

41.A computer-readable medium having stored instructions, the stored instructions including instructions that, when executed by a processor, cause the processor to: detect a first pressure on a first input device; determine that the first pressure comprises an ambiguous input; upon determining that the first pressure comprises the ambiguous input, provide a first tactile sensation to the first input device.

42.The computer-readable medium of claim 41, wherein determining that the first pressure comprises an ambiguous input further comprises detecting a second pressure on a second input device.

43.The computer-readable medium of claim 42, wherein determining that the first pressure comprises an ambiguous input further comprises detecting the first pressure on the first input device approximately simultaneous to the second pressure on the second input device.

44.The computer-readable medium of claim 1, wherein determining the first pressure on the first input device comprises receiving a first input signal.

45.The computer-readable medium of claim 1, wherein providing the first tactile sensation to the first input device comprises transmitting a first controller output signal to an actuator in communication with the first input device.

46.An input device, comprising: a means for determining pressure; and an actuator in communication with the means for determining pressure and capable of creating at least three distinct tactile sensations in response to at least three corresponding pressure input signals from the means for determining pressure.

47.The input device of claim 46, wherein one of the at least three corresponding pressure input signals indicates a rest state.

48.The input device of claim 46, further comprising a controller in communication with the means for determining pressure and with the actuator, the controller configured to cause the actuator to create the at least three distinct tactile sensations in response to at least three corresponding pressure input signals from the means for determining pressure.

49.The input device of claim 48, further comprises a second actuator in communication with the controller.

50.The input device of claim 46, wherein the input device comprises at least one of an analog switch, a force sensing resistor, a strain gauge based sensor, a capacitive touch switch, and a touchpad.

51.The input device of claim 46, further comprising a second means for determining pressure.

52.The input device of claim 51, the second means for determining pressure in communication with the first actuator.

53.The input device of claim 51, further comprising a second actuator.

54.The input device of claim 53, the second means for determining pressure in communication with the second actuator.

55.The input device of claim 46, further comprising a plurality of means for determining pressure.

56.The input device of claim 46, further comprising a second actuator.

57.The input device of claim 46, further comprising a plurality of actuators.

58.The input device of claim 46, the first actuator comprising at least one of a piezo-electric actuator, a voice coil, a moving magnet actuator, eccentric rotating mass, and a flexure coupled to a motor.

59.The input device of claim 46, the means for determining pressure comprising a pressure-sensitive touchpad.

60.The input device of claim 59, further comprising a display panel in communication with the pressure-sensitive touchpad, the display panel configured to display at least one softkey.

61.The input device of claim 60, further comprising a pressure analyzer configured to calculate the pressure applied to the at least one softkey.

62.The input device of claim 61, the pressure analyzer configured to calculate the pressure applied to the at least one softkey based at least in part on an amount of area of the softkey receiving contact.

63.A mobile phone comprising the input device of claim 46.

64.The input device of claim 46, the first actuator configured to produce a distinct tactile sensation upon a function failure.

65.The input device of claim 64, the function failure indicating a function unavailability.

66.An apparatus comprising: at least one input device comprising: a first position, corresponding to a first input signal; and a second position, corresponding to a second input signal; the input device moveable from the first position to the second position upon application of a sufficient amount of pressure to the input device; at least one actuator in communication with the input device to output tactile sensations to the input device; and at least one controller in communication with the input device to detect the first input signal and the second input signal and in communication with the actuator to cause the actuator to create a first tactile sensation in response to detection of the first input signal and to create a second tactile sensation in response to detection of the second input signal.

67.The apparatus of claim 66, the input device comprising at least one of an analog switch, a force sensing resistor, a strain gauge based sensor, a capacitive touch switch, and a touchpad.

68.The apparatus of claim 66, the at least one input device comprising a plurality of input devices, and the at least one actuator comprising a plurality of actuators, each actuator coupled to a distinct input device.

69.The apparatus of claim 66, wherein the actuator comprises at least one of a piezo-electric actuator, a voice coil, a moving magnet actuator, and a flexure coupled to a motor.

70.The apparatus of claim 66, the input device comprising a pressure-sensitive touchpad, and the apparatus further comprising: a display panel capable of displaying computer software generated graphics, the display panel in communication with the pressure-sensitive touchpad to receive the tactile sensations there from; and at least one software generated button disposed on the display panel.

71.The apparatus of claim 66, the touchpad comprising a pressure calculator to measure the distinct amount of pressure.

72.The apparatus of claim 66, further comprising: an object to select one of the buttons by pressing a location of the display panel corresponding to that button; and a pressure calculator to calculate the distinct amount of pressure based upon an amount of area of the object in contact with the display panel.

73.The apparatus of claim 66, the apparatus comprising at least one of a mobile telephone, a personal computer and a hand-held computing device.