

- a controller in communication with the conversion module and the design module, the controller configured to send a signal based on the modified parametric data set, the signal being configured to cause a haptic device to output a haptic effect.
- 5.** The apparatus of claim 1, further comprising:
- a design module in communication with the conversion module, the design module configured to modify the parametric data set associated with the mechanical device to produce modified parametric data set; and
- a controller in communication with the conversion module and the design module, the controller configured to send a signal based on the modified parametric data set, the signal being operative to cause a haptic device to output a haptic effect,
- the design module configured to compare the haptic effect to the operational characteristics of the mechanical device to produce a comparison signal,
- the design module configured to modify the parametric data set associated with the mechanical device at least partially based on the comparison signal.
- 6.** The apparatus of claim 1, further comprising:
- a memory component in communication with the conversion module, the memory component configured to store the parametric data set associated with the mechanical device in a library having a plurality of parametric data sets, each parametric data set from the plurality of parametric data sets being uniquely associated with a mechanical device from a plurality of mechanical devices.
- 7.** The apparatus of claim 1, wherein the data includes force profile data associated with operational characteristics of the mechanical device.
- 8.** The apparatus of claim 1, wherein the data includes audio data associated with the plurality of operational characteristics of the mechanical device, the audio data being indicative of audio quality, the apparatus further comprising:
- a controller in communication with the conversion module and the design module, the controller configured to send a signal based on the modified parametric data, the signal configured to cause a haptic device to output a haptic effect and an audio effect.
- 9.** A method, comprising:
- receiving data associated with a plurality of operational characteristics of a mechanical device, the plurality of operational characteristics being associated with a perceptual experience of the mechanical device; and
- producing automatically, without user intervention, a parametric data set associated with the mechanical device based on the data.
- 10.** The method of claim 9, wherein:
- the data associated with the plurality of operational characteristics of the mechanical device is at least one of analog data and digital data; and
- the parametric data set associated with the mechanical device is digital data.
- 11.** The method of claim 9, further comprising:
- sending a signal to a haptic device, the signal being based on the parametric data set associated with the mechanical device, the signal being operative to cause the haptic device to output a haptic effect; and
- comparing the haptic effect to the plurality of operational characteristics of the mechanical device.
- 12.** The method of claim 9, further comprising:
- modifying the parametric data set associated with the mechanical device to produce modified parametric data set; and
- sending a signal based on the modified parametric data set, the signal being operative to cause the haptic device to output a haptic effect.
- 13.** The method of claim 9, further comprising:
- sending a signal to a haptic device, the signal being based on the parametric data set associated with the mechanical device, the signal being operative to cause the haptic device to output a haptic effect;
- comparing the haptic effect to the plurality of operational characteristics of the mechanical device;
- modifying the parametric data set associated with the mechanical device based on the comparing; and
- repeating the sending, the comparing and the modifying until a difference between the haptic effect and the operational characteristics of the mechanical device is within a predetermined threshold.
- 14.** The method of claim 9, further comprising:
- storing the parametric data set associated with the mechanical device in a library having a plurality of parametric data sets, each parametric data set from the plurality of parametric data sets being uniquely associated with a mechanical device from a plurality of mechanical devices.
- 15.** The method of claim 9, wherein the data includes force profile data associated with operational characteristics of the mechanical device.
- 16.** The method of claim 9, wherein the data includes audio data associated with the plurality of operational characteristics of the mechanical device.
- 17.** An apparatus, comprising:
- a design module configured to produce a user interface associated with a library having a plurality of predefined parametric data sets, each parametric data set from the plurality of predefined parametric data sets being uniquely associated with a haptic output from a plurality of haptic outputs,
- the design module configured to send a signal based on at least one user command indicative of at least one parametric data set from the plurality of predefined parametric data sets, the signal operative to cause a haptic device to output a haptic output associated with a plurality of operational characteristics associated with a perceptual experience of a mechanical device.
- 18.** The apparatus of claim 17, wherein:
- the plurality of operational characteristics associated with the mechanical device is based on a measurement of the mechanical device, and
- the haptic output is operative to substantially simulate the plurality of operational characteristics of the mechanical device.