CLAIMS

1. A wireless positioning pen with a pressure-sensitive tip comprising an electric power source, optical system (1), inertial sensors and Bluetooth wireless technology, characterized in that a casing (6) is provided with a second casing (7) in the rear part, and the top part of the casing (6) is provided with holes (61) with fingerboards (8) with buttons; said casing (6) provides a sliding housed body (4) with a battery (10) therein, a head (3) is attached to the front part thereof, and a first cover is (5) provided with a fastening mechanism (51) attached to lower part of the sliding housed body (4), wherein the sliding housed body (4) houses a printed circuit board (2) comprising a first fixed part (21), a second fixed part (22), a third fixed part (23), and a fourth fixed part (24) mutually interconnected with flexible parts (20), wherein a front part of the sliding housed body (4) is provided with the optical system (1) configured for sliding thereof on a PCB fixed part (14) bearing an optical sensor (13) connected through a PCB flexible part (15) to the fourth fixed part (24), wherein the head (3) is provided with a tip button (92) with a light source (16), and in addition, a capacitive sensor (91), wherein a capacitive sensor (91) comprises a fixed electrode (911) built inside the first fixed part (21) and a mobile electrode (912) and is one-sidedly signal-connected with an RC oscillator (94) that is further signal-connected to the power manager (236), wherein applying a force on the tip button (92) transfers a force onto the mobile electrode (912).

2. A wireless positioning pen with a pressure-sensitive tip according to claim 1 characterized in that the optical system (1) comprises a holder (12) with one end configured to house optical lenses (111), whereas the other end is configured for sliding on the fixed part (14) of the printed circuit board (PCB) (2) with the optical sensor (13).

3. A wireless positioning pen with pressure-sensitive tip according to claim 1 characterized in that the head (3) is provided with an expanding optical channel (19) with one end followed by the optical lenses (111), and the other end terminates in a free space, whereas both the optical channel (19) and the optical system (1) are arranged coaxially with respect to an optical axis (17).

4. A wireless positioning pen with a pressure-sensitive tip according to claim 1 characterized in that the fingerboards (8) on the buttons are two-way.

5. A wireless positioning pen with a pressure-sensitive tip according to claim 1 characterized in that the first cover (5) is demountable with the sliding housed body (4) via a fixing means (11), wherein the fixing means (11) is a screw.

6. The connection of the wireless positioning pen with a pressure-sensitive tip according to claim 1, characterized in that the optical system (1) is connected to the printed circuit board (PCB) (2) further connected to a pressure-sensitive tip (9), wherein the battery (10) supplies power through the printed circuit board (PCB) (2).

7. The connection of the wireless positioning pen with a pressure-sensitive tip according to claim 1, characterized in that the optical system (1) comprises the light source (16) bi-directionally signal-connected with the optical sensor (13).

8. The connection of the wireless positioning pen with a pressure-sensitive tip according to claim 1, characterized in that the printed circuit board (2) includes the power manager (236) signally connected with a first voltage inverter (234) as well as a second voltage inverter (235), wherein the power manager (236) is further signally connected with a processor (241), bi-directionally signal-connected with an accelerator gyroscope module (242), further bi-directionally signal-connected with an antenna (243), and a first button (221), a second button (222), a third button (231), and a fourth button (232) are further signal-connected to the processor (241), wherein the fourth button (232) is further signal-connected to the power manager (236).

9. The connection of the wireless positioning pen with a pressure-sensitive tip according to claim 1, characterized in that the powering of each electronic component is provided with the battery (10) interconnected with both the first voltage inverter (234) and the second voltage inverter (235), further via the first voltage inverter (234) with the processor (241), a charge pump (237), the optical sensor (13), and the RC oscillator (94).

10. A method of controlling the wireless positioning pen with a pressure-sensitive tip comprising a power source, optical system (1), inertial sensors and Bluetooth wireless technology according to claim 1, characterized in that it comprises:

    motion detection of the wireless positioning pen with a pressure-sensitive tip; and

    a change in the position of a cursor of a target controlled device depending on the detected motion; or

    evaluation of a screen of the target controlled device depending on the detected motion.

11. A method of controlling the wireless positioning pen with a pressure-sensitive tip according to claim 10, characterized in that tilting motions of the wireless positioning pen with the press sensitive tip vertically translates the motions to a Y axis motion movement of the cursor of the target controlled devices, and tilting horizontally translates the motions to an X axis motion movement of the cursor for the target controlled devices.

12. A method of controlling the wireless positioning pen with a pressure-sensitive tip according to claim 10, characterized in that the tilting motions of the wireless positioning pen vertically scroll the screen of the target controlled device in a direction opposite to the motion of the wireless positioning pen.

13. A method of controlling the wireless positioning pen with a pressure-sensitive tip according to claim 10, characterized in that a rapid rotation motion of the wireless positioning pen around a longitudinal axis to one side and back followed by a rolling of the wireless positioning pen in a longitudinal axis makes the screen of the target controlled device move in a direction identical to the rolling of the wireless positioning pen.