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(54) Title: RIDE CONTROL SYSTEMS AND METHODS FOR AMUSEMENT PARK RIDES

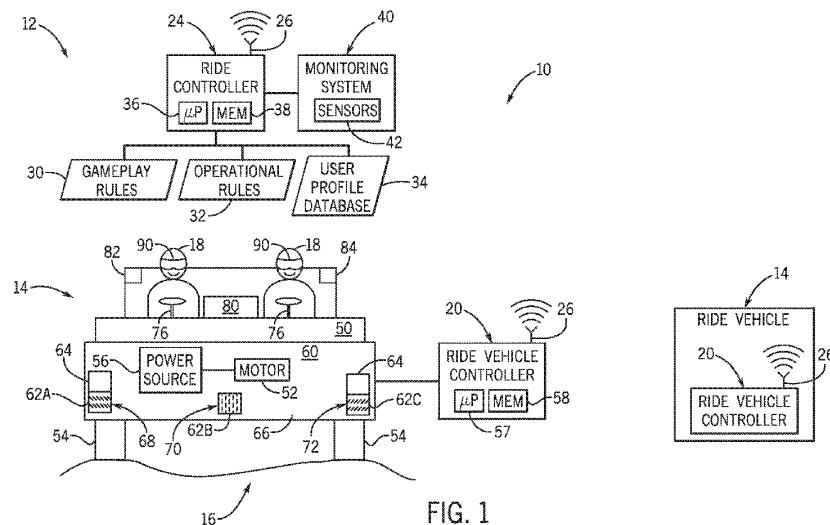


FIG. 1

(57) Abstract: A control system (12) includes a ride controller (24) configured to maintain a plurality of rules indicative of permitted states of the free-roaming ride vehicle (14) within a game area (16) and including gameplay rules (30). The ride controller (24) is configured to receive monitoring data indicative of a current state of a free-roaming ride vehicle (14), receive a signal indicative of a user request to perform a requested action with the free-roaming ride vehicle (14), model performance of the requested action from the current state to determine a modeled state of the free-roaming ride vehicle (14), and determine whether the modeled state complies with the plurality of rules. In response to determining the modeled state does not comply with the plurality of rules, the ride controller (24) is configured to determine a proximate action that complies with the plurality of rules and provide a control signal to instruct the free-roaming ride vehicle (14) to perform the proximate action.

[Continued on next page]

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