CLAIMS

1. A recomposer, for connecting a plurality of designation peripherals to the same central unit of a computer system, said recomposer comprising:

inputs for exchanging, with each of the designation peripherals, when said designation peripheral is connected to said recomposer, data normally exchanged with the central unit when said designation peripheral is directly connected to said central unit;

an output for exchanging data with the central unit, when said recomposer is connected to said central unit; and

digital processing means configured to transform the data received at the inputs of the recomposer into data outputted from the recomposer;

said output data being compliant in content and in structure to data which would be emitted by a designation peripheral including a single active surface;

said outputted data characterising individually, at each instant, on the single active surface, actions carried out with the designation peripherals, actions characterised by the data received as inputs, and

wherein the digital processing means includes:

at least one analyzer configured to extract, from the data received as inputs from each of the designation peripherals connected to said recomposer, a table of variable data and descriptors of said designation peripheral;

at least one configurator configured to define the dimensions and position of a designation surface associated with each of the designation peripherals connected to said recomposer in a coordinate system of the single active surface;

at least one controller for transforming variable data of the data received as inputs into variable data of the outputted data; and

at least one conditioner configured to structure the data to be outputted in accordance with a communication protocol comprised by the central unit to which the recomposer must be connected.

2. The recomposer according to claim 1, wherein the configurator, for each designation surface associated with a designation peripheral connected to the recomposer, defines dimensions and a position in the single active surface of an area corresponding to said active surface associated with the designation peripheral by:

a scaling of each of an abscissa axis and of an ordinate axis of said designation surface known in a coordinate system of said designation surface to a coordinate system of the single active surface; and

a position of a reference point of said designation surface in the coordinate system of the single active surface.

3. The recomposer according to claim 1, wherein coordinates of a point designated on a designation surface in the coordinate system of a designation peripheral transmitted in the variable data received on an input of the recomposer, or produced by the recomposer from the received variable data, are transformed into coordinates of said point designated on the designation surface, in the coordinate system of the single active surface, and incorporated into the variable data of the data emitted by the output.

4. The recomposer according to claim 1, configured to receive, on at least one input, data conforming to the requirements of an open standard, for example the USB standard and the HID overlay to said USB standard.

5. The recomposer according to claim 1, configured to receive, on at least one input, data defined by a closed protocol called "proprietary" protocol.

6. The recomposer according to claim 1, wherein the outputted data conforming to the requirements of an open standard, for example the USB standard and the HID overlay to said USB standard.

7. The recomposer according to claim 1, wherein at least one input corresponds to a wireless link to which a wireless designation peripheral can connect, for example by a radio link or by an optical link.

8. An assembly including a recomposer according to claim 1 and comprising at least two designation peripherals.

9. The assembly according to claim 8, wherein at least one designation peripheral includes an active surface associated with a touch screen.

10. The assembly according to claim 8, wherein at least one designation peripheral is a stylus associated with a designation surface.

11. The assembly according to claim 8, wherein at least one designation peripheral is a scrolling device whose signals are processed to define a position on a designation surface.

12. A computer system including an assembly in accordance with claim 8, wherein the output of the recomposer is connected to a central unit of said computer system.

13. A method for connecting several designation peripherals to the same central unit in a computer system, to allow the simultaneous interoperability of said designation peripherals, the method comprising the steps of connecting said designation peripherals on inputs of a recomposer according to claim 1 and to connect an output of said recomposer to the central unit so that said designation peripherals connected to said recomposer are seen by said central unit as a single active surface designation peripheral.

14. The method according to claim 13, comprising a step of parameterising the recomposer, said parameterisation step including defining an arrangement of designation surfaces, associated with each of the connected designation peripherals, in the single active surface.