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(54) Title: METHODS FOR PERFORMING TASKS INHERENTLY SAFELY IN A TANK CONTAINING HAZARDOUS SUBSTANCES

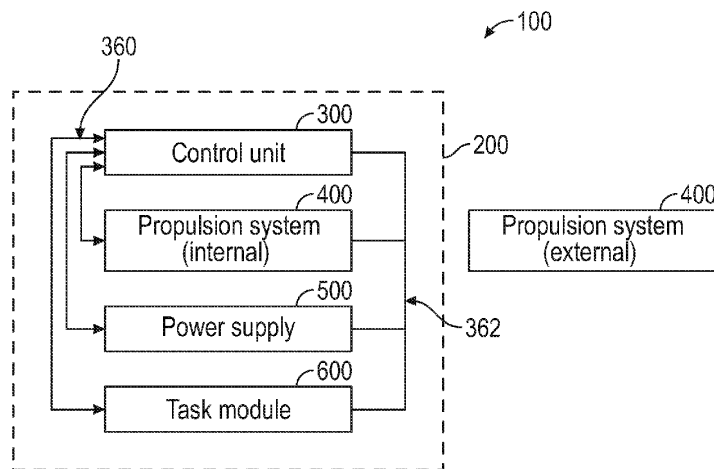


FIG. 2

(57) Abstract: A method of performing a selected task in a tank at least partially filled with an energetic substance includes, in part, configuring a mobile platform to be inherently safe by positioning spark-generating components in either or both of: (i) an inherently safe enclosure that prevents a spark occurring inside the inherently safe enclosure from passing to an exterior of the inherently safe enclosure, and (ii) a spark-neutralizing body formed of at least one non-flammable substance and positioned inside an enclosure, the spark-neutralizing body blocking direct contact between a spark from the enclosed spark-generating component and an energetic substance from occurring inside the at least one enclosure. The method also includes positioning at least one spark-generating component not inside any inherently safe enclosure that prevents a spark occurring inside the inherently safe enclosure from passing to an exterior of the inherently safe enclosure. The sparks are capable of igniting the energetic substances.

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