CLAIMS

1. A method of operating a display device for a hand held laboratory device, the display device comprising a screen,

the method comprising the steps of

receiving acceleration data from an accelerometer of the hand held laboratory device,

computing a movement of the hand held laboratory device from the acceleration data,

comparing the computed movement with a predetermined set of movements and

where the computed movement matches or is similar to one of the predetermined set of movements,

initiating a screen navigation function on the screen corresponding to the matched predetermined movement and/or initiating a control function in the hand held laboratory device corresponding to the matched predetermined movement.

2. A method according to claim 1 comprising receiving acceleration data from at least one accelerometer in the hand held laboratory device and computing a movement of the hand held laboratory device by computing a trajectory of the movement of the hand held laboratory device.

3. A method according to claim 2 comprising comparing the computed trajectory with predetermined movements or trajectories to match the computed trajectory with one predetermined movement.

4. A method according to any one of the claims 1 to 3 comprising receiving acceleration or movement data from at least one of a position sensor and an accelerator of the display device, and using the movement or acceleration of the display device in computing the movement of the handheld laboratory device.

5. A method according to any one of the preceding claims wherein the steps of receiving acceleration data from an accelerometer of the hand held laboratory device and computing a movement of the hand held laboratory device from the acceleration data are performed at the hand held laboratory device.

6. A method according to claim 5 wherein the step of comparing the computed movement with a predetermined set of movements is performed at the hand held medical device.

7. A method according to any one of claims 1 to 4 wherein the steps of receiving acceleration data from an accelerometer of the hand held laboratory device and computing a movement of the hand held laboratory device from the acceleration data are performed at the display device.

8. A method according to claim 5 or claim 7 wherein the step of comparing the computed movement with a predetermined set of movements is performed at the display device.

~~9. A method according to any one of the preceding claims wherein the predetermined movement is one or more of a tilting movement, movements away or towards the user, movements to the right or left of the user, movements up and down, circular movements clockwise or anti clockwise, spinning movements clockwise or anti clockwise, shaking movements, no movement (still stand) or a combination of such movements.~~

~~10. A method according to any one of the preceding claims comprising computing the movements of the handheld laboratory device relative to the hand held laboratory device or relative to the user or relative to a fixed coordinate system in space.~~

~~11. A method according to any one of the preceding claims wherein the screen navigation function is one or more of scrolling of a screen, opening a new screen, selecting a function or tap on a screen, taping a tap, browse through a sequence of taps or functions for selection, switch to cursor movement and back, editing a screen, start a program, closing a program and login on or off of a user.~~

~~12. A method according to any one of claims 1 to 11, wherein the control function in the hand held laboratory device is to switch the device on or off, start a measurement, stop a measurement, send data to the display device, switch on or of a light source, switch on or of a sensor, switch on or of an indicator light, determine the status of a button, receive data from the display device, display information on a display in the hand held device, send battery status information, send error messages, and mixtures thereof.~~

~~13. A method according to any one of the preceding claims, comprising transmitting data from at least one accelerometer of the handheld laboratory device to a display device.~~

~~14. A program operable when run on the hand held measurement device and/or the display device to perform a method according to any one of the preceding claims.~~

~~15. A wireless handheld laboratory device comprising measurement means and at least one accelerometer and wherein a movement of the handheld laboratory device in a 3 dimensional x,y,z coordinate system is wireless relayed to a display device to compute instructions for the handheld laboratory device to operate the measurement means.~~

~~16. A hand held laboratory device according to claim 15 operable to receive acceleration data from the accelerometer of the hand held laboratory device and compute a movement of the hand held laboratory device from the acceleration data.~~

~~17. A hand held laboratory device according to claim 16 wherein the movement data comprises the computed movement of the hand held device.~~

18. A hand held laboratory device according to claim 16 operable to compare the computed movement with a predetermined set of movements.

19. A hand held laboratory device according to claim 18 operable, where the computed movement matches or is similar to one of the predetermined set of movements, to transmit movement data comprising the one of the predetermined set of movements to the display device.

20. A handheld laboratory device according to any one of claims 15 to 19 wherein the measurement means comprises one of more of a photometer, a spectrometer, a pH meters, a volt, conductivity or ampere meter; a luminometer, a gas detection meter, a pipette, a turbidity meter, a nephleometer, a temperature or pressure meter, a x-ray detection meter, a scanners for drugs or explosives, a glucose meter, a biosensor, a point of care diagnostic device, a blood pressure meter or mixtures thereof.

21. A display device for a hand held laboratory device:
the display device containing a screen,
the display device being operable to a
receive movement data from a hand held movement data from the hand held laboratory device and
initiate a screen navigation function on the screen corresponding to the movement data.

22. A display device according to claim 21 wherein the movement data comprises acceleration data from the hand held laboratory device, the display device being operable to
compute a movement of the hand held laboratory device from the acceleration data,
compare the computed movement with a predetermined set of movements and
where the computed movement matches or is similar to one of the predetermined set of movements, initiate the screen navigation function.

23. A display device according to claim 21 or claim 22 wherein the display device is operable to compute a movement of the hand held laboratory device by computing a trajectory of the movement of the hand held laboratory device.

24. A display device according to claim 21 wherein the movement data comprises a computed trajectory

25. A display device according to claim 23 or claim 24 wherein the display device is operable to compare the computed movement with the predetermined set of movements by comparing the computed trajectory with predetermined movements or trajectories to match the computed trajectory with one predetermined movement.

26. A display device according to any one of claims 21 to 25 wherein the display device is a smartphone, a tablet computer or a personal computer or a

notebook computer or a dedicated device built to work with the hand held laboratory device.

27. A display device according to any one of claims 21 to 26 wherein the display device comprises at least one of a position sensor and an accelerator, wherein the program is operable to use the movement or acceleration of the display device in computing the movement of the handheld laboratory device.

28. A display device according to any one of claims 21 to 27 wherein the predetermined movement is tilting movements, movements away or towards the user, movements to the right or left of the user, movements up and down, circular movements clockwise or anti clockwise, spinning movements clockwise or anti clockwise, shaking movements, no movement (still stand) or a combination of such movements.

29. A display device according to any one claims 21 to 28 wherein the display device is operable to compute the movements of the handheld laboratory device relative to the hand held laboratory device or relative to the user or relative to a fixed coordinate system in space.

30. A display device according to any one of claims 21 to 29 wherein the screen navigation function is the scrolling of a screen, opening a new screen, selecting a function or tap on a screen, taping a tap, browse through a sequence of taps or functions for selection, switch to cursor movement and back, editing a screen, start a program, closing a program.

31. A system for controlling a hand held laboratory device composed of:

a) A hand held laboratory device containing at least one accelerometer and measurement means,

b) a display device containing a screen,

c) and a software running on the display device accessing a set of predetermined movements and able to receive acceleration data from the hand held laboratory device and able to compute a movement of the hand held laboratory device from the acceleration data and able to compare such computed movements with the predetermined set of movements and matching similar movements and able to initiate a screen navigation function on the display device linked to the matched movement. And wherein the function controls the measurement means within the hand held laboratory device.

1. A method of operating a hand-held laboratory device (ii), the method comprising the steps of:

receiving, by a display device (i) remote from the hand-held laboratory device, acceleration data from an accelerometer of the hand-held laboratory device corresponding to a movement of the hand-held laboratory device by a user;

computing, by the display device, a movement of the hand-held laboratory device from the acceleration data;

comparing, by the display device, the computed movement with a predetermined set of movements, where the computed movement matches or is similar to one of the predetermined set of movements;

initiating, by the display device in response to determining that the computed movement

matches one of the predetermined set of movements, a screen navigation function of the display device corresponding to the matched predetermined movement; and

characterized in that if the screen navigation function of the display device selects a control function of the hand-held laboratory device, transmitting the control function corresponding to the screen navigation function from the display device to the hand-held laboratory device for initiating the control function in the hand-held laboratory device.

2. A method according to claim 1, comprising computing the movement of the hand-held laboratory device by computing a trajectory of the movement of the hand-held laboratory device, preferably comprising comparing the computed trajectory with predetermined movements or trajectories to match the computed trajectory with one predetermined movement.

3. A method according to claim 1, comprising receiving acceleration or movement data from at least one of a position sensor and an accelerator of the display device, and using the movement or acceleration of the display device in computing the movement of the hand-held laboratory device.

4. A method according to claim 1, wherein the predetermined movement is one or more of a tilting movement, movements away or towards the user, movements to the right or left of the user, movements up and down, circular movements clockwise or anti-clockwise, spinning movements clockwise or anti-clockwise, shaking movements, no movement as still stand or a combination of such movements.

5. A method according to claim 1, comprising computing the movements of the handheld laboratory device relative to the user or relative to a fixed coordinate system in space.

6. A method according to claim 1, wherein the screen navigation function is one or more of scrolling of a screen, opening a new screen, selecting a function or tap on a screen, taping a tap, browse through a sequence of taps or functions for selection, switch to cursor movement and back, editing a screen, start a program, closing a program and login on or off of a user.

7. A method according to claim 1, wherein the control function in the hand-held laboratory device is to switch the device on or off, start a measurement, stop a measurement, send data to the display device, switch on or off a light source, switch on or off a sensor, switch on or off an indicator light, determine the status of a button, receive data from the display device, display information on a display in the hand-held device, send battery status information, send error messages, and mixtures thereof.

8. A program operable when run on a hand-held laboratory device (ii) and on a display device (i) to perform a method according to any one of the preceding claims.

9. A hand-held laboratory device (ii) comprising measurement means, at least one accelerometer and a wireless transmitter, wherein the measurement means is configured to receive acceleration data from the accelerometer corresponding to a movement of the hand-held laboratory device by a user;
the hand-held laboratory device is configured to compute a movement of the hand-held laboratory device from the acceleration data in the hand-held laboratory device and further configured to transmit the computed movement from the hand-held laboratory device to a display device (i) remote from the hand-held laboratory device; and
characterized in that the hand-held laboratory device is further configured to receive from the display device a control function corresponding to a screen navigation function of the display device determined by the display device based on the transmitted computed movement; and the hand-held laboratory device is further configured to initiate the received control function.

10. A hand-held laboratory device according to claim 9, wherein the measurement means comprises one or more of a photometer, a spectrometer, a pH meter, a volt, conductivity or ampere meter; a luminometer, a gas detection meter, a pipette, a turbidity meter, a nephleometer, a temperature or pressure meter, a x-ray detection meter, a scanner for drugs or explosives, a glucose meter, a biosensor, a point of care diagnostic device, a blood pressure meter or mixtures thereof.

11. A system for controlling a hand-held laboratory device, comprising:
(a) a hand-held laboratory device (ii) containing at least one accelerometer measurement means, and a wireless transmitter; and
(b) a display device (i) comprising a screen, the display device being remote from the hand-held laboratory device;
wherein the display device is configured to receive acceleration data from the at least one accelerometer of the hand-held laboratory device corresponding to a movement of the hand-held laboratory device by a user;
the display device is further configured to compute a movement of the hand-held laboratory device from the acceleration data; the display device is further configured to compare the computed movement with the predetermined set of

movements, where the computed movement matches one of the predetermined set of movements;

the display device is further configured to initiate in response to determining that the computed movement matches one of the predetermined set of movements, a screen navigation function of the display device corresponding to the matched predetermined movement; and

characterized in that if the screen navigation function of the display device selects a control function of the hand-held laboratory device, the control function corresponding to the screen navigation function from the display device is transmitted to the hand-held laboratory device for initiating the control function in the hand-held laboratory device.