

What is claimed is:

1. A mobile terminal, comprising:  
a main body formed to be worn on a head of a user;  
a display unit disposed on a front surface of the main body, and formed to display a virtual space including a virtual object;  
a plurality of cameras formed to sense a hand of a user existing in the virtual space;  
a plurality of feedback signal units spaced apart from each other to output feedback signals in different directions; and  
a controller configured to detect a specific part of the user's hand in contact with or in proximity to the virtual object based on a plurality of sensing information received from the plurality of cameras when the user's hand is in contact with or in proximity to a virtual object included in the virtual space, and control the plurality of feedback signal units to transmit feedback signals having different directions to the specific part.

2. The mobile terminal of claim 1, wherein the plurality of feedback signal units are disposed in an edge region of the main body to output feedback signals to an edge of the specific part of the user's hand.

3. The mobile terminal of claim 1, wherein the plurality of cameras are spaced apart from each other to sense a user's hand at different angles.

4. The mobile terminal of claim 1, wherein the controller outputs a different feedback signal according to an area of a specific part of a user's hand in contact with or in proximity to the virtual object.

5. The mobile terminal of claim 1, wherein the controller outputs a different feedback signal according to a relative position between the virtual object and each of a plurality of parts of the user's hand.

6. The mobile terminal of claim 5, wherein the controller outputs a feedback signal at a first intensity when a relative distance between the virtual object and a specific part of the user's hand is a first distance, and outputs a feedback signal at a second intensity lower than the first intensity when a relative distance between the virtual object and a part different from the specific part of the user's hand is a second distance larger than the first distance.

7. The mobile terminal of claim 1, wherein the controller detects a gesture of the user's hand, and outputs a different feedback signal according to the gesture of the user's hand.

8. The mobile terminal of any one of claims 4 through 6, wherein the controller changes at least one of a frequency, an amplitude, and a waveform of the feedback signal to output a different feedback signal.

9. The mobile terminal of claim 1, wherein the controller detects a position of the user's hand in the virtual space, and determines at least one feedback signal unit to output a feedback signal among the plurality of feedback signal units according to the position of the user's hand.

10. The mobile terminal of claim 1, wherein when at least one of the plurality of feedback signal units is controlled not to output a feedback signal based on a preset condition, the controller controls the remaining feedback signal units excluding the at least one feedback signal unit to sequentially output feedback signals to the specific part.

11. The mobile terminal of claim 10, wherein the preset condition is a condition in which either one of a plurality of user's hands existing in the virtual space is located between the other one thereof and an output path of a signal of a specific feedback signal unit.

12. The mobile terminal of claim 1, wherein the controller generates a virtual image corresponding to the user's hand based on a plurality of sensing information received from the plurality of cameras, and determines whether the virtual object is in contact with or in proximity to the virtual object based on a relative distance between the virtual image and the virtual object.

13. The mobile terminal of claim 1, wherein the controller outputs a different

feedback signal according to the type of the virtual object when the virtual object and the user's hand are in contact or in proximity to each other.

14. The mobile terminal of claim 1, wherein the controller controls the plurality of feedback signal units to limit the feedback signal from reaching a part of the user's hand excluding the specific part.

15. The mobile terminal of claim 1, wherein when notification information related to the virtual object is generated in a state where the user's hand existing out of the virtual space is sensed, the controller controls the plurality of feedback signal units to allow feedback signals to reach the user's hand or the like.

16. A control method of a mobile terminal, the method comprising:  
displaying a virtual space including a virtual object;  
sensing a user's hand existing in the virtual space through a plurality of cameras;

detecting a specific part of a user's hand in contact with or in proximity to the virtual object based on a plurality of sensing information received from the camera when the user's hand is in contact with or in proximity to the virtual object included in the virtual space; and

outputting feedback signals through a plurality of feedback signal units to allow feedback signals having different directions to reach the specific part.

17. The method of claim 16, wherein the plurality of feedback signal units are spaced apart from each other.

18. The method of claim 16, wherein said outputting feedback signals controls a plurality of feedback signal units not to output feedback signals to the remaining parts excluding the specific part of the user's hand.

19. The method of claim 16, wherein said outputting feedback signals outputs a different feedback signal according to an area of the specific part of the user's hand in contact with or in proximity to the virtual object.

20. The method of claim 16, wherein said outputting feedback signals outputs a different feedback signal according to a shape of a user's hand in contact with or in proximity to the virtual object.