

send a signal to cause a stopping voltage pulse to be applied to the haptic device, the stopping voltage pulse configured to cause the haptic device to stop providing the haptic sensation within a second pre-determined period of time after the first pre-determined period of time

**49.** A method, comprising:

providing steady-state power to a haptic device, the power being configured to cause the haptic device to output a haptic sensation above a pre-determined sensation threshold;

applying a voltage pulse to the haptic device, the voltage pulse being configured to change the haptic sensation output by the haptic device by a pre-determined amount within a pre-determined reduced response time.

**50.** The method of claim 49, wherein the voltage pulse is applied to the haptic device prior to providing the steady-state power to the haptic device.

**51.** The method of claim 49, further comprising:

terminating the steady-state power provided to the haptic device, the voltage pulse being applied to the haptic device after terminating the steady-state power.

**52.** The method of claim 49, further comprising:

terminating the steady-state power provided to the haptic device, the voltage pulse being applied to the haptic device after terminating the power with a polarity opposite the polarity of the steady-state power provided to the haptic device.

**53.** A method, comprising:

applying a lead-in voltage pulse to a haptic device, the lead-in voltage pulse configured to cause the haptic device to provide a haptic sensation above a pre-determined sensation threshold within a first pre-determined period of time;

providing power to the haptic device to maintain the haptic sensation above the pre-determined sensation threshold during a second pre-determined period of time after the first pre-determined period of time.

**54.** The method of claim 53, further comprising:

providing a stopping voltage pulse to the haptic device, the stopping voltage pulse configured to cause the haptic device to stop providing the haptic sensation within a third pre-determined period of time after the second pre-determined period of time.

**55.** A method comprising:

providing power to a haptic device to maintain a haptic sensation provided by the haptic device above a pre-determined sensation threshold during a first predetermined period of time; and

applying a stopping voltage pulse to the haptic device, the stopping voltage pulse configured to cause the haptic device to stop providing the haptic sensation within a second pre-determined period of time after the first predetermined period of time.

**56.** An apparatus, comprising:

a controller configured to send control signals;

a variable-moment haptic device configured to provide a haptic sensation based at least partially on the control signals, the variable-moment haptic device having a moment that changes based on at least a direction of movement of the mass being varied by the control signals.

**57.** The apparatus of claim 56, wherein the mass is an eccentric rotating mass.

**58.** The apparatus of claim 56, wherein the mass is an eccentric rotating mass having at least one weighted distal portion, a relative position of the at least one weighted distal portion being configured to vary based on at least the direction of movement of the mass, the moment changing by the varying of the relative position of the at least one weighted distal portion.

**59.** The apparatus of claim 56, wherein the mass is an eccentric rotating mass having at least one weighted distal portion, a position of the at least one weighted distal portion being configured to vary relative to a center of rotation based on at least the direction of movement of the mass, the moment changing by the varying of the relative position of the at least one weighted distal portion.

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