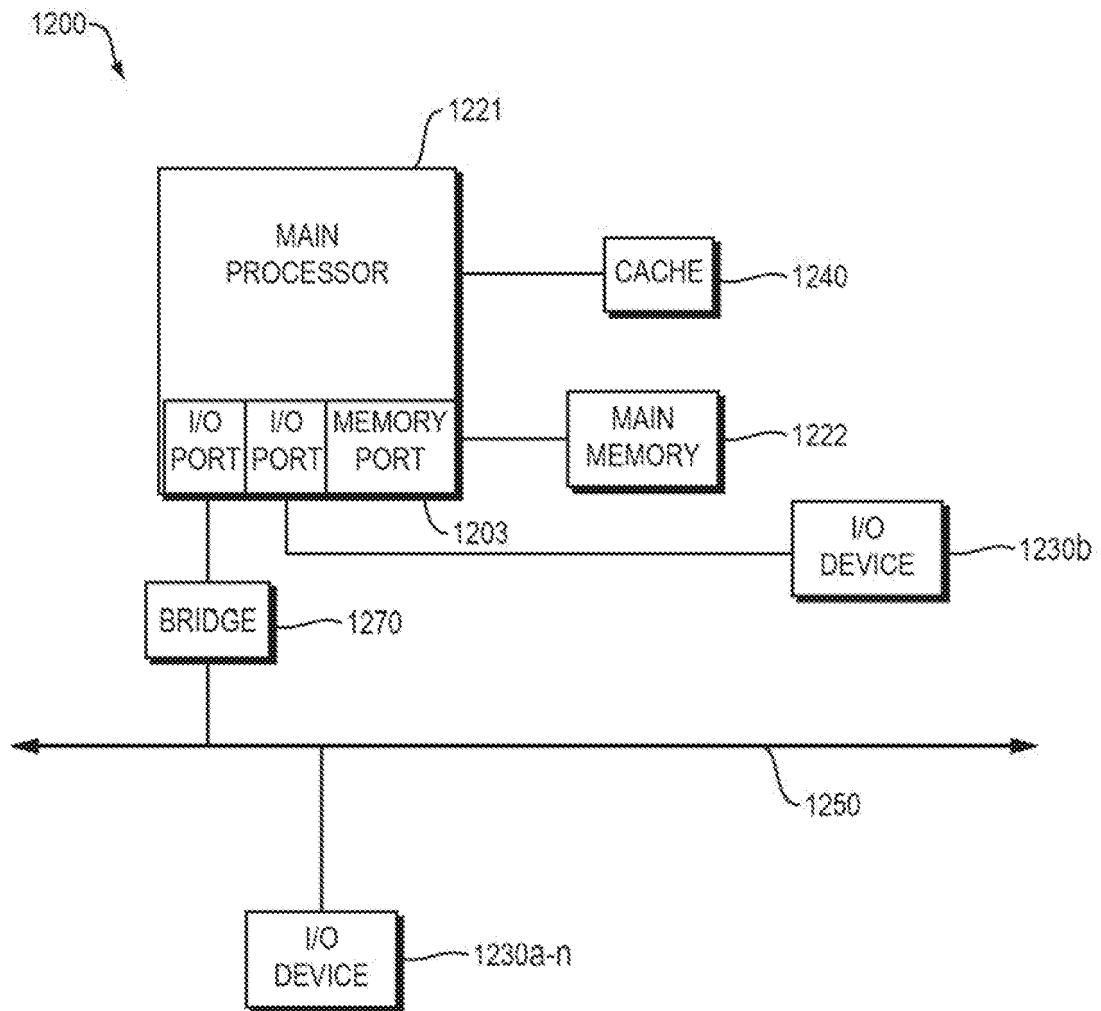


FIG. 12B