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(54) Title: DIELECTRIC ELASTOMER MEMBRANE FEEDBACK APPARATUS, SYSTEM AND METHOD

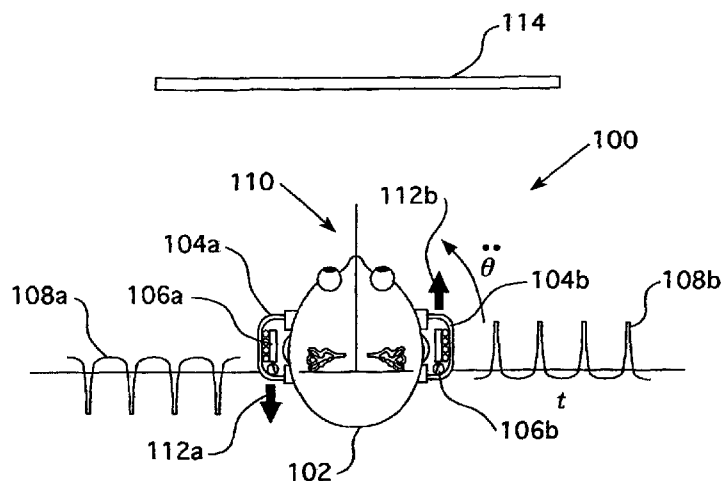


FIG. 1

(57) Abstract: A feedback enabled system, module, and method are disclosed. The feedback enabled system comprises a first feedback module. The first feedback module comprises a membrane (thin film); a frame; a motion coupling, wherein when a voltage is applied to the membrane (thin film), the motion coupling exerts a force on the frame to provide feedback; and a user interface, wherein the first feedback module is configured to provide feedback through the user interface. The method comprises applying a first voltage with a first waveform to a first feedback module, the first feedback module comprising a dielectric elastomer membrane (thin film), a frame, and a motion coupling, wherein, when the first voltage is applied to the dielectric elastomer membrane (thin film), the motion coupling exerts a force on the frame.





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