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(54) Title: SYSTEMS, METHODS AND APPARATUS FOR SAFE LAUNCH AND RECOVERY OF AN INSPECTION VEHICLE

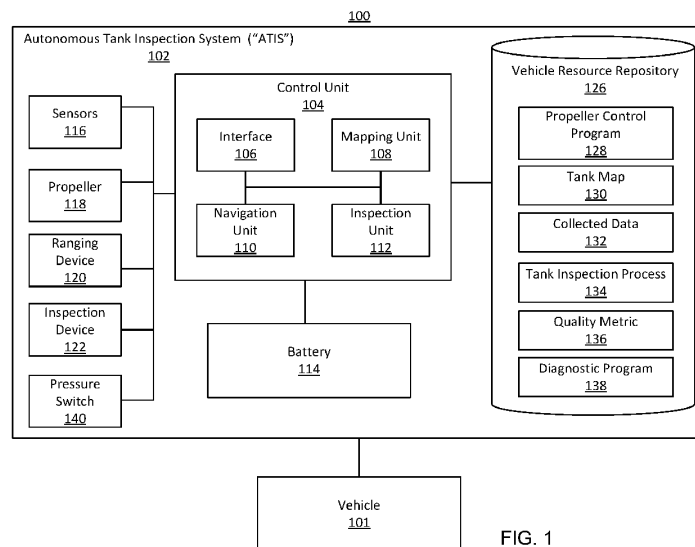


FIG. 1

(57) Abstract: Systems, methods and apparatus for launching and recovering a vehicle via a side manway of a tank are provided. A launcher is coupled to a vertical side of the tank via a manway adapter. The launcher includes a first side having a lid and a second side configured to couple with the manway adapter. The lid is removed from the first side of the launcher. An autonomous vehicle is loaded into the launcher via the first side of the launcher. The lid is placed on the first side of the launcher. The launcher can be pressurized with the autonomous vehicle inside the launcher. The manway adapter is opened at the second side of the launcher to release the flammable fluid into the launcher. Subsequent to opening the manway adapter, the autonomous vehicle launches from the launcher into the tank to perform a tank inspection process.

[Continued on next page]

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