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(54) Title: ELECTROACTIVE POLYMER ACTUATOR FEEDBACK APPARATUS SYSTEM, AND METHOD

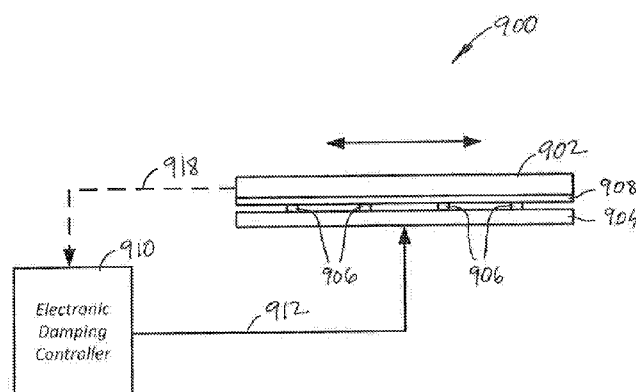


FIG. 9A

(57) **Abstract:** An electronic damping feedback control system for an electroactive polymer module, an electroactive polymer device, and a computer-implemented method for creating realistic effects are provided. The electronic damping controller is coupled in a feedback loop between a user interface device and an electroactive polymer actuator, where the actuator is coupled to the user interface device. The electronic damping controller is configured to receive an actuation signal from the user interface device in response to a user input. In response to the actuation signal, the electronic damping controller generates an electronic damping signal to couple to the actuator. The electroactive polymer device includes a user interface device, an electroactive polymer actuator coupled to the user interface device, and the electronic damping controller. The present invention may provide improved user interface devices.