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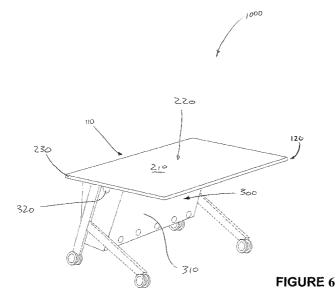
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(57) Abstract: The present invention may be said to consist in a desk arrangement which is capable opening up to receive computer and peripheral equipment for storage and transport. The desk arrangement is also configured for storage in a compact formation, and preferably nested together with similar desk arrangements.

-1-

### **DESK ARRANGEMENT**

#### FIELD OF THE INVENTION

The present invention relates to a desk. More particularly but not exclusively it relates to a training desk for using electronic equipment and storing electronic equipment in.

### **BACKGROUND TO THE INVENTION**

Students are trained on various types of electronic equipment worldwide. A common type of equipment used for training are computers. These are normally located on training desks.

Computers may have a lot of peripheral equipment associated with them.. Such peripheral equipment may include one or more screens, keyboards, mice, and a large variety of other equipment that is currently available, together with the cables required to power and/ or control them.

When the computers are not required on the desk, for example where a different type of training is being carried out which does not involve computers, this peripheral equipment tends to lie around on the desk, and may clutter the training area, which may lead to damage of the peripheral equipment.

It is possible to store the computer and its peripheral equipment out of the way. However, such storage is hindered by having to connect and disconnect the associated control and/ or power cables every time that the computer is stored.

It would be desirable to be able to quickly store the computer and/ or its peripheral equipment in a convenient fashion when it is no longer required, without having to disconnect and reconnect the control and/ or power cables of the peripheral equipment and computer.

In this specification, where reference has been made to external sources of information, including patent specifications and other documents, this is generally for the purpose of providing a context for discussing the features of the present invention. Unless stated otherwise, reference to such sources of information is not to be construed, in any jurisdiction, as an admission that such sources of information are prior art or form part of the common general knowledge in the art.

-2-

For the purpose of this specification, where method steps are described in sequence, the sequence does not necessarily mean that the steps are to be chronologically ordered in that sequence, unless there is no other logical manner of interpreting the sequence.

For the purposes of this specification, the term **"peripheral equipment"** when used in relation to a computer relates to equipment normally required for use together with a computer to enable control and/or use of the computer processor and digital storage, and includes but is not limited to external hard drives, mouses, monitors or screens, keyboards, digital storage devices, sound enabling devices, graphics enabling devices, and the like.

For the purposes of this specification, the term "computer equipment" relates to any one or more selected from a computer and peripheral equipment for a computer.

For the purposes of this specification, the term "computer" relates to any one or more of a computer processor, its motherboard, its associated functional mechanisms which include but are not limited to graphics cards, and sound cards, digital input and/ or output devices, and its associated packaging which may include but is not limited to a box, such as a "tower" box or the like.

For the purposes of this specification, the term "plastic" shall be construed to mean a general term for a wide range of synthetic or semisynthetic polymerization products, and generally consisting of a hydrocarbon-based polymer.

#### **OBJECT OF THE INVENTION**

It is an object of the present invention to provide a desk arrangement which overcomes or at least partially ameliorates some of the abovementioned disadvantages or which at least provides the public with a useful choice.

### SUMMARY OF THE INVENTION

In a first aspect the present invention may be said to broadly consist in a desk arrangement, said desk arrangement being suitable for mounting computer equipment; said desk arrangement comprising:

- a desktop arrangement configured for presenting a planar upper surface at a work zone;
- a storage compartment configured for storing computer equipment.

-3-

Preferably, the storage compartment is configured for storing computer equipment while in an electrically connected state.

Preferably, the desktop arrangement comprises at least one table surface member configured for presenting a planar upper surface.

Preferably, the desk arrangement comprises a frame for supporting one or more selected from the desktop arrangement and the storage compartment.

Preferably, the at least part of the frame is removable for storage and handling of the desk arrangement.

Preferably, the desktop arrangement comprises a moving mechanism whereby the desktop arrangement is movable between

• a covered condition in which the desktop arrangement is configured for use as a table, and

• an access condition in which desktop arrangement allows convenient access to the storage compartment for storing or retrieving computer equipment.

Preferably, the desktop arrangement is configured to slide linearly on a track arrangement between its table condition and its access condition.

Preferably, the moving mechanism is a linear track arrangement.

Preferably, the desk arrangement is configured for providing passage for the traverse of cables between the storage compartment and the work zone.

Preferably, the desk arrangement is configured for providing passage for the traverse of cables between an electrical power source and one or more selected from the storage compartment and the work zone.

Alternately, the desk arrangement is configured for providing power to and one or more selected from the storage compartment and the work zone from an electrical power source by induction.

Preferably, the storage compartment is disposed under the table surface member.

Preferably, the desk arrangement comprises a front side and an opposed rear side configured for receiving a seated user, and the storage compartment is disposed towards the front side of the of the desk arrangement.

Preferably, the storage compartment comprises a diagonally extending rear panel towards the rear side of the desk arrangement.

Preferably, the desk arrangement is configured and adapted to be nested with an adjacent similar desk arrangement for storage and/ or transport.

-4-

Preferably, the desk arrangement is configured and adapted to be nested with an adjacent inverted desk arrangement for storage and/ or transport.

Preferably, the storage compartment is configured for nesting with the storage compartment of an adjacent inverted similar desk arrangement.

Preferably, the diagonally extending rear panel of the storage compartment is configured and adapted to nest with the diagonally extending rear panel of an adjacent inverted similar desk arrangement.

Preferably, the desk arrangement comprises a storage rack for supporting a computer.

Preferably, the storage rack includes its own securing mechanism for securing the computer on the storage rack.

Preferably, the storage rack is configured for supporting a computer under the table surface member.

Preferably, the configured for supporting a computer under the table surface member and next to the storage compartment.

Alternately, the storage compartment is configured for securely storing a computer within the storage compartment.

Preferably, the storage compartment is configured for securely storing a computer within the storage compartment even when the desk arrangement is upside down.

Pert when the desktop arrangement is in its covered condition, the storage compartment is fully enclosed to prevent the ingress and/or egress of computer equipment.

Preferably, the desktop arrangement is securable in its covered condition, so that the desk arrangement is movable on its side and/or upside down, without the desktop arrangement moving to its access condition.

Preferably, the desktop arrangement comprises at least one or more securing mechanisms for securing the desktop arrangement in its covered condition.

Preferably, the desk arrangement comprises wheels in which the desk arrangement can be moved around.

Preferably, at least one or more wheels are located on a wheeled portion.

Preferably, the wheel portion is mounted to the frame.

Preferably, portion is removably mounted with the frame.

-5-

Preferably, the frame is configured asymmetrically on the desk arrangement, in order to allow the frames of adjacent inverted desk arrangements to bypass each other when nested together.

Preferably, the desk arrangement comprises internal wiring for convenient connection of the computer equipment to one or more selected from a

- power source
- network
- visual output device.

Preferably, the desk arrangement includes at least one connector arrangement for connecting two desk arrangements to each other, comprising

- an engaging formation movable between
  - an unextended position, and
  - an extended position in which the engaging formation is engageable with a complementary engaging formation of a similar connector arrangement associated with an adjacent desk arrangement to hold the adjacent desk arrangement in alignment with said desk arrangement.

Preferably, the engaging formation is pivotable about a pivoting axis between its unextended position and its extended position.

Preferably, the connector arrangement comprises complementary engaging formations for engaging with the engaging formation of a similar connector arrangement associated with an adjacent desk arrangement.

Preferably, the table leg connecting formations are configured for removably connecting to a frame of a similar adjacent desk arrangement.

Preferably, the engaging formation in its unextended position is configured and adapted not to extend from the table surface member.

Preferably, the pivoting axis is substantially vertically oriented.

Preferably, the engaging formation comprises a hook formation.

Preferably, the connector arrangement is configured for supporting the desk arrangement on a side of the desk arrangement.

Preferably, the engaging formation is configured to engage in a complementary manner with a similar engaging formation on an adjacent desk arrangement.

Preferably, the connector arrangement comprises a running formation movable between a retracted position and an extended position in which it extends from the -6-

periphery of the table surface to present a running surface on which the table is supportable on its side.

Preferably, the running formation presents a running surface on which the table is movable when the table is on its side to protect the sides of the table from abrasion.

Preferably, the running surface is comprised of a relatively frictionless and/ or abrasion resistant material.

Preferably, the connector arrangement comprises a body member.

Preferably, the body member is securable to one or more selected from the frame, a storage enclosure and the table surface member.

In another aspect the present invention may be said to broadly consist in a method of storing equipment in an electronically connected configuration in a desk arrangement, said method comprising the steps of

- providing a desk arrangement as described above,
- providing computer equipment;
- mounting at least some computer equipment on top of the desktop arrangement in its covered condition;
- moving the desktop arrangement to its access condition;
- moving the mounted computer equipment into the storage compartment; and
- moving the desktop arrangement to its covered condition.

Preferably, the method comprises the step of

• securing the desktop arrangement in its covered condition.

Preferably, the method comprises the step of

• turning the desk arrangement upside down or on its side.

Preferably, the method comprises the step of

• arranging the desk arrangement in a nested fashion with another similar desk arrangement.

Preferably, the method comprises the step of

• electrically connecting at least some of the computer equipment with each other and/ or to a power source.

Preferably, the step of moving the mounted computer equipment into the storage compartment is carried out while at least part of the computer equipment remains electrically connected with each other.

-7-

Preferably, the step of moving the mounted computer equipment into the storage compartment is carried out while at least part of the computer equipment remains electrically powered.

Other aspects of the invention may become apparent from the following description which is given by way of example only and with reference to the accompanying drawings.

As used herein the term "and/ or" means "and" or "or", or both.

As used herein "(s)" following a noun means the plural and/or singular forms of the noun.

The term "comprising" as used in this specification means "consisting at least in part of. When interpreting statements in this specification which include that term, the features, prefaced by that term in each statement, all need to be present but other features can also be present. Related terms such as "comprise" and "comprised" are to be interpreted in the same manner.

To those skilled in the art to which the invention relates, many changes in construction and widely differing embodiments and applications of the invention will suggest themselves without departing from the scope of the invention as defined in the appended claims. The disclosures and the descriptions herein are purely illustrative and are not intended to be in any sense limiting.

## **BRIEF DESCRIPTION OF THE DRAWINGS**

The invention will now be described by way of example only and with reference to the drawings in which:

Figure 1: shows a top front perspective view of a first embodiment of a desk arrangement;

Figure 2: shows a top rear perspective view of a first embodiment of a desk arrangement;

Figure 3: shows a top perspective view of a pair of desk arrangements stacked in an inverted relationship;

Figure 4: shows a side view of a pair of desk arrangements stacked in an inverted relationship;

Figure 5: shows a top perspective view of two pairs of desk arrangements stacked on top of each other;

Figure 6: shows a top rear perspective view of a second embodiment of a desk arrangement;

Figure 7: shows a top front perspective view of a third embodiment of a desk arrangement;

Figure 8: shows a top rear perspective view of a third embodiment of a desk arrangement;

Figure 9: shows a top rear perspective view of a third embodiment of a desk arrangement; and

Figure 10: shows a top front perspective view of a third embodiment of a desk arrangement.

Figure 11: shows a top front perspective view of a fourth embodiment of a desk arrangement.

## DETAILED DESCRIPTION OF THE INVENTION

With reference to the above drawings, in which similar features are generally indicated by similar numerals, a desk arrangement according to a first aspect of the invention is generally indicated by the numeral 100.

In one embodiment now described, there is provided a desk arrangement 1000 suitable for mounting a computer (not shown) and peripheral equipment (not shown). The desk arrangement 1000 comprises a desktop arrangement 200 configured for presenting a planar upper surface 210 at a work zone 220.

The desk arrangement 1000 further comprises a storage compartment 300 configured for storing computer equipment, preferably while the computer equipment is in an electrically connected state.

The desktop arrangement 200 comprises one, and in another embodiment two or more table surface members 230. The table surface members 230 are configured for presenting a planar upper surface 210.

In a preferred embodiment the desk arrangement 1000 comprises a frame 100 for supporting one or more selected from the desktop arrangement 200 and the storage compartment 300 off the ground. In one embodiment, the frame 100 comprises removable portions 150. The removable portions are for facilitating convenient storage and handling of the desk arrangement 1000 as will be described below.

-9-

The desktop arrangement 200 comprises a moving mechanism shown in the form of a track arrangement 240 in figure 4 on which the table surface members 230 is linearly movable forwards and backwards. In a preferred embodiment, the track arrangement comprises a sliding formation (not shown) that is slidingly movable within a complementarily shaped sliding formation (not shown). It will be appreciated that a wide variety of track arrangements are possible.

Using the moving mechanism the desktop arrangement 200 is movable between a covered condition (shown in figure 6) in which the desktop arrangement 200 is configured for use as a table, and an access condition (shown in figures 7 and 8) in which desktop arrangement 200 allows convenient access to the storage compartment 300 for storing or retrieving computer equipment. In the covered condition, it is envisaged that the storage compartment 300 will be closed to prevent the ingress and/ or egress of computer equipment from it.

The desk arrangement 100 is also configured for providing passage for the traverse of cables (not shown), such as power or control cables, between the storage compartment 300 and the work zone 220, and for providing passage for the traverse of such cables from a power source (not shown) to the computer equipment on the work zone, and preferably to computer equipment stored in the storage compartment 300 as well. Such passage is provided by apertures 320 in the sides of the storage compartment 300, and also by a slot 232 between the frame 100 and the table surface member 230.

It is envisaged that power could alternatively and/or additionally be supplied to the computer equipment in either of the work zone 220 and the storage compartment 300 by induction. This would be provided by induction coils (not shown) located strategically under the table surface member 230 that interact with complementary induction coils (not shown) associated with the equipment to be powered.

The desk arrangement 1000 defines a front side 110 and an opposed rear side 120. The rear side 120 is configured for receiving a seated user (not shown) in operation. The storage compartment 300 is disposed towards the front side 110 of the desk arrangement 1000 for reasons that will be explained below.

In a preferred embodiment, the storage compartment 300 comprises a diagonally extending rear panel 310 disposed towards the rear side of the desk arrangement. By shaping the storage compartment diagonally, storage space within the storage compartment 300 can be increased to hold larger or wider items at least towards its top side.

-10-

It is envisaged that such a desk arrangement 100 would be able to provide quick and convenient removal of the computer equipment from the work zone 220 when it is not required.

In order to remove computer equipment from the work zone 220, the table surface member 230 is moved on the moving mechanism from its covered position to its access condition. The computer equipment can then be packed into the storage compartment 300, even while the cables are still connected to them, and possibly while the cables are still powered.

Once the computer equipment has been packed into the storage compartment, the table surface member 230 is moved along the track arrangement until the desktop arrangement is in its covered condition, leaving the work zone 220 clear of computer equipment.

In this configuration, it is envisaged that the desk arrangement can be stored or moved. Such storage and handling is discussed in more detail below.

In order to reverse the process, the table surface member 230 is moved along the track arrangement until the desktop arrangement 200 is in its access condition. The computer equipment can then be removed from the storage compartment 300 and placed on or around the work zone 220 on the upper surface 210 of the table surface member 230. Power and/ or control cables for the computer equipment can be arranged to extend through the slot 232. This means that the above processes of removing and replacing the computer equipment on the upper surface can be carried out without having to remove and re-plug the cables into the computer equipment, and preferably while the computer equipment. Or at least some of it, remains electrically connected.

It is further envisaged, and as shown in figures 9 and 10, that a single desk arrangement can comprise a plurality of movable desktop arrangements 200 that are individually movable, and securable.

In a preferred embodiment, it is envisaged that the desk arrangements 1000 may be stored together with its associated computer equipment for convenient and quick set up, and compact storage requiring relatively little storage space.

In order to facilitate this, the desk arrangement 1000 is configured and adapted to be nested with an adjacent similar desk arrangement 1000 for storage and/ or transport in a compact configuration as shown in figures 4 and 5. In this regard, the shape and location of the rear panel 310 (whether diagonally extending or not) of the storage compartment

-11-

300 is important, as, in order to accomplish this, the storage compartment 300 must in turn be configured for nesting with the storage compartment 300 of an adjacent inverted similar desk arrangement 1000. In a preferred embodiment, the diagonally extending rear panel 310 will also be configured to nest adjacent a similar rear panel on a similar inverted desk arrangement 1000.

Such an arrangement would require the desktop arrangement 1000 to be securable in its covered condition by a securing mechanism (not shown), to prevent computer equipment falling out of the storage compartment 300 during handling of the desk arrangement 1000. Having removable portions 150 of the frame 100 will facilitate such storage and handling. It is also envisaged that the frame 100 can be configured asymmetrically, in order to allow the frames of adjacent inverted desk arrangements to bypass each other when nested together. Such an arrangement would be desirable in places where, training is provided in different formats, and where rearrangement, removal and storage of the desk arrangements 1000 are constantly required, such as in conference or seminar facilities, or computer based training businesses. The securing mechanism could also comprise a locking mechanism (not shown) for locking the desktop arrangement in its covered condition (for example to prevent theft of the computer equipment).

In another embodiment, it is envisaged that the desk arrangement 1000 could be configured to support or accommodate computer equipment apart from its peripheral equipment, for example under the table surface member 230 and next to the storage compartment 300. In such a configuration, the computer may be placed on the floor or on a storage rack (not shown). The storage rack could include its own securing mechanism for securing the computer on the storage rack. In a preferred embodiment, a computer can be stored within the storage compartment 300, even when the desk arrangement 1000 is inverted (for example when it is in storage).

In the embodiments shown in figure 9, the desk arrangement 1000 further comprises wheels in which the desk arrangement can be moved around. In another embodiment not shown, it is envisaged that the wheels could be mounted on removable wheeled portions (not shown) removably mountable to the frame, that would facilitate storage and/ or transport.

Further, in preferred embodiments, it is envisaged that the desk arrangement 1000 can comprise internal wiring for facilitating the convenient connection of computer equipment to one or more selected from a power source, network, and a visual output

WO 2013/093658

-12-

device. As an example, it is envisaged that the desk arrangement 1000 will be configured with a plurality of ports for items such as a

- Powered VGA Splitter
- Powered USB Switch
- VGA Extender
- Network Switch
- HDMI Splitter

In a further embodiment, it is envisaged that the desk arrangement 1000 could further comprise at least one or more connector arrangements 600 (as shown in figure 11), for connecting two similar desk arrangements to each other. The connector arrangement 600 is associated with, and preferably connected to at least one of the desk arrangements 1000 and comprises an engaging formation 620, and a body member 610.

The engaging formation is preferably shaped as a hook formation. The connector arrangement may also comprise a complementary engaging formation 630. The engaging formation 620 and complementary engaging formation 630 are configured to be engaged with the other of the engaging formation 630 and complementary engaging 620 formation of a similar adjacent desk arrangement.

The body member 610 is securable to one or more selected from the frame 100, the storage enclosure 300 and the table surface member 230.

At least the engaging formation 620 is movable between an unextended position (not shown), and an extended position (figure 11) in which the engaging formation 620 is engageable with a complementary engaging formation 630 of a similar connector arrangement associated with an adjacent desk arrangement to hold the adjacent desk arrangement together, and preferably in alignment with said associated desk arrangement 1000.

The engaging formation 620 is preferably pivotable about a vertical pivoting axis 640 between its unextended position and its extended position. In its unextended position the engaging formation 620 is configured and adapted not to extend from the table surface member 230.

In one embodiment, the connector arrangement 600 comprises complementary engaging formations 630 for engaging with the engaging formation 620 of a similar connector arrangement associated with an adjacent desk arrangement.

-13-

In a preferred embodiment, the connector arrangement 600 comprises a running formation (not shown) movable between a retracted position and an extended position in which it extends from the periphery of the table surface member 230 to present a running surface on which the table is supportable on its side. The running formation presents a running surface on which the desk arrangement 1000 is movable in a frictionally reduced manner when the table is on its side to protect the sides of the table from abrasion, and to make movement of the table easier.

Preferably, the running surface is comprised of a relatively frictionless and/ or abrasion resistant material, for example, as a hard plastic like PTFE.

Where in the foregoing description reference has been made to elements or integers having known equivalents, then such equivalents are included as if they were individually set forth.

Although the invention has been described by way of example and with reference to particular embodiments, it is to be understood that modifications and/or improvements may be made without departing from the scope or spirit of the invention.

In addition, where features or aspects of the invention are described in terms of Matkush groups, those skilled in the art will recognise that the invention is also thereby described in terms of any individual member or subgroup of members of the Markush group.

## CLAIMS:

- 1. A desk arrangement, said desk arrangement being suitable for mounting computer equipment; said desk arrangement comprising:
  - a) a desktop arrangement configured for presenting a planar upper surface at a work zone;
  - b) a storage compartment configured for storing computer equipment.
- 2. A desk arrangement as claimed in claim 1, wherein the storage compartment is configured for storing computer equipment while in an electrically connected state.
- 3. A desk arrangement as claimed in any one of claims 1 to 2, wherein the desktop arrangement comprises at least one table surface member configured for presenting a planar upper surface.
- 4. A desk arrangement as claimed in any one of claims 1 to 3, wherein the desk arrangement comprises a frame for supporting one or more selected from the desktop arrangement and the storage compartment.
- 5. A desk arrangement as claimed in any claim 4, wherein at least part of the frame is removable for storage and handling of the desk arrangement.
- 6. A desk arrangement as claimed in any one of claims 1 to 5, wherein the desktop arrangement comprises a moving mechanism whereby the desktop arrangement is movable between
  - a) a covered condition in which the desktop arrangement is configured for use as a table, and
  - b) an access condition in which desktop arrangement allows convenient access to the storage compartment for storing or retrieving computer equipment.
- 7. A desk arrangement as claimed in claim 6, wherein the desktop arrangement is configured to slide linearly on a track arrangement between its covered condition and its access condition.
- 8. A desk arrangement as claimed in any one of claims 6 to 7 wherein the moving mechanism is a linear track arrangement.
- 9. A desk arrangement as claimed in any one of claims 1 to 8, wherein the desk arrangement is configured for providing passage for the traverse of cables between the storage compartment and the work zone.

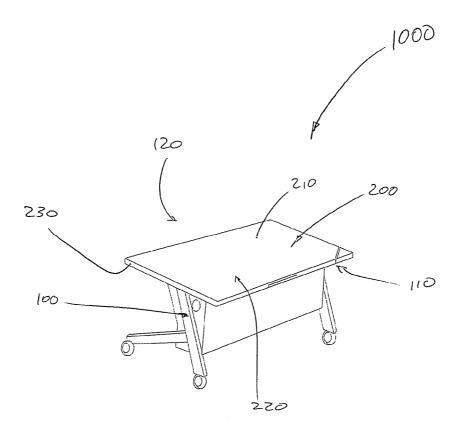
- 10. A desk arrangement as claimed in any one of claims 1 to 9, wherein the desk arrangement is configured for providing passage for the traverse of cables between an electrical power source and one or more selected from the storage compartment and the work zone.
- 11. A desk arrangement as claimed in any one of claims 1 to 10, wherein the desk arrangement is configured for providing power to one or more selected from the storage compartment and the work zone from an electrical power source by induction.
- 12. A desk arrangement as claimed in any one of claims 3 to 11, wherein the storage compartment is disposed under the table surface member.
- 13. A desk arrangement as claimed in any one of claims 1 to 12, wherein the desk arrangement comprises a front side and an opposed rear side configured for receiving a seated user, and the storage compartment is disposed towards the front side of the of the desk arrangement.
- 14. A desk arrangement as claimed in claim 13, wherein the storage compartment comprises a diagonally extending rear panel towards the rear side of the desk arrangement.
- 15. A desk arrangement as claimed in any one of claims 1 to 14, wherein the desk arrangement is configured and adapted to be nested with an adjacent similar desk arrangement for storage and/ or transport.
- 16. A desk arrangement as claimed in claim 15, wherein the desk arrangement is configured and adapted to be nested with an adjacent inverted similar desk arrangement for storage and/ or transport.
- 17. A desk arrangement as claimed in claim 16, wherein the storage compartment is configured for nesting with the storage compartment of an adjacent inverted similar desk arrangement.
- 18. A desk arrangement as claimed in any one of claims 16 to 17, wherein the diagonally extending rear panel of the storage compartment is configured and adapted to nest with the diagonally extending rear panel of an adjacent inverted similar desk arrangement.
- 19. A desk arrangement as claimed in any one of claims Ito 18, wherein the desk arrangement comprises a storage rack suitable for supporting a computer box.
- 20. A desk arrangement as claimed in claim 19, wherein the storage rack includes its own computer securing mechanism for securing the computer box on the storage rack.

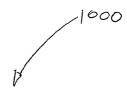
- 21. A desk arrangement as claimed in any one of claims 19 to 20, wherein the storage rack is configured for supporting a computer under the table surface member.
- 22. A desk arrangement as claimed in claim 21, wherein the storage rack is configured for supporting a computer under the table surface member and next to the storage compartment.
- 23. A desk arrangement as claimed in any one of claims lto 22, wherein the storage compartment is configured for securely storing a computer box wimin the storage compartment.
- 24. A desk arrangement as claimed claim 23, wherein the storage compartment is configured for securely storing a computer and/ or peripheral equipment within the storage compartment even when the desk arrangement is upside down.
- 25. A desk arrangement as claimed in any one of claims 6 to 24, wherein when the desktop arrangement is in its covered condition, the storage compartment is fully enclosed to prevent the ingress and/ or egress of computer equipment.
- 26. A desk arrangement as claimed in any one of claims 6 to 25, wherein the desktop arrangement is securable in its covered condition, so that the desk arrangement is movable onto its side and/ or upside down, without the desktop arrangement moving to its access condition.
- 27. A desk arrangement as claimed in any one of claims 20 to 26, wherein the desktop arrangement comprises at least one or more desktop securing mechanisms for securing the desktop arrangement in its covered condition.
- 28. A desk arrangement as claimed in any one of claims 1 to 27, wherein the desk arrangement comprises wheels in which the desk arrangement can be moved around.
- 29. A desk arrangement as claimed in any one of claims 1 to 28, wherein at least one or more wheels are located on a wheeled portion.
- 30. A desk arrangement as claimed in claim 29, wherein the wheel portion is mounted to the frame.
- 31. A desk arrangement as claimed in claim 29, wherein the wheeled portion is removably mounted with the frame.
- 32. A desk arrangement as claimed in any one of claims 16 to 31, wherein the frame is configured asymmetrically on the desk arrangement, in order to allow the frames of adjacent inverted desk arrangements to bypass each other when the desk arrangement is nested with an upside down similar desk arrangement.

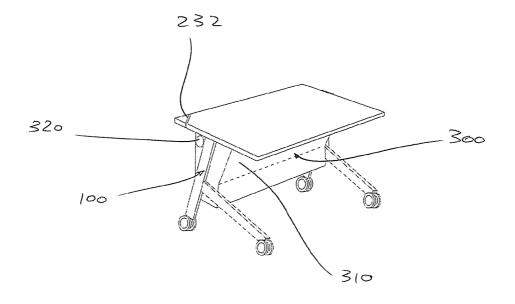
- 33. A desk arrangement as claimed in any one of claims 10 to 32, wherein the desk arrangement comprises internal wiring for convenient connection of the computer equipment to one or more selected from a
  - a) power source
  - b) network
  - c) visual output device.
- 34. A desk arrangement as claimed in any of claims 1 to 33, wherein the desk arrangement includes at least one connector arrangement for connecting two desk arrangements to each other, comprising
  - an engaging formation movable between
    - o an unextended position, and
    - o an extended position in which the engaging formation is engageable with a complementary engaging formation of a similar connector arrangement associated with an adjacent desk arrangement to hold the adjacent desk arrangement in alignment with said desk arrangement.
- 35. A desk arrangement as claimed in claims 34, wherein the engaging formation is pivotable about a pivoting axis between its unextended position and its extended position.
- 36. A desk arrangement as claimed in any of claims 34 to 35, wherein the connector arrangement comprises complementary engaging formations for engaging with d<sub>1</sub>e engaging formation of a similar connector arrangement associated with an adjacent desk arrangement.
- 37. A desk arrangement as claimed in any of claims 34 to 36, wherein the table leg connecting formations are configured for removably connecting to a frame of a similar adjacent desk arrangement.
- 38. A desk arrangement as claimed in any of claims 34 to 37, wherein the engaging formation in its unextended position is configured and adapted not to extend from the table surface member.
- 39. A desk arrangement as claimed in any of claims 35 to 38, wherein the pivoting axis is substantially vertically oriented.
- 40. A desk arrangement as claimed in any of claims 34 to 39, wherein the engaging formation comprises a hook formation.

- 41. A desk arrangement as claimed in any of claims 34 to 40, wherein the connector arrangement is configured for supporting the desk arrangement on a side of the desk arrangement.
- 42. A desk arrangement as claimed in any of claims 34 to 41, wherein the engaging formation is configured to engage in a complementary manner with a similar engaging formation on an adjacent desk arrangement.
- 43. A desk arrangement as claimed in any of claims 41 to 42, wherein the connector arrangement comprises a running formation movable between a retracted position and an extended position in which it extends from the periphery of the table surface to present a running surface on which the table is supportable on its side.
- 44. A desk arrangement as claimed in any of claims 41 to 43, wherein the running formation presents a running surface on which the table is movable when the table is on its side to protect the sides of the table from abrasion.
- 45. A desk arrangement as claimed in any of claims 43 to 44, wherein the running surface is comprised of a relatively frictionless and/ or abrasion resistant material.
- 46. A desk arrangement as claimed in any of claims 34 to 45, wherein the connector arrangement comprises a body member.
- 47. A desk arrangement as claimed in claims 46, wherein the body member is securable to one or more selected from the frame, a storage enclosure and the table surface member.
- 48. A method of storing equipment in an electronically connected configuration in a desk arrangement, said method comprising the steps of
  - a) providing a desk arrangement as described above,
  - b) providing computer equipment;
  - mounting at least some computer equipment on top of the desktop arrangement in its covered condition;
  - d) moving the desktop arrangement to its access condition;
  - e) moving the mounted computer equipment into the storage compartment; and
  - f) moving the desktop arrangement to its covered condition.
- 49. A method of storing equipment as claimed in any claim 48, wherein the method comprises the step of
  - a) securing the desktop arrangement in its covered condition.

- 50. A method of storing equipment as claimed in any one of claims 48 to 49, wherein the method comprises the step of
  - a) tmning the desk arrangement upside down or on its side.
- 51. A method of storing as claimed in any one of claims 48 to 50, wherein the method comprises the step of
  - a) arranging the desk arrangement in a nested fashion with another similar desk arrangement.
- 52. A method of storing as claimed in claim 51, wherein the method comprises the step of
  - a) arranging the desk arrangement in a nested fashion with an adjacent upside down similar desk arrangement.
- 53. A method of storing equipment as claimed in any one of claims 48 to 52, wherein the method comprises the step of
  - a) electrically connecting at least some of the computer equipment with each other and/ or to a power source.
- 54. A method of storing equipment as claimed in claim 53, wherein the step of moving the mounted computer equipment into the storage compartment is carried out while at least part of the computer equipment remains electrically connected with each other.
- 55. A method of storing equipment as claimed in any one of claims 53 to 54, wherein the step of moving the mounted computer equipment into the storage compartment is carried out while at least part of the computer equipment remains electrically powered.



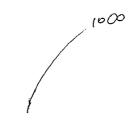


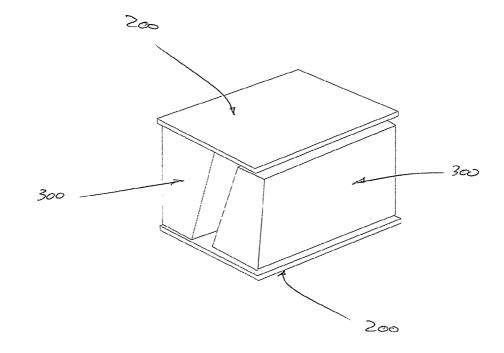




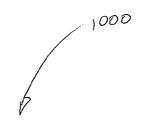
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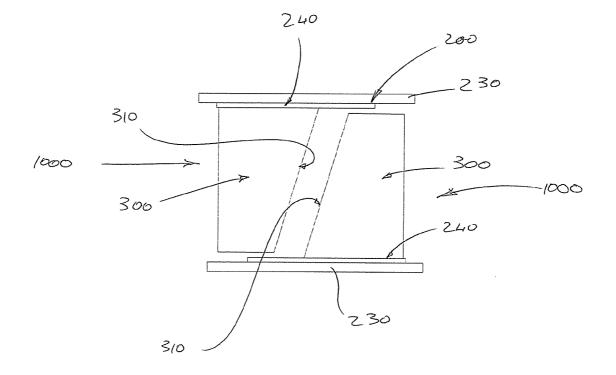
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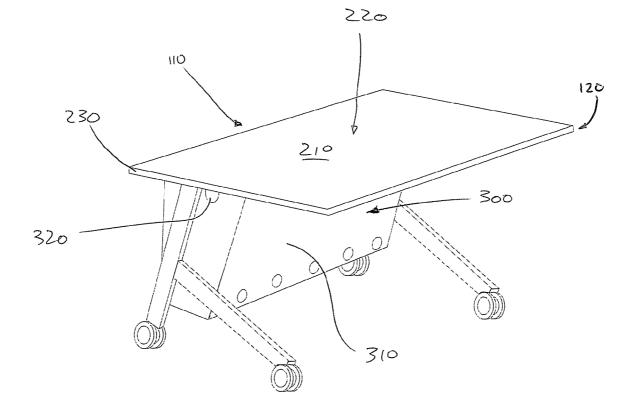






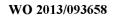


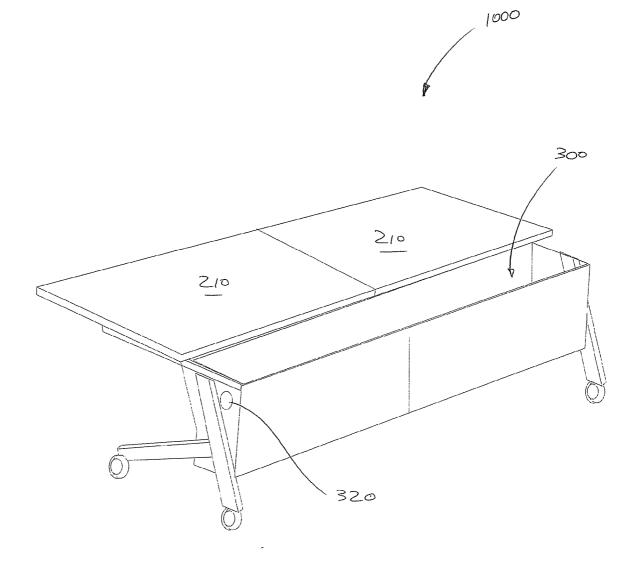


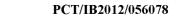


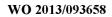
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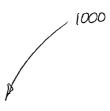


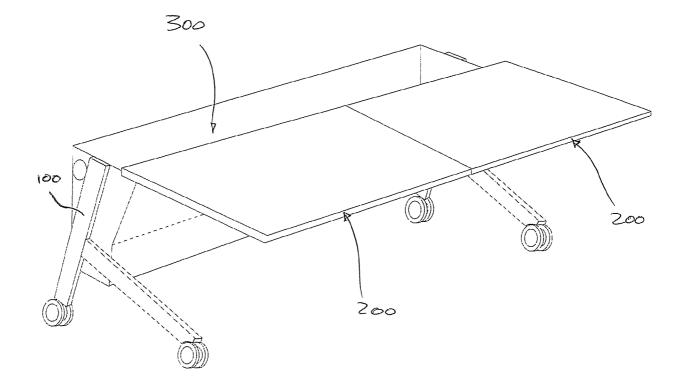


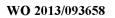




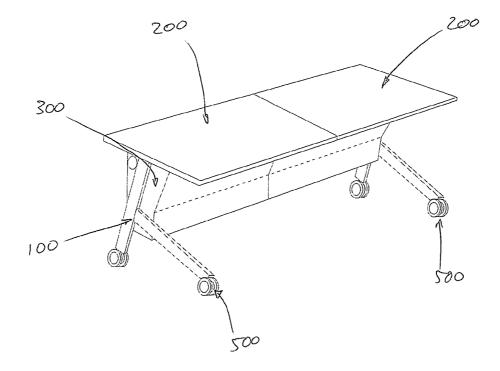




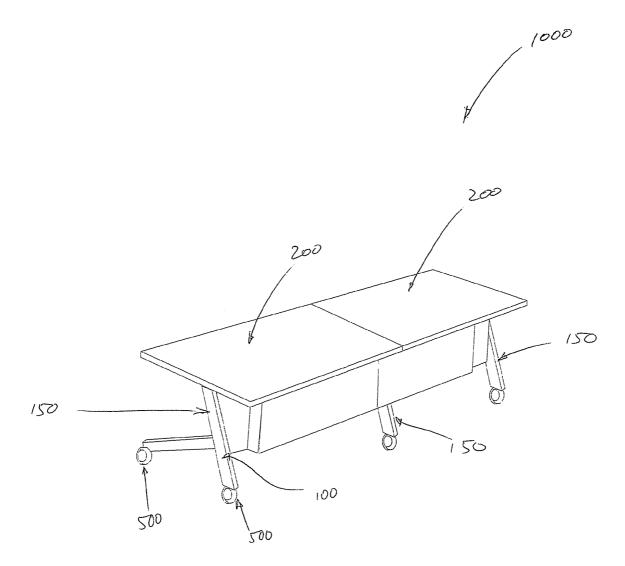


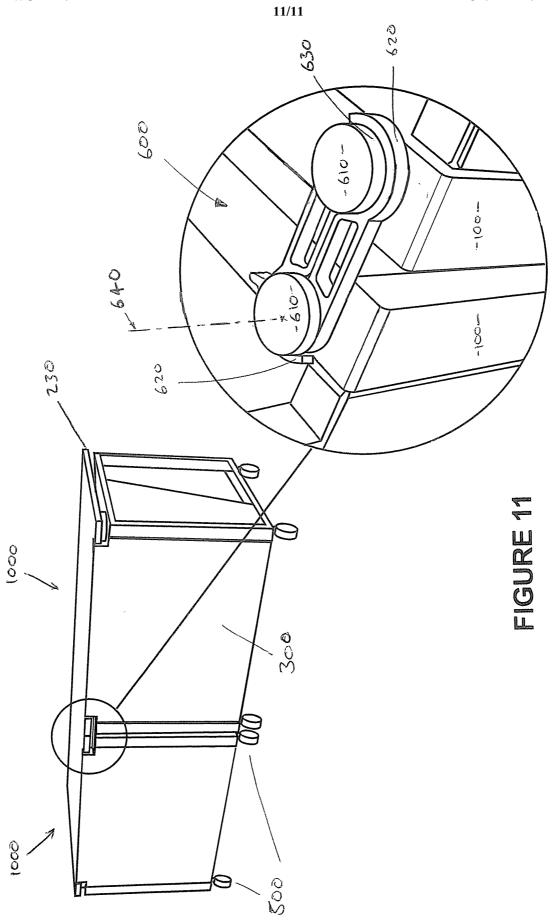


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10/11





## A. CLASSIFICATION OF SUBJECT MATTER A47B 21/04 (2006.01) A47B 13/00 (2006.01)

According to International Patent Classification (IPC) or to both national classification and IPC

B, FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

<u>Esp(¾ce</u> : IPC and IPC Marks: A47B7/02, Keywords: table, desk, computer, storage, rack, frame, wheels and like terms.

Google Patents: desk, computer, drawer and like terms.

C. DOCUMEN	TS CONSIDERED TO BE RELEVANT			· · · · · · · · · · · · · · · · · · ·
Category*	Citation of document, with indication,	where a	ppropriate, of the relevant passages	Relevant to claim No.
	Documents are li	isted ir	n the continuation of Box C	
XF	urther documents are listed in the con	tinuati	on of Box C X See patent family anno	2X
"A" documen considere "E" earlier af internatio "L" documen which is citation o "O" documen or other f	t published prior to the international filing date	"T" "X" "Y" "&"	later document published after the international filing date or pr conflict with the application but cited to understand the principle underlying the invention document of particular relevance; the claimed invention cannot or cannot be considered to involve an inventive step when the or alone document of particular relevance; the claimed invention cannot involve an inventive step when the document is combined with such documents, such combination being obvious to a person sk document member of the same patent family	e or theory be considered novel locument is taken be considered to one or more other
	than the priority date claimed al completion of the international search		Date of mailing of the international search report	
13 February 2	1		13 February 2013	
AUSTRALIAN PO BOX 200, Email address:	ing address of the ISA/AU PATENT OFFICE WODEN ACT 2606, AUSTRALIA pet@ipaustralia.gov.au -61 2 6283 7999		Authorised officer Alison Green AUSTRALIAN PATENT OFFICE (ISO 9001 Quality Certified Service) Telephone No. 0262832174	

Y       As above       20         DE 202003 12 U1 (DITTFACH) 25 April 2002       1-5, 9-10, 12-14         X       English abstract, English translation, Figs.       1-5, 9-10, 12-14         US 2008/0224582 A1 (BOLAND) 18 September 2008       1-5, 9-10, 12-13         Y       As above       20         US 5878673 A (KRAMER et al.) 09 March 1999       1999		INTERNATIONAL SEARCH REPORT	Internat ional application No.
US 5971509 A (DEIMEN et al.) 26 October 1999         X       Col. 2 lines 1-16, Col. 2 lines 35-50, Col. 5 line 18-Col. 7 line 44, Figs. 1-3, 6-7, 13         Y       As above         DE 202003 12 U1 (DITTFACH) 25 April 2002         X       English abstract, English translation, Figs.         US 2008/0224582 A1 (BOLAND) 18 September 2008         Y       As above         US 2008/0224582 A1 (BOLAND) 18 September 2008         Y       As above         US 5878673 A (KRAMER et al.) 09 March 1999         X       Col. 2 lines 58-Col. 3 line 4, Fig. 1         Y       As Above         WO 2008/059302 A2 (WAGNER) 22 May 2008	C (Continuat	ion). DOCUMENTS CONSIDERED TO BE RELEVANT	PCT/IB2012/056078
X       Col. 2 lines 1-16, Col. 2 lines 35-50, Col. 5 line 18-Col. 7 line 44, Figs. 1-3, 6-7, 13       1-5, 9-10, 12-13         Y       As above       20         X       DE 202003 12 U1 (DITTFACH) 25 April 2002       1-5, 9-10, 12-14         X       English abstract, English translation, Figs.       1-5, 9-10, 12-14         US 2008/0224582 A1 (BOLAND) 18 September 2008       1-5, 9-10, 12-13         Y       As above       20         X       Para. 0029-0039, Figs       1-5, 9-10, 12-13         Y       As above       20         X       VS 5878673 A (KRAMER et al.) 09 March 1999       20         X       Col. 2 lines 58-Col. 3 line 4, Fig. 1       1, 3-5, 9, 12-13, 28         Y       As Above       20         WO 2008/059302 A2 (WAGNER) 22 May 2008       20	Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y       As above       20         X       DE 202003 12 U1 (DITTFACH) 25 April 2002       1-5, 9-10, 12-14         X       English abstract, English translation, Figs.       1-5, 9-10, 12-14         US 2008/0224582 A1 (BOLAND) 18 September 2008       1-5, 9-10, 12-13         Y       As above       20         X       Para. 0029-0039, Figs       1-5, 9-10, 12-13         Y       As above       20         VS 5878673 A (KRAMER et al.) 09 March 1999       20         X       Col. 2 lines 58-Col. 3 line 4, Fig. 1       1, 3-5, 9, 12-13, 28         Y       As Above       20         WO 2008/059302 A2 (WAGNER) 22 May 2008       100	·	US 5971509 A (DEIMEN et al.) 26 October 1999	
DE 202003 12 U1 (DITTFACH) 25 April 2002         X       English abstract, English translation, Figs.         US 2008/0224582 A1 (BOLAND) 18 September 2008         X       Para. 0029-0039, Figs         Y       As above         US 5878673 A (KRAMER et al.) 09 March 1999         X       Col. 2 lines 58-Col. 3 line 4, Fig. 1         Y       As Above         WO 2008/059302 A2 (WAGNER) 22 May 2008	Х	Col. 2 lines 1-16, Col. 2 lines 35-50, Col. 5 line 18-Col. 7 line 44, Figs. 1-3, 6-7, 13	• 1-5, 9-10, 12-13
X       English abstract, English translation, Figs.       1-5, 9-10, 12-14         US 2008/0224582 A1 (BOLAND) 18 September 2008       1-5, 9-10, 12-13         Y       Para. 0029-0039, Figs       1-5, 9-10, 12-13         Y       As above       20         US 5878673 A (KRAMER et al.) 09 March 1999       20         X       Col. 2 lines 58-Col. 3 line 4, Fig. 1       1, 3-5, 9, 12-13, 28         Y       As Above       20         WO 2008/059302 A2 (WAGNER) 22 May 2008       20	Y	As above	20
US 2008/0224582 A1 (BOLAND) 18 September 2008         X       Para. 0029-0039, Figs         Y       As above         US 5878673 A (KRAMER et al.) 09 March 1999         X       Col. 2 lines 58-Col. 3 line 4, Fig. 1         Y       As Above         US 0208/059302 A2 (WAGNER) 22 May 2008		DE 202003 12 U1 (DITTFACH) 25 April 2002	
X       Para. 0029-0039, Figs       1-5, 9-10, 12-13         Y       As above       20         US 5878673 A (KRAMER et al.) 09 March 1999       1, 3-5, 9, 12-13, 28         X       Col. 2 lines 58-Col. 3 line 4, Fig. 1       1, 3-5, 9, 12-13, 28         Y       As Above       20         WO 2008/059302 A2 (WAGNER) 22 May 2008       20	X	English abstract, English translation, Figs.	1-5, 9-10, 12-14
Y     As above     20       US 5878673 A (KRAMER et al.) 09 March 1999     1, 3-5, 9, 12-13, 28       X     Col. 2 lines 58-Col. 3 line 4, Fig. 1       Y     As Above       WO 2008/059302 A2 (WAGNER) 22 May 2008		US 2008/0224582 A1 (BOLAND) 18 September 2008	
US 5878673 A (KRAMER et al.) 09 March 1999         X       Col. 2 lines 58-Col. 3 line 4, Fig. 1         Y       As Above         WO 2008/059302 A2 (WAGNER) 22 May 2008	Х	Para. 0029-0039, Figs	1-5, 9-10, 12-13
X       Col. 2 lines 58-Col. 3 line 4, Fig. 1       1, 3-5, 9, 12-13, 28         Y       As Above       20         WO 2008/059302 A2 (WAGNER) 22 May 2008       20	Y	As above	20
Y         As Above         20           WO 2008/059302 A2 (WAGNER) 22 May 2008         20		US 5878673 A (KRAMER et al.) 09 March 1999	
WO 2008/059302 A2 (WAGNER) 22 May 2008	Х	Col. 2 lines 58-Col. 3 line 4, Fig. 1	1, 3-5, 9, 12-13, 28-3 1
	Y	As Above	20
Y Pg. 6 lines 22-27, Pg. 7 lines 10-26, Figs. 20		WO 2008/059302 A2 (WAGNER) 22 May 2008	
	Y	Pg. 6 lines 22-27, Pg. 7 lines 10-26, Figs.	.20

11

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/IB2012/056078
1 C 1/1D 2012/0500/0

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)
This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. <b>T</b> Claims Nos:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)
Box No. Ill Observations where unity of invention is lacking (Continuation of item 3 of first sheet)
This International Searching Authority found multiple inventions in this international application, as follows:
See Supplemental Box for Details
1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying additional fees, this Authority did not invite payment of additional fees.
3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. X No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: 1-5, 9-10, 12-14, 19-22, 28-31
<b>Remark on Protest</b> I         The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
<b>I</b> No protest accompanied the payment of additional search fees.

#### INTERNATIONAL SEARCH REPORT

**Supplemental Box** 

#### Continuation of: Box III

This International Application does not comply with the requirements of unity of invention because it does not relate to one invention or to a group of inventions so linked as to form a single general inventive concept.

This Authority has found that there are different inventions based on the following features that separate the claims into distinct groups:

- 1. Claims I. The feature of a desk arrangement with a desktop with a planar upper surface and a storage ٠ compartment is specific to this group of claims.
- 2. Claims 2-3, 12-14. The feature of a desk arrangement including a table surface member, locating a storage compartment under a table surface member or wherein the storage compartment allows for storing computer equipment in an electrically connected state is specific to this group of claims.
- 3. Claims 4-5. The feature of a desk arrangement with a frame is specific to this group of claims.
- 4. Claims 6-8. The feature of a desk arrangement with a moving mechanism is specific to this group of claims.
- 5. Claims 9-10. The feature of a desk arrangement with a passage for power cables is specific to this group of claims.
- 6. Claim 11. The feature of a desk arrangement with an electrical power source powered by induction is specific to this group of claims.
- 7. Claims 15-18. The feature of a desk arrangement which is nested with an adjacent similar desk is specific to this group of claims.
- 8. Claims 19-22. The feature of a desk arrangement with a storage rack is specific to this group of claims.
- 9. Claims 23-25. The features of a desk arrangement with a storage compartment configured for secure storage is specific to this group of claims.
- 10. Claims 26-27. The features of securing a desk arrangement and securing a desktop in a covered condition is specific to this group of claims.
- 11. Claims 28-3 1. The feature of a desk arrangement comprising wheels is specific to this group of claims.
- 12. Claim 32. The feature of a desk arrangement including a frame configured asymmetrically to allow nesting is specific to this group of claims.
- 13. Claim 33. The feature of a desk arrangement comprising internal wiring is specific to this group of claims.
- 14. Claims 34-47. The feature of a desk arrangement including a connector for connecting two desks to each other is specific to this group of claims.
- 15. Claims 48-55. The feature of a method of storing equipment whilst electrically connected in a desk • arrangement and involving specific steps of moving the desk between access and covered positions is specific to this group of claims.

PCT Rule 13.2, first sentence, states that unity of invention is only fulfilled when there is a technical relationship among the claimed inventions involving one or more of the same or corresponding special technical features. PCT Rule 13.2, second sentence, defines a special technical feature as a feature which makes a contribution over the prior art.

When there is no special technical feature common to all the claimed inventions there is no unity of invention.

In the above groups of claims, the identified features may have the potential to make a contribution over the prior art but are not common to all the claimed inventions and therefore cannot provide the required technical relationship. The only feature common to all of the claimed inventions and which provides a technical relationship among them is a desk arrangement with an planar upper surface and storage compartment Form PCT/ISA/210 (Supplemental Box) (July 2009)

Supplemental Box

However this feature does not make a contribution over the prior art because it is disclosed in:

D1: US 597 1509 A (DEIMEN et al.) 26 October 1999

D2: DE 202003 12 U1 (DITTFACH) 25 April 2002

D3: US 2008/0224582 A1 (BOLAND) 18 September 2008

D4: US 5878673 A (KRAMER et al.) 09 March 1999

Therefore in the light of this document this common feature cannot be a special technical feature. Therefore there is no special technical feature common to all the claimed inventions and the requirements for unity of invention are consequently not satisfied *aposteriori*.

## INTERNATIONAL SEARCH REPORT

International application No.

Information on patent family members

PCT/IB2012/056078

This Annex lists known patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document/s Cited in Search Report		Patent Family Member/s	
Publication Number	<b>Publication Date</b>	Publication Number	Publication Date
US 5971509 A	26 Oct 1999	US 5971508 A	26 Oct 1999
03 37/1307 A	20 000 1999	US 5971509 A	26 Oct 1999
DE 202002 12 111	25 A 2002		20 000 1999
DE 202003 12 U1	25 Apr 2002	None	
US 2008/0224582 A1	18 Sep 2008	AU 2006254705 A1	07 Dec 2006
		EP 1895871 A1	12 Mar 2008
		US 2008224582 A1	18 Sep 2008
		WO 2006 128218 A1	07 Dec 2006
US 5878673 A	09 Mar 1999	US 5878673 A	09 Mar 1999
WO 2008/059302 A2	22 May 2008	EP 2086369 A2	12 Aug 2009
		US 20101 16949 Á1	13 May 2010
		WO 2008059302 A2	22 May 2008

End of Annex

Due to data integration issues this family listing may not include 10 digit Australian applications filed since May 2001.