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(54) **Title:** ADAPTIVE MOBILE ROBOT BEHAVIOR BASED ON PAYLOAD

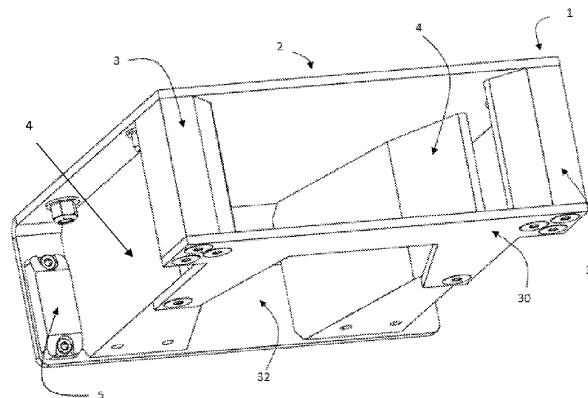


FIG 1

(57) **Abstract:** Embodiments relate to a robotic system having a plurality of sensors attached to a robot. The system includes an identifier attached to a receiver hitch of a cart. The identifier includes information related to a cart with which the identifier is attached. At least one sensor of the plurality of sensors is configured to detect the identifier and transmit sensor data to a computing unit of the robot. The computing unit of the robot operates the robot and/or the plurality of sensors based on the cart information. Some embodiments include a facility sensor attached to a facility. The facility sensor is configured to detect presence or absence of a cart.

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WO 2023/086666 A1

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