CLAIMS

1. A computer mouse movable relative to a tracking surface on which the computer mouse is placed, the computer mouse comprising:

a housing;

a magnetic element provided on the housing; and

a control circuit configured to control a magnetic attraction force between the magnetic element and a ferromagnetic material on the tracking surface;

wherein the housing comprises a bottom surface facing the tracking surface;

at least one foot extending out from the bottom surface; and

a pressure-sensitive sensor at the at least one foot, the pressure-sensitive sensor configured to determine a pressure exerted on the at least one foot;

wherein the control circuit is configured to control the magnetic force based on the pressure exerted on the at least one foot.

2. The computer mouse of claim 1, wherein the control circuit is configured to control the magnetic attraction force by controlling an amount of electric current provided to the magnetic element.

3. The computer mouse of any one of claims 1 to 2, wherein the magnetic element is one of an electromagnet or an electro-permanent magnet.

4. The computer mouse of any one of claims 1 to 3, further comprising:

a user interface for receiving user inputs, the control circuit configured to control the magnetic attraction force based on the user inputs.

5. The computer mouse of claim 4, wherein the user interface is one of a slider, a button, a keypad or a knob arranged on the housing.

6. The computer mouse of any one of claims 1 to 5, wherein the computer mouse is coupled to a computing device running a computer application, wherein the control circuit is configured to control the magnetic attraction force based on events in the computer application.

7. The computer mouse of any one of claims 1 to 6, further comprising:

a memory configured to store configuration settings, the configuration settings comprising at least one of correlation between user inputs received through a user interface and a glide force threshold, correlation between a computer application and the glide force threshold or correlation between a position of a pointer in a graphical user interface and the glide force threshold.

8. The computer mouse of any one of claims 1 to 7, wherein the computer mouse is coupled to a computing device displaying a pointer within a graphical user interface, wherein the control circuit is configured to control the magnetic attraction force based on a position of the pointer in the graphical user interface.

9. The computer mouse of any one of claims 1 to 8, wherein the magnetic element is arranged on the bottom surface or in the at least one foot.

10. The computer mouse of any one of claims 1 to 9, wherein the ferromagnetic material is non-magnetized.

11. The computer mouse of any one of claims 1 to 10, wherein the tracking surface comprises a protective layer over the ferromagnetic material, the protective layer being non-ferromagnetic.

12. The computer mouse of any one of claims 1 to 11, further comprising:

a drive current feedback circuit configured to adjust the magnetic attraction force between the magnetic element and the ferromagnetic material based on a reading of a magnetic field strength of the magnetic element.

13. A computer mouse arrangement, comprising:

a ferromagnetic material on a tracking surface; and

a computer mouse movable relative to the tracking surface on which the computer mouse is placed, the computer mouse comprising:

a housing;

a magnetic element provided on the housing; and

a control circuit configured to control a magnetic attraction force between the magnetic element and the ferromagnetic material on the tracking surface;

wherein the housing comprises a bottom surface facing the tracking surface;

at least one foot extending out from the bottom surface; and

a pressure-sensitive sensor at the at least one foot, the pressure-sensitive sensor configured to determine a pressure exerted on the at least one foot;

wherein the control circuit is configured to control the magnetic force based on the pressure exerted on the at least one foot.

14. A mouse pad for arranging under a computer mouse, the computer mouse having at least one foot extending out from a surface of the computer mouse adapted to face the mouse pad and further having a pressure-sensitive sensor at the at least one foot, the pressure-sensitive sensor configured to provide a signal based on a pressure exerted on the at least one foot,
the mouse pad comprising:

a magnetic layer; and

a control circuit configured to control a magnetic attraction force between the magnetic layer and a ferromagnetic material on a housing of the computer mouse based on the signal provided by the pressure-sensitive sensor at the at least one foot of the computer mouse.

15. The mouse pad of claim 14, further comprising:

a protective layer over the magnetic layer, the protective layer being non-magnetic.

16. The mouse pad of any one of claims 14 to 15, wherein the control circuit is configured to control the magnetic attraction force by controlling an amount of electric current provided to the magnetic layer;
wherein the magnetic layer comprises at least one of an electromagnet or an electro-permanent magnet.

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

a user interface for receiving user inputs, the control circuit configured to control the magnetic attraction force based on the user inputs.

18. The mouse pad of any one of claims 14 to 17, wherein the magnetic layer is arranged at a periphery of the mouse pad.

19. The mouse pad of any one of claims 14 to 18, wherein the mouse pad is coupled to a computing device running a computer application, wherein the control circuit is configured to control the magnetic attraction force based on events in the computer application.