**CLAIMS**

1. A trackpad comprising:

a sensor configured to sense a position of a plurality of fingers of a user; and

a mode determination circuit configured to switchably select in which mode of a plurality of modes to operate the trackpad based on an output of the sensor;

wherein switching between the plurality of modes is enabled by one, or more in combination, of a button press, a gesture, a touch event that requires up to five fingers, a launching an application, and an event within an application;

wherein switching is activated or deactivated for each of the plurality of modes;

wherein the plurality of modes comprises

a steering mode comprising at least one of an avatar steering mode or a camera steering mode; and

a virtual mouse mode providing a virtual mouse around a hand of the user, wherein the virtual mouse comprises:

at least one button; and

a virtual sensor configured to emulate a physical sensor on a mouse input device, wherein a position of the virtual sensor is calibrated based on the position of and distance between the fingers of the user such that an index finger acts as a left mouse button and a middle finger acts as a right mouse button; and

wherein the trackpad is configured to, as long as at least one finger of the user remains in contact with the trackpad, maintain the position of the virtual sensor relative to the at least one finger remaining in contact with the trackpad, so that the position of the virtual sensor moves with movement of the at least one finger remaining in contact with the trackpad and an identity of the at least one finger remains known.

2. The trackpad of claim 1,

wherein the steering mode is triggered by two fingers on the trackpad; and/or

wherein the virtual mouse mode is triggered by a pre-determined gesture.

3. The trackpad of claim 1 or claim 2,

wherein the virtual mouse comprises at least one scroll wheel, wherein the at least one scroll wheel is triggered by tapping and swiping with the index finger or the middle finger.

4. The trackpad of any one of claims 1 to 3,

wherein the mode determination circuit is configured to switch between the camera and virtual mouse modes based on the touch event with all five fingers simultaneously placed on the trackpad.

5. The trackpad of any one of claims 1 to 4,

wherein the mode determination circuit is configured to switch between the modes based on at least one of a current mode and a target mode.

6. The trackpad of any one of claims 1 to 5,

wherein the trackpad is provided in a touchscreen.

7. The trackpad of any one of claims 1 to 6, wherein the trackpad further comprises:

a pressure determination circuit configured to determine a pressure of a finger of the user on the trackpad; and

an action determination circuit configured to determine whether the user performs a change of pressure of the finger on the trackpad after moving the finger on the trackpad without lifting the finger from the trackpad.

8. The trackpad of claim 7,

wherein the action determination circuit is configured to determine whether an item is selected based on the user moving his finger on the trackpad and then changing the pressure of the finger on the trackpad.

9. The trackpad of claim 7 or claim 8,

wherein the pressure determination circuit is configured to determine the pressure based on a size of the fingertip on the sensor.

10. The trackpad of any one of claims 1 to 9,
wherein the trackpad is provided in a touchscreen.

11. The trackpad of any one of claims 1 to 10, wherein the trackpad is further configured to emulate a click of the left mouse button in response to the index finger being lifted, wherein the left mouse button is held as long as the index finger remains lifted.

12. The trackpad of any one of claims 1 to 11, wherein the trackpad is further configured to emulate a click of the left mouse button in response to the index finger tapping the trackpad, wherein the trackpad is further configured to create a virtual button after the index finger taps the trackpad, and maintain the virtual button in a down state until the index finger taps the trackpad again or until a specified period of time elapses.

13. The trackpad of claim 12, wherein the trackpad is further configured to maintain the virtual button in the down state regardless of whether the index finger remains in contact with the trackpad after the index finger taps the trackpad.

14. A method for controlling a trackpad, the method comprising:
sensing a position of a plurality of fingers of a user; and
switchably selecting in which mode of a plurality of modes to operate the trackpad based on the sensing;
wherein switching between the plurality of modes is enabled by one, or more in combination, of a button press, a gesture, a touch event that requires up to five fingers, a launching an application, and an event within an application;
wherein switching is activated or deactivated for each of the plurality of modes;
wherein the plurality of modes comprises

a steering mode comprising at least one of an avatar steering mode or a camera steering mode; and

a virtual mouse mode providing a virtual mouse around a hand of the user, wherein the virtual mouse comprises:

at least one button; and

a virtual sensor configured to emulate a physical sensor on a mouse input device, wherein a position of the virtual sensor is calibrated based on the position of and distance between the fingers of the user such that an index finger acts as a left mouse button and a middle finger acts as a right mouse button; and

wherein the method further comprises configuring the trackpad to, as long as at least one finger of the user remains in contact with the trackpad, maintain the position of the virtual sensor relative to the at least one finger remaining in contact with the trackpad, so that the position of the virtual sensor moves with movement of the at least one finger remaining in contact with the trackpad and an identity of the at least one finger remains known.

15. The method of claim 14,

wherein the steering mode is triggered by two fingers on the trackpad;

wherein the virtual mouse mode is triggered by a pre-determined gesture.

16. The method of claim 14 or claim 15,

wherein the virtual mouse comprises at least one scroll wheel, wherein the at least one scroll wheel is triggered by tapping and swiping with the index finger or the middle finger.

17. The method of any one of claims 14 to 16, further comprising:

switching between the camera and virtual mouse modes is based on the touch event with all five fingers simultaneously placed on the trackpad.

18. The method of any one of claims 14 to 17, further comprising:

switching between the modes based on at least one of a current mode and a target mode.

19. The method of any one of claims 14 to 18, further comprising:

determining a pressure of a finger of the user on the trackpad; and

determining whether the user performs a change of pressure of the finger on the trackpad after moving the finger on the trackpad without lifting the finger from the trackpad.

20. The method of any one of claims 14 to 19,

wherein the pressure is determined based on a size of the fingertip on the sensor.