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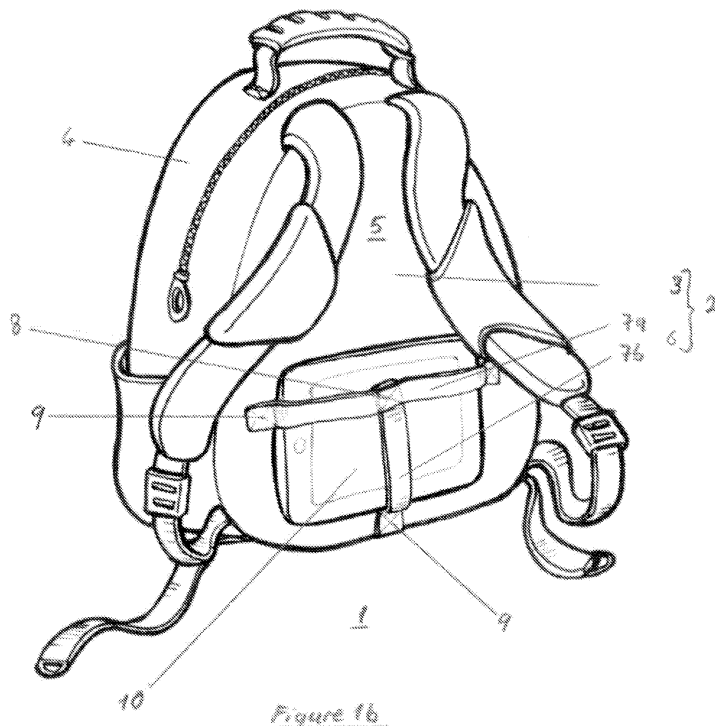
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(54) Title of the Invention: **Electronic device carrying unit**
Abstract Title: **Means on a backpack or garment for carrying an electronic device**

(57) A carrying unit 1 for a tablet electronic device 10 comprises a hands-free holding module 2 capable of holding the tablet electronic device 10 between the back face 3 of a backpack 5 carried on the shoulders of a wearer and the back of the wearer. The holding module 2 may take the form of a number of straps 7a, 7b (or 17a-d in fig 2), an open mouthed receptacle (22, fig.3), or a pocket (32, fig 4). The holding module may be permanently mounted to a backpack or may be demountably attached by fasteners. The carrying unit allows an electronic device to be slid into the holding means without the need to unslung the backpack to do so. Alternatively, such a holding means may be attached to a garment.



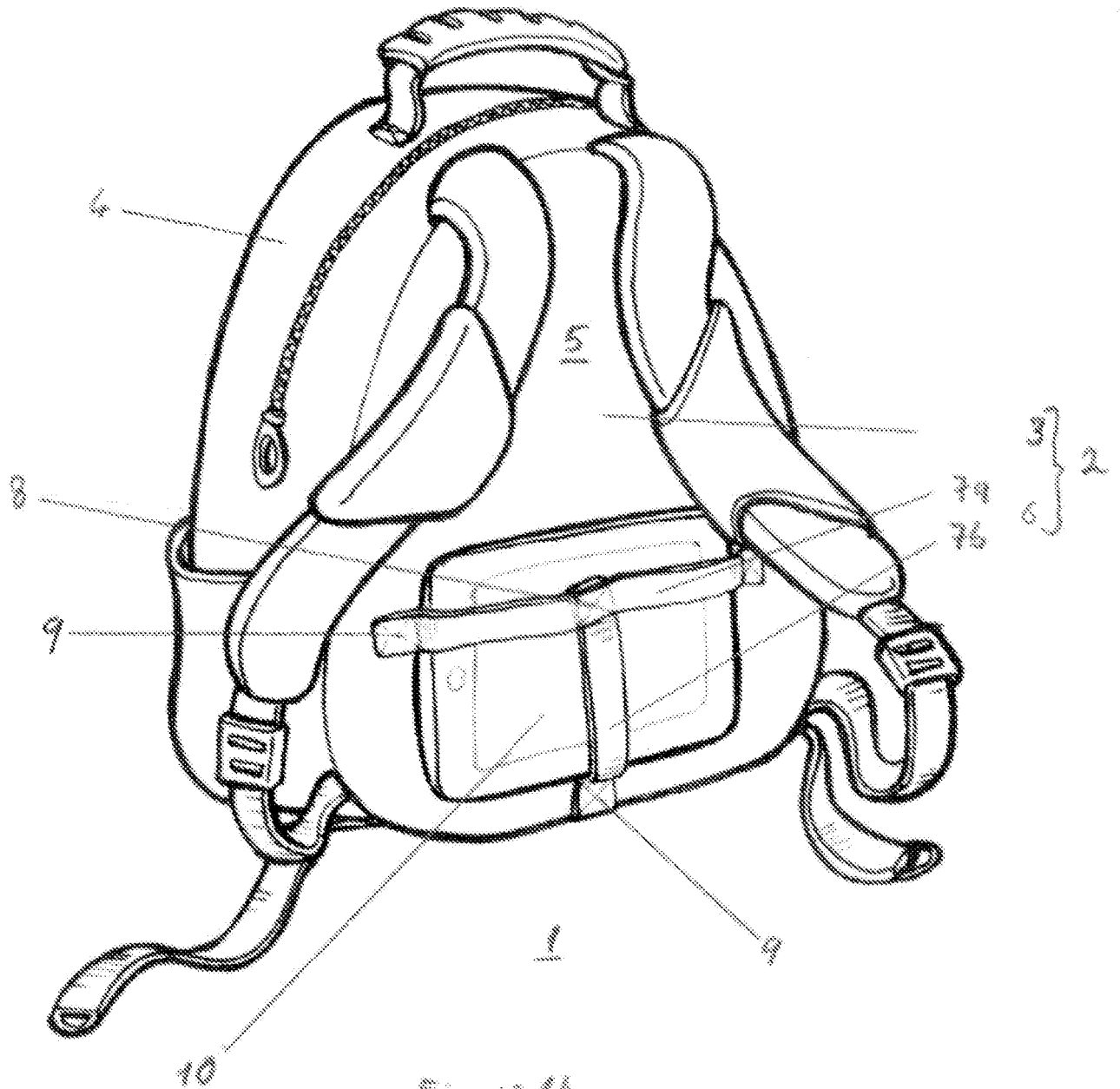


Figure 1b

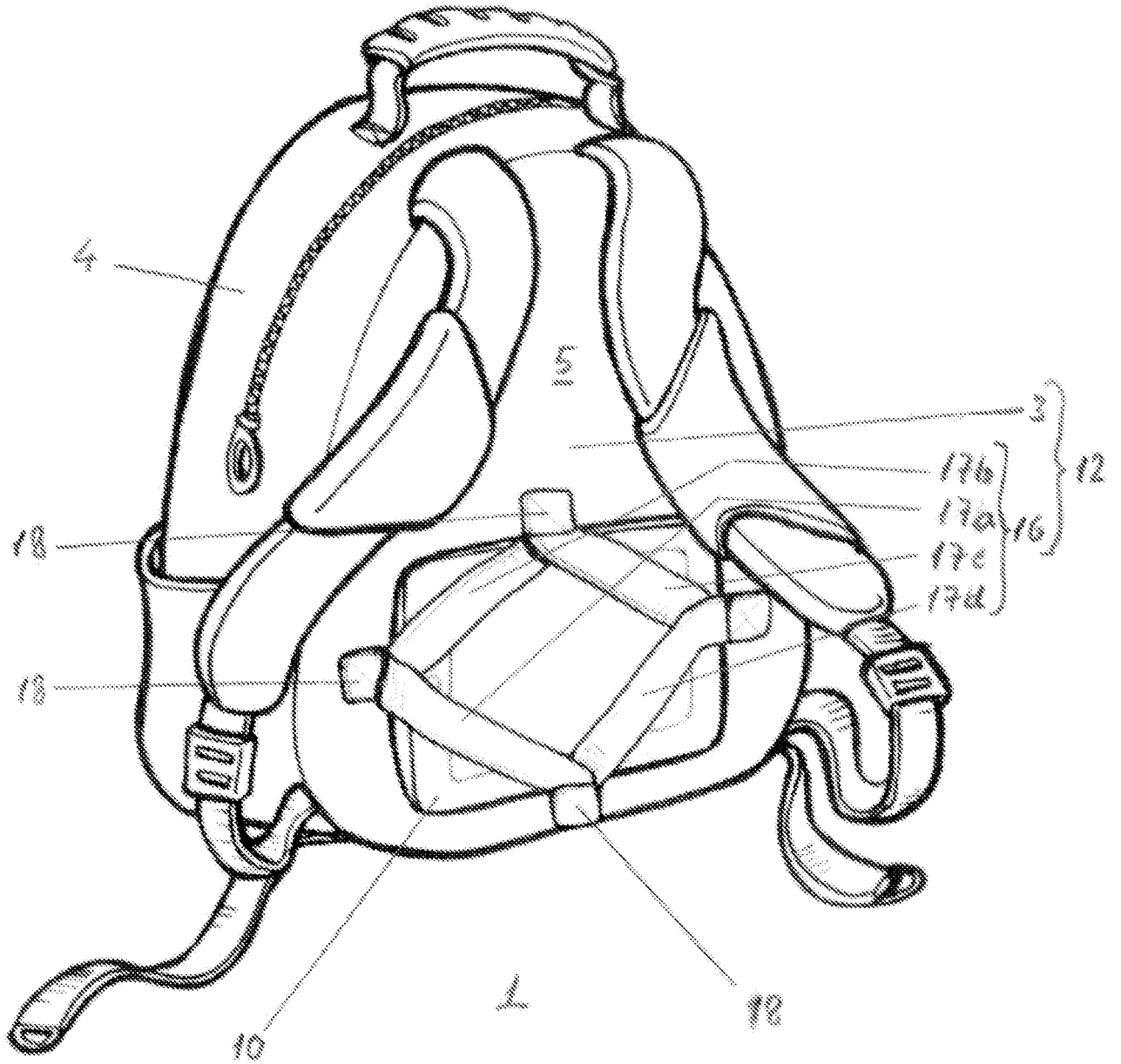


Figure 2

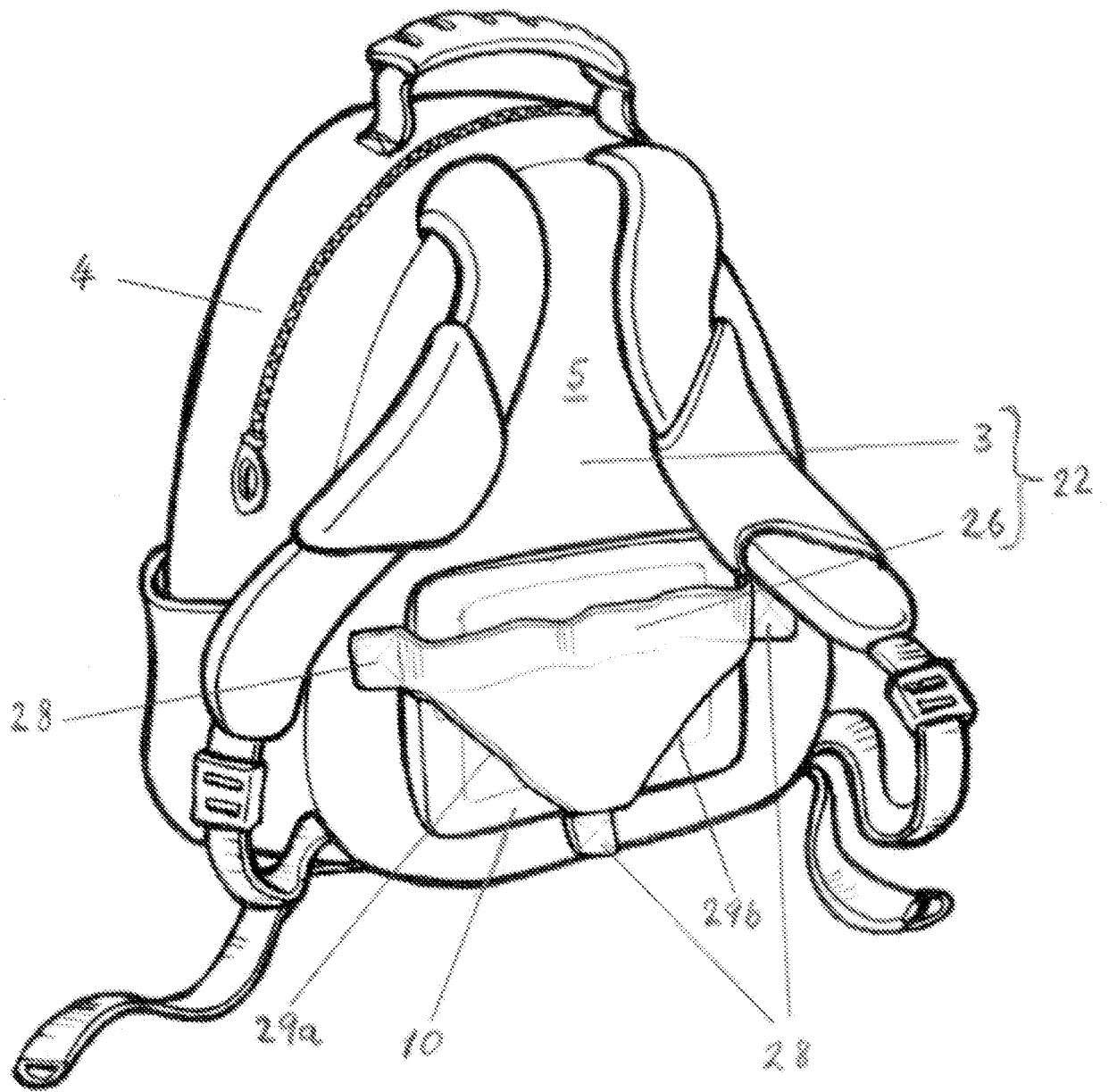


Figure 3

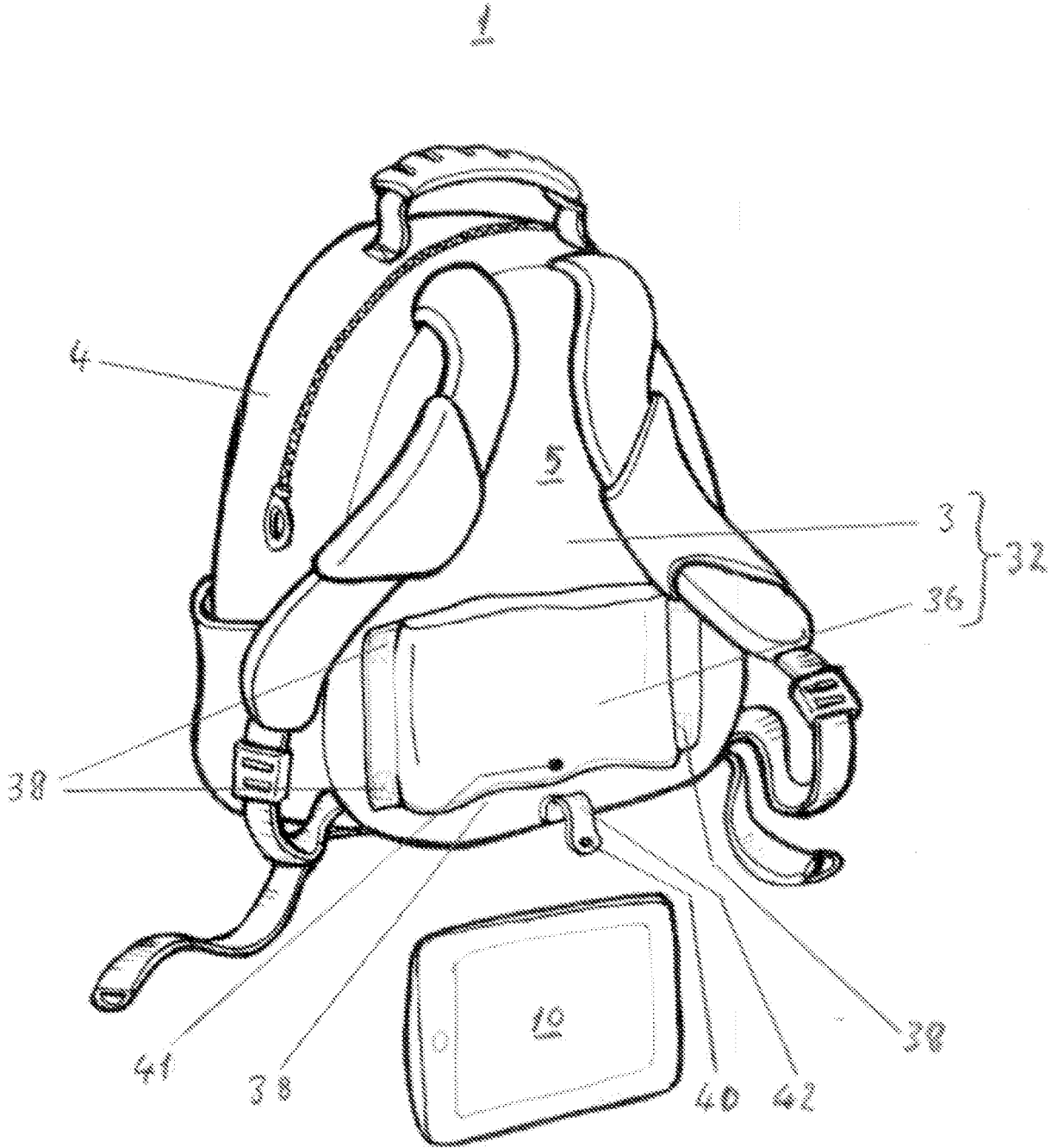


Figure 4

Electronic Device Carrying Unit

Field of the Invention

5 The present invention relates to a mobile electronic device carrying unit for use with a backpack. In particular, the present invention relates to a carrying unit for mobile electronic tablet form devices, such as tablet and hand-held computers.

When used herein the following terms have the following meanings:

10

'Backpack' includes backpacks, knapsacks and rucksacks, optionally with external compartments, that are suspended and bear a load only on the wearer's back.

15

"Back" in relation to the wearer of a backpack means the back from the small of the back upwards.

20

"Bottom strap" means elongate piece, such as a strap or band, usually of heavy-duty textile material, such as webbing, which extends in a generally horizontal direction between opposing sides of the framework of an external frame backpack at or near the bottom of the framework such that it may engage usually the small of the back, of the wearer. The bottom strap may extend between opposing arms extending forwardly from opposing lateral edges at or near the bottom of the frame.

25

"Compartment" in relation to components of a backpack includes structures such as pockets and pouches.

30

"Back face" in relation to a back pack is the face of the back pack which, when worn by the wearer, is closest to, usually in contact with, the wearer's back. It may be the back face of the (usually fabric) bag or container in a frameless back pack, the cloth back face of an internal frame backpack, or the (usually fabric) bag or container or the frame of an external frame backpack.

35

"Mouth" in relation to a receptacle for holding a tablet device means a mouth of that receptacle through which the tablet device can be inserted or removed.

"Stand-off space" means the space between the back face of the bag of a backpack and the back from the small of the back upwards, of the wearer of the backpack.

- 5 "Tablet devices" means mobile electronic devices with a tablet form, and includes tablet and hand-held computers, e-readers and e-pads, and such devices with multimedia applications. Such devices are often slightly elongate with a longitudinal axis.

10 Background of the Invention

Pressure for convenient portability of mobile electronic devices, for example for those who have mobile professions, has led to many manufacturers offering pocketable mobile electronic devices or carrying units for mobile electronic
15 devices for sale. These devices may be divided into different types, such as mobile phones, portable media players; tablet computers, and/or hand-held computers in general; and lap-top computers.

Mobile phones and portable media players have a small volume and weight, and
20 it is relatively easy to carry them securely and hands-free when not in use in a garment pocket or in a small shallow fabric pouch for small loose items secured with a zipper and worn at the waist by a strap around the hips or waist. This is known in the US as a fanny pack, and in other Anglophone countries as a bum bag, and may be worn facing the rear above the buttocks, or preferably to the
25 side of the wearer or facing the front above the groin, because in that position they are harder to pickpocket and easier to access.

Lap-top computers have a larger volume and weight, and it is not possible to carry them in a garment pocket. To carry such units hands-free when not in use
30 generally requires carrying units, which may be closed, e.g. by a zip fastener and/or be lockable to prevent unauthorised separation of the mobile electronic devices from the carrying units, and are typically provided with a shoulder strap.

One of the primary advantages of garment pockets, bum bags and laptop
35 carrying units is that they are hands-free, and may be carried or worn in a position relatively free from the risk of theft and/or may be lockable.

However, tablet form devices, such as computers and hand-held computers in general have an intermediate volume, planar and elongate rectangular front area and weight, but are generally thinner from the front face to the back face.

5 One of the primary disadvantages of garment pockets, bum bags and laptop carrying units is that they cannot conveniently carry tablet devices. In the case of bum bags, even if they could be constructed and arranged to receive and carry a tablet device, they would be cumbersome and impractical to wear at the waist in any orientation because in those positions they would render sitting and walking
10 inconvenient and/or uncomfortable.

It would be possible to carry a tablet device hands-free in a bag or container carried on both shoulders, such as a backpack, knapsack or rucksack, in the backpack main body or in a compartment, such as a pocket, pouch or normally
15 permanently mounted on the back or side walls of the backpack.

However, although this is a hands-free carrying means for the tablet device, it has the significant disadvantages of not providing easy access to a tablet device contained in it, whether in the main body or in a compartment on the back or side
20 walls of the backpack without unslinging the backpack.

Additionally, such a compartment is easy to pickpocket, even with a closure to retain the tablet device. It is unlikely to be so constructed and arranged that it will specifically embrace an individual model of tablet device.
25

It is therefore an object of the present invention to provide a hands-free carrying unit for a tablet device, for use with a backpack, and optionally a garment on the back of the bearer of the backpack, which not only provides easy access for the wearer of the backpack without unslinging the backpack, but is in a position in
30 use that hinders unauthorised separation of such a device from the carrying unit.

Brief Description of the Invention

In a first aspect, the invention provides a carrying unit for a tablet device comprising a hands-free holding means capable of holding the tablet device
35 between the back face of a backpack carried on both shoulders of a wearer and the back of the wearer.

In the use of all the embodiments of this first aspect of the present invention, a tablet device may be slid into, and snugly received in, the holding means between the back of the wearer and a backpack, without the need to unsling the backpack to do so, and the device is then in a position that hinders unauthorised separation of such a device from the carrying unit. The present carrying unit for tablet devices thus overcomes the disadvantages of the prior art.

The carrying unit of the present invention for mobile electronic tablet devices is thus of particular advantage to those who have mobile professions, especially for those using public transportation, whom the present invention is intended to benefit most.

There are several different embodiments of the present carrying unit which are described in further detail hereinafter. These carrying units are listed here for convenience of reference by features relevant to the operation of the unit, and include carrying units with

1. a no-receptacle hands-free holding module,
2. a hands-free holding module in the form of an open-mouthed receptacle,
3. a stand alone holding module permanently or demountably attached to
 - a) a garment on the back of the wearer of the backpack, or
 - b) the back face of the backpack,
 - i) on its bag or container or
 - ii) on its framework, and
4. an 'integral' holding module permanently or demountably attached to
 - a) a garment on the back of the wearer of the backpack, or
 - b) the back face of the backpack on its bag or container, where the holding module is in part defined by the garment or the back face of the backpack bag or container, and is
 - a) a receptacle (such as, for example a muff or pocket, as shown in Figures 3 and 4),
 - b) a number of independent straps, or
 - c) a composite holding integer (such as, for example a system of mutually attached straps, as shown in Figures 1 and 2), and
5. any holding module with a closure.
6. a kit for forming a carrying unit of type 3. or 4.

Backpacks in general fall into one of three categories: frameless, internal frame and external frame. The present carrying unit may be used with any such backpack, and as mentioned above and described in further detail hereinafter, in some embodiments it is attached to the backpack. It is therefore necessary to describe here features of these backpacks which are relevant to the operation of the present carrying unit.

These features include:

- a) the absence or presence of a frame,
- 10 b) the absence or presence of a stand-off space (as defined hereinbefore),
- c) the absence or presence of a bottom strap (as defined hereinbefore).

In the case of a frameless backpack, as shown in Figures 1 to 4, there is no frame to which some embodiments of the present carrying unit could be attached, no bottom strap and no stand-off space.

In the case of an internal frame ("I-frame") backpack, a small frame is integrated within a large cloth section and serves to support the pack and distribute the weight of the pack and its contents. There is thus a frame to which some embodiments of the present carrying unit may be attached, but the means of attachment have to pass through the front face of the cloth section. There is no stand-off space, and no bottom strap.

In the case of an external frame ("E-frame") back pack, a frame is disposed across the front of, and bears, the backpack bag, and serves to support the pack and distribute the weight of the pack and its contents. There is thus a frame to which some embodiments of the present carrying unit may be attached.

The frame may also bear a system of straps and/or tautly-stretched netting which provides a stand-off space. The straps may include a bottom strap below the stand-off space, optionally mounted on two forwardly projecting arms of the frame.

In all embodiments of the carrying unit of the present invention, a tablet device may be slidable in between, and snugly received between, the back of the wearer and a backpack, without the need to unslung the backpack to do so. The tablet device is most conveniently slid in from a direction where there is no obstruction,

in particular from any component of the backpack, thereby providing easy access for the wearer.

Thus, in the case of a frameless or internal frame backpack it may be slid in
5 laterally or obliquely upwards and laterally of the wearer (as shown in Figure 1a) or from below (as shown in Figure 4), most conveniently obliquely upwards and laterally or from below.

In the case of an external frame rucksack, in particular one with a bottom strap,
10 the frame or the strap may form an obstacle in some directions, and the computer may most conveniently be inserted laterally of the user.

In all cases, sliding in from above is generally less convenient, and there may be a need to unslung the backpack in order to do so, but it is not excluded from the
15 scope of the present invention.

In a frameless or internal frame backpack, where there is no framework present, the tablet device may be held hands-free between the back of the wearer and the backpack by the weight of the backpack.
20

In an external frame backpack, the tablet device may be held hands-free in the stand-off space between the back of the wearer and the backpack, particularly if a bottom strap is present. It will be held by the weight of the backpack and/or by resting on and being supported by a bottom strap, especially one between
25 forwardly projecting arms, which is ordinarily below the stand-off space.

In both cases, for reasons of comfort and convenience of ready access to, and insertion of, the tablet device, it is preferred that, in its rest position in the carrying unit it is in an orientation with its longitudinal axis extending transversely of the
30 wearer. Also for reasons of comfort, security and convenience, in its rest position, the tablet device preferably does not extend below the small of the back of the wearer and/or any bottom strap (if present) of an external frame backpack.

Its position from the small of the back upwards of the wearer makes it impractical
35 to pickpocket, whilst allowing convenient access for the wearer. This is the case even with the stand-off space in the case of an external frame backpack.

This is unlike a bum bag or a conventional compartment on the back or side walls of a backpack.

Brief Description of the Drawings

5

Embodiments of type 4b.a and 4b.c above are depicted in the following Figures, in which:

10 Figures 1a and 1b show perspective views of a frameless backpack with a composite holding integer in the form of a T permanently mounted on the back face of its bag.

15 Figure 2 shows a perspective view of a frameless backpack with a composite holding integer in the form of a diamond permanently mounted on the back face of its bag.

20 Figure 3 shows a perspective view of a frameless backpack with a receptacle holding module, which is integral with the back face of the bag of the backpack, in the form of a sleeve or pocket with a single truncated triangular continuous wall permanently mounted on the back face of the bag, and with an opening with a closure for insertion of a tablet device from below on its lower edge.

25 Figure 4 shows a perspective view of a frameless backpack with a receptacle holding module, which is integral with the back face of the bag of the backpack, in the form of a pocket with a single rectangular continuous wall permanently mounted on the back face of the bag, and with an opening for insertion of a tablet device from above on its upper edge.

Detailed Description of the Invention

30

1. A no-receptacle hands-free holding module

35 In one embodiment of this first aspect of the present invention, the no-receptacle hands-free holding means within the carrying unit for a tablet device consists essentially of the back face of a backpack carried on both shoulders of a wearer and the back of the wearer.

The tablet device may be inserted into, and is held between, the back face of the backpack and the back of the wearer in the manner, position and orientation described above for various types of backpack.

5 2. A hands-free holding module in the form of an open-mouthed receptacle

In another embodiment, the hands-free holding means comprises a holding module so constructed and arranged that it will hold and retain a tablet device in a position between the back of the wearer and the back face of the backpack.

10 In this embodiment, the hands-free holding module is not mounted on the back face of a backpack, or on a garment the back of the wearer or wearer.

In this embodiment, again, for reasons of comfort and convenience of ready access to and insertion of the tablet device, it is preferred that the device is held
15 in an orientation with its longitudinal axis extending transversely of the wearer. Also for reasons of comfort, security and convenience, in its rest position, the tablet device preferably does not extend below the small of the back of the wearer and/or any bottom strap (if present) of an external frame backpack.

20 The holding module may have any construction or arrangement that is compatible with its retaining role and with easy access to a tablet device by the wearer without the backpack having to be unslung, but it usually so constructed and arranged as to receive a tablet device that is inserted in a direction where there is no barrier or hindrance to insertion.

25

In one preferred form of this embodiment, the holding module is in the form of an open-mouthed receptacle so constructed and arranged that it will receive and retain the tablet device. The open-mouthed receptacle is often a generally flat structure with at least two continuous and/or discontinuous opposing walls, such
30 as a muff or sleeve with at least two mouths or a pocket, pouch or compartment with at least one mouth, preferably made from a flexible material.

The flexible material may comprise a continuous inelastic fabric, such as a textile fabric, for example heavy-duty textile material, for instance webbing made of
35 natural materials, such as cotton canvas, or of synthetic materials such as polyamide (nylon); or natural or synthetic leather.

The flexible material may additionally or alternatively comprise a continuous elastic material such as a natural or synthetic elastomer, for example a natural rubber or a synthetic rubber, for instance neoprene, or an elasticised textile fabric.

5

The flexible material may additionally or alternatively be discontinuous, such as in the form of netting, or a mesh or web. It may comprise an inelastic fabric and/or an elastic material, suitable examples of which are as described for continuous flexible materials immediately above.

10

In all cases, the flexible material may additionally or alternatively comprise any other material conventionally used in the flexible components of backpacks

In this form, two or more sheets of flexible continuous and/or discontinuous material may be mutually attached to form a receptacle.

15

They may be permanently attached mutually by stitching, adhering, pinning and/or riveting.

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20

They may be permanently attached mutually by stitching, adhering, pinning and/or riveting.

25

Alternatively, they may be demountably attached mutually by releasable fastening means by means of fasteners, such as co-operating pairs of members, one on one sheet and the other on the other sheet.

Examples of such co-operating pairs include hook-and-eye fasteners, including areas of plastics micro hook-and-eye fasteners (Velcro), press-studs, quarter-turn locks, catches, including magnetic catches, clasps and clips, straps and buckles, buttons and button-holes, and toggles and loops, or by means of laces in eyelets or grommets in each strap.

35

Such pairs of members will in general be attached or fastened permanently to the relevant surface by permanent fastening means, suitably including those listed above in respect of permanent fastening means for the receptacle or wall of the receptacle, such as stitching.

5

The holding module receptacle often conforms to the overall dimensions of the tablet device carried in the holding module. Thus, the receptacle will usually be elongate and with a longitudinal axis that corresponds to that of the tablet device carried in it. In an alternative form, the receptacle may be adapted for different models of the tablet device, allowing interchange of tablet devices in the receptacle. The receptacle may not comprise elastic material, and it may then be dimensioned such that it is large enough to receive all envisaged different models of a tablet device. This form of the carrying unit of the present invention is versatile in that different models of tablet devices may be carried securely.

15

Alternatively, if the receptacle comprises elastic material, the receptacle may be smaller than the device and be capable of extending (within its limits of stretch) to hold the device snugly. In the same way, the holding module may be capable of receiving such devices that are of slightly different sizes.

20

It may be advantageous in this embodiment for the receptacle to have a relatively irregular or uneven surface, for example a coarse or rough surface texture or nap. Thus, in addition to being snugly received and retained, the receptacle containing the tablet device will be held more securely by frictional forces between it and the backpack bag or container and/or a garment on the back of the wearer.

25

The receptacle may be inserted first, and then the tablet device inserted into the receptacle, or preferably the tablet device may be inserted into the receptacle and then the receptacle carrying the tablet device inserted in situ. It is preferred that the device is inserted into the receptacle before the receptacle is inserted between the backpack and the back of the wearer.

30

The tablet device and/or the receptacle may be inserted into, and is held between, the back face of the backpack and the back of the wearer in the manner, position and orientation described above for the tablet device and various types of backpack.

35

In particular if the receptacle is to hold a tablet device before insertion, the receptacle is preferably in the form of a rectangular pocket, pouch or compartment (to prevent the device slipping out of another mouth, as in a muff or sleeve), or in the form of a muff or sleeve with a closure on at least all mouths
5 other than the one by which the device it inserted.

For insertion of the receptacle and/or the tablet device laterally or obliquely upwards, the open-mouthed receptacle is so arranged that it extends in a direction from side to side of the backpack in situ with its mouth or mouths
10 opening laterally with respect to the back pack, and thus usually along the shorter side of the device.

For insertion of the receptacle and/or the tablet device downwards, the receptacle is so arranged that it extends in a direction from side to side of the backpack in situ with its mouth opening upwardly with respect to the backpack, and thus
15 usually along the longer side of the device.

For insertion of the receptacle and/or the tablet device upwards, the receptacle is so arranged that it extends in a direction from side to side of the backpack in situ with its mouth opening downwardly with respect to the backpack, and thus
20 usually along the longer side of the device. In this form of the embodiment, any mouth opening downwards should have a closure, so that the device may not readily slip out of the mouth opening downwards. The closure will be closed after the tablet device has been inserted into the receptacle. Suitable closures include
25 those described hereinafter in more detail.

In particular when an empty receptacle is slid between the small of the back and above of the wearer and a backpack, the receptacle may comprise a chassis of a resiliently flexible material. The chassis supports the two continuous and/or
30 discontinuous walls, and holds at least one mouth open. The chassis may comprise, for example strips of a plastics material and/or aluminium or a light-weight metal alloy. It is useful in particular where there is no stand-off space between the back of the wearer and the backpack

35 3. A permanently or demountably attached stand alone holding module

In another embodiment, the hands-free holding module comprises an open-mouthed receptacle which is mounted on a garment on the back of the wearer of the backpack and/or the back face of a backpack.

5 The receptacle may be of flexible material, defining at least two continuous and/or discontinuous walls. Suitable flexible, continuous or discontinuous materials for the mounted receptacle are as described hereinbefore in relation to an unmounted receptacle. Thus, two or more sheets of flexible continuous and/or discontinuous material may be mutually attached to form a receptacle.

10

They may be permanently attached mutually as described hereinbefore in relation to an unmounted receptacle. Alternatively, they may be demountably attached mutually by releasable fastening means by means of fasteners, such as pairs of co-operating members, one on one sheet and the other on the other sheet, as described hereinbefore in relation to an unmounted receptacle.

15

The receptacle may be permanently mounted on a garment on the back of the wearer or the back face of the backpack, that is, on the back face of the bag or container in a frameless backpack, or the cloth section into which a small frame is integrated in an internal frame backpack, or the back face of the bag or container or the back face of the frame of an external frame backpack.

25 It will be held in position by fastening means, which serve to prevent unauthorised separation of the tablet device from the wearer.

Such means may suitably comprise permanent fastening of the receptacle to the relevant surface by: adhering, pinning, and/or riveting. In the case of fastening to a fabric surface, e.g. the back face of the garment on the back of the wearer, or the back face of the bag or container of a frameless backpack or external frame backpack and/or the cloth section of an internal frame backpack, such means may also suitably comprise fastening the receptacle to the relevant surface by stitching.

35

The receptacle may alternatively be demountably mounted on a relevant surface by releasable fastening means, such as pairs of co-operating members, one on the receptacle and the other on the back face of the backpack, such as hook-and-eye fasteners, including areas of plastics micro hook-and-eye fasteners (Velcro),
5 press-studs, quarter-turn locks, catches, including magnetic catches, clasps and clips, straps and buckles, buttons and button-holes, or toggles and loops, or by means of laces in eyelets or grommets in the surface and the receptacle.

The receptacle may also be attached or fastened to the frame of a frame
10 backpack by at least one elongate flexible strap or band, typically of a textile fabric, attached to the receptacle forming a loop around a frame member and being attached or fastened back on itself or the receptacle by permanent or releasable fastening means. In the case of an internal frame backpack, the loop passes in opposite directions through the cloth section into which the frame is
15 integrated. Often there will be at least two such straps.

The fabric of the strap may comprise a continuous inelastic fabric, such as a textile fabric, for example heavy-duty textile material, for instance webbing made of natural materials, such as cotton canvas, or of synthetic materials such as
20 polyamide (nylon); or natural or synthetic leather.

The fabric may additionally or alternatively comprise a continuous elastic material such as a natural or synthetic elastomer, for example a natural rubber or a synthetic rubber, for instance neoprene, or an elasticised textile fabric.
25

The fabric may additionally or alternatively be discontinuous, such as in the form of netting, or a mesh or web.

It may comprise an inelastic fabric and/or an elastic material, suitable examples of which are as described for continuous flexible materials immediately above.
30

In all cases, the fabric may additionally or alternatively comprise any other material conventionally used in the flexible components of backpacks

Suitable permanent or releasable fastening means for such a loop around a
35 frame member include those listed above in respect of permanent or releasable fastening means for attaching the receptacle to a garment or backpack bag.

These will usually comprise a pair of co-operating members, one of the pair of members being attached or fastened permanently to, and often at or towards the tip of the elongate strap, and the other on, or on the strap near, the receptacle, generally by permanent fastening means, suitably including those listed above in respect of permanent fastening means for the receptacle, such as stitching.

The tablet device may be inserted into the mounted receptacle, and (in addition to being held in the receptacle) is held between the back face of the backpack and the back of the wearer in the manner, position and orientation described above for various types of backpack and an unmounted receptacle.

Suitable features, positions and orientations of the mounted receptacle, and of the mouth or mouths of the mounted receptacle are as described hereinbefore in relation to an unmounted receptacle.

Preferred holding modules of this type amongst those listed hereinbefore include: a pocket with rectangular continuous walls mounted on the back face of a textile fabric bag of a backpack by stitching. It will have a mouth opening towards the bottom of the backpack, with a closure, preferably a press-stud mounted on a strap attached to the receptacle on one side of the mouth, co-operating with a socket mounted on the receptacle on the other side of the mouth.

As for an unmounted receptacle, the mounted receptacle often conforms to the overall dimensions of the tablet device and is capable of holding the device snugly carried in the receptacle, or it may be capable of receiving such devices that are of different sizes, by comprising elastic material (when it may be smaller than the device), or by being larger than the device snugly to receive devices that are of slightly different sizes.

4. A permanently or demountably attached 'integral' holding module, as shown in Figures 1 to 4.

One embodiment of the present carrying unit has been described in which a stand-alone holding module in the form of a receptacle is mounted on the back face of a backpack or on the back of a garment on the wearer.

In another embodiment, a holding module is mounted on the back face of a backpack or on a garment on the back of the wearer, and a wall of the holding module is defined by the back face of the backpack or the garment on the back of the wearer, as shown for example in Figures 1 to 4.

5

In one form of this embodiment, the holding module comprises at least one piece of flexible continuous and/or discontinuous material, as a sheet or layer (hereinafter 'sheet'), mounted on the back face of a backpack or on a garment on the back of the wearer, at at least three points, to form a receptacle, as shown in
10 Figures 3 and 4, by way of example only.

In another form of this embodiment, not shown in any Figure, the holding module comprises at least two independent elongate pieces of flexible continuous and/or discontinuous material, each as a strap, band or strip (hereinafter 'strap'), each
15 mounted on the back face of a back pack or on the back of a garment on the wearer, at at least two points.

In an alternative form, two or more straps of flexible continuous and/or discontinuous material, are mutually attached to form at least one composite
20 holding integer, mounted on the back face of a back pack or on a garment on the back of the wearer, at at least three points, as shown in Figures 1 and 2, by way of example only.

In each form, each elongate strap, composite holding integer or sheet forms at
25 least one loop on the back face of the backpack or on the back of the wearer to receive and hold the device. In the case of a sheet, the loop forms at least one wall of a receptacle, the surface on which it is mounted forming another receptacle wall, as shown in Figures 1 to 4.

30 The flexible material of the sheet(s) or straps may comprise a continuous inelastic fabric, such as a textile fabric, for example heavy-duty textile material, for instance webbing made of natural materials, such as cotton canvas, or of synthetic materials such as polyamide (nylon); or natural or synthetic leather.

35

The flexible material may additionally or alternatively comprise a continuous elastic material such as a natural or synthetic elastomer, for example a natural rubber or a synthetic rubber, for instance neoprene, or an elasticised textile fabric.

5

The flexible material may additionally or alternatively be discontinuous, such as in the form of netting, or a mesh or web. It may comprise an inelastic fabric and/or an elastic material, suitable examples of which are as described for continuous flexible materials immediately above.

10

In all cases, the flexible material may additionally or alternatively comprise any other material conventionally used in the flexible components of backpacks

In all these forms of the embodiment, the sheets or straps may be permanently attached to the back face of a back pack or to a garment on the back of the wearer, or as appropriate mutually, by stitching (for example as shown in Figures 1 to 4) to the back face of the bag of a frameless backpack) or to the back of a garment on the wearer; adhering, pinning, and/or riveting.

Alternatively, they may be demountably attached by releasable fastening means by means of fasteners, such as co-operating pairs of members, one on one strap and the other on the other strap on which it is to be demountably mounted (not shown in any Figure). Suitable releasable fastening means include pairs of co-operating members such as hook-and-eye fasteners, including areas of plastics micro hook-and-eye fasteners (Velcro), press-studs, quarter-turn locks, catches, including magnetic catches, clasps and clips, straps and buckles, buttons and button-holes, or toggles and loops, or by means of laces in eyelets or grommets in each strap.

Such pairs of members will themselves be attached or fastened permanently to the relevant surface by permanent fastening means, suitably including those listed above in respect of permanent fastening means.

The holding module may also be attached or fastened to the frame of a frame backpack by at least two elongate flexible straps, typically of a textile fabric, attached to or integral with the holding module forming a loop around a frame member and being attached or fastened back on itself or the holding module.

It may be fastened by permanent or releasable fastening means (not shown in any Figure), of the type described hereinbefore in relation to the holding module.

.
In the case of a holding module which comprises two or more straps (including a composite holding integer), the attaching straps may be the straps of the holding module. In the case of an internal frame backpack, the loop passes in opposite directions through the cloth section into which the frame is integrated.

The fabric of the straps may suitably be any listed above for the straps of a holding module. Suitable permanent or releasable fastening means for such a loop around a frame member include those listed above in respect of permanent or releasable fastening means for attaching the receptacle to a garment or backpack bag.

Where the holding module is in the form of a receptacle (as shown in Figures 3 and 4), suitable features, positions and orientations of the receptacle, and of the mouth or mouths of the mounted receptacle are as described hereinbefore in relation to an unmounted receptacle.

Thus, preferred holding modules of this type include ones in which the sheet of flexible material which is attached by stitching to the back of a garment or front of a backpack is generally triangular and attached to a relevant surface to form a generally triangular muff or sleeve with at least two mouths opening obliquely downwardly, and one upwardly, as shown in Figure 3

Preferred holding modules of this type include ones in which the sheet of flexible material which is attached to the back of a garment or front of a backpack is rectangular by stitching to form a rectangular muff or sleeve with at least two mouths opening laterally or upwardly or downwardly (the sheet being attached along two edges) or more preferably, a pocket, pouch or compartment (the sheet being attached along three edges) with a mouth opening downwardly, as shown in Figure 4.

.
Where the latter type of pocket with a rectangular continuous wall has a mouth opening towards the bottom of the garment or backpack, it will typically have a closure, preferably a press-stud mounted on a strap attached to the garment or backpack or receptacle wall on one side of the mouth, co-operating respectively

with a socket mounted on the receptacle wall or garment or backpack on the other side of the mouth, as shown in Figure 4. .

5 Where a (less preferred) holding module (not shown in any Figure) comprises at least two straps, each mounted on the back face of a back pack or on the back of a garment on the wearer, at at least two points, they may be orientated in parallel to effectively form an open sided muff or sleeve, with two opposing mouths defined by the straps and the surface on which they are mounted, these mouths will open as described hereinbefore in relation to an unmounted receptacle,
10 generally laterally or respectively upwardly and downwardly.

Where a mouth opens downwardly, the straps should comprise elastic material and should be shorter than the part of the perimeter of the device which is in contact with them, to snugly receive and hold the device, and/or the mouth
15 opening towards the bottom of the garment or backpack should typically have a closure, for example a press-stud mounted on a strap on one side of the mouth, co-operating with a socket mounted on the other side of the mouth, as described in the preceding paragraph.

20 Alternatively, the at least two independent straps may extend skewly upright to form parts of a V or W or an inverted form of such shapes, or a rhombus, such as a square, diamond or lozenge, each of which is discontinuous at any of its angles, to effectively form an open sided muff or sleeve. This muff or sleeve will have at least two opposing mouths defined by the straps and the surface on
25 which they are mounted, which will open generally obliquely respectively upwardly and downwardly. The straps may comprise elastic material to snugly receive and hold the device.

Where the holding module is in the form of at least one composite holding
30 integer, comprising two or more mutually attached straps of flexible continuous and/or discontinuous material, mounted on the back face of a back pack or on a garment on the back of the wearer at at least three points, as shown in Figures 1 and 2, the composite holding integer may be in the form of a T (as shown in Figure 1), inverted T, I--, H or I attached or fastened to the relevant surface at or
35 near the ends of the arms or the relevant figure.

It will be seen that these form respectively an open-sided pocket with a mouth opening upwardly, downwardly and laterally, and an open-sided sleeve with two mouths opening laterally, and upwardly and downwardly.

- 5 As above, where a mouth opens downwardly, the straps should comprise elastic material and should be shorter than the part of the perimeter of the device which is in contact with them, to snugly receive and hold the device, and/or the mouth opening towards the bottom of the garment or backpack should typically have a closure, for example a press-stud mounted on a strap on one side of the mouth,
10 co-operating with a socket mounted on the other side of the mouth, similar to the closure shown in Figure 4.

Alternatively, where the holding module is in the form of at least one composite holding integer, comprising two or more mutually attached straps of flexible
15 continuous and/or discontinuous material, mounted on the back face of a back pack or on a garment on the back of the wearer at at least three points, as shown in Figures 1 and 2, the composite holding integer may comprise at least two straps which extend skewly upright to form a V or W or an inverted form of such shapes, or a rhombus, such as a square, diamond or lozenge (as shown in
20 Figure 2). The straps are attached or fastened mutually and/or to the relevant surface at or near the ends of the straps, to effectively form an open sided muff or sleeve.

This muff or sleeve will have at least two opposing mouths defined by the straps and the surface on which they are mounted, which will open generally obliquely
25 respectively upwardly and downwardly, as shown in Figures 1 and 2. The straps may comprise elastic material to snugly receive and hold the device.

Preferred holding modules of this type include:

- 30 a composite holding integer of straps of flexible material mutually permanently attached by stitching in the form of an upright T and permanently attached by stitching to the back face of a textile fabric bag of a backpack, as shown in Figure 1, and
a composite holding integer of straps of flexible material mutually permanently
35 attached by stitching in the form of a diamond with its longitudinal axis substantially transverse and permanently attached to the back face of a textile fabric bag of a backpack by the same stitching, as shown in Figure 2.

In all cases, as noted above, for reasons of comfort and convenience of ready access to, and insertion of, the tablet device, it is preferred that, in its rest position in the carrying unit it is in an orientation with its longitudinal axis extending transversely of the wearer, as shown in Figures 1b, 2, 3 and 4. Also for reasons of comfort, security and convenience, in its rest position, the tablet device preferably does not extend below the small of the back of the wearer and/or any bottom strap (if present) of an external frame backpack. .

In all forms of this embodiment of the carrying unit of the present invention, a tablet device may be slidable in between, and snugly received between, the back of the wearer and a backpack, without the need to unslung the backpack to do so. The tablet device is most conveniently slid in from a direction where there is no obstruction, in particular from any component of the backpack, and from a direction in which a mouth or effective mouth of the holding module opens, thereby providing easy access for the wearer, as shown in Figures 1a and 4.

In the case of an external frame back pack in particular one with a bottom strap, the frame or the strap may form an obstacle to insertion from directions such as upwardly and obliquely upwardly, so that forms of this embodiment which have mouths which open downwardly or obliquely downwardly may not be suitable for use with an external frame backpack, such as for example that shown in Figure 4 and, in one more of possible insertion obliquely upwardly, that shown in Figure 2. For external frame backpacks, a form of the holding module which has at least one mouth or effective mouth opening laterally of the user may be most convenient, or (less conveniently, as there may be a need to unslung the backpack in order to insert the device) one with a mouth or effective mouth opening upwardly, as shown in Figures 1 and 3.

In a frameless or internal frame backpacks where there is no such obstruction present, the tablet device may be inserted from any direction in which a mouth or effective mouth of the holding module opens. Examples of appropriate and convenient directions of insertion thus include downwardly, as appropriate to the modules shown in Figures 1 and 3; upwardly, as appropriate to the module shown in Figure 4; and obliquely downwardly or upwardly, as appropriate to the module shown in Figure 2.

In a frameless or internal frame backpack, the tablet device may be held hands-free not only by the holding module, but also by the weight of the backpack.

5 The holding module often conforms to the overall dimensions of the tablet device carried in the holding module, as shown in Figures 1 to 4, but the straps or sheet(s) may comprise elastic material, and the holding module may be smaller overall than the device and be capable of extending (within its limits of stretch) to hold the device snugly, and to be capable of receiving such devices that are of slightly different sizes. Alternatively, the holding module overall may be larger
10 overall than the device to accommodate devices of slightly different sizes, provided however that the smaller sizes do not fall out of the holding module in use.

15 All the foregoing considerations also apply to a holding module on the back of a garment on the wearer of the backpack, rather than on the front of the backpack.

5. Receptacle with a closure

20 In another embodiment, the hands-free holding module comprises an open-mouthed receptacle with at least one closure on a mouth of the receptacle. The or each closure will be closed after the tablet device has been inserted into the receptacle.

25 This renders the module even more impractical to pickpocket, unlike a bum bag or a conventional pocket, pouch or compartment on the back or side walls of a backpack. The or each closure is particularly advantageous in the form where the receptacle is dimensioned such that it receives different models of tablet devices, allowing interchange of tablet devices, rather than being designed to snugly receive and retain a particular tablet device.

30

As noted above, the hands-free holding module may comprise
an open-mouthed receptacle comprising at least two continuous and/or
discontinuous walls of flexible material, which is not mounted on the back face of
a back pack or on a garment the back of the wearer (not shown in any Figure);
35 a stand-alone receptacle comprising at least two continuous and/or discontinuous
walls of flexible material, which is mounted on the back face of a back pack or on
a garment the back of the wearer (not shown in any Figure); or

an open-mouthed receptacle which is integral with the on the back face of a back pack or on a garment the back of the wearer, the relevant surface defining a module wall (as shown in Figures 3 and 4).

- 5 Any such receptacle may be in the form of a muff or sleeve with at least two mouths, as shown in Figure 3, or a pocket, pouch or compartment with one mouth, as shown in Figure 4.

10 It is usually so constructed and arranged as to receive a tablet device that is inserted in a direction where there is no barrier to insertion, thereby providing easy access for the wearer.

The tablet device may be inserted into the receptacle in the manner, position and orientation described above for the tablet device and various types of receptacle.

15

If the receptacle is in the form of a pocket, pouch or compartment with one mouths, a closure may suitably be on that mouth, and if in the form of a muff or sleeve with two mouths, a closure may be located on one or both mouths, in the latter case, usually a closure of the same type on each mouth. As noted
20 hereinbefore, any mouth opening downwards (for example as shown in Figure 4) should have a closure, so that the device may not readily slip out of any mouth opening downwards. The closure will be closed after the tablet device has been inserted into the receptacle.

25 Suitable closures include means with co-operating members, similar to those listed above in respect of releasable fastening means, such as: straps and buckles, and buttons and button-holes, toggles and loops, co-operating catches, including magnetic catches, clasps and clips, hook-and-eye fasteners, including areas of plastics micro hook-and-eye fasteners (Velcro); laces, press-studs and
30 sockets, and separable and inseparable zip-fasteners, preferably areas of plastics micro hook-and-eye fasteners (Velcro); press-studs (as shown in Figure 4), and separable and inseparable zip-fasteners.

35 The co-operating members of such pairs in the closure will usually be attached or fastened on each side of the mouth or mouths of the open-mouthed receptacle.

One member may be optionally mounted on a strap attached or fastened permanently to a wall of the receptacle (as shown in Figure 4); the other of the co-operating pair of members will then be attached or fastened permanently to the a wall of the receptacle across the mouth from the first. Each member will be
5 held in position by means of attachment.

The means of attachment preferably comprise permanent fastening of a member to the relevant surface by: adhering, pinning, riveting, and stitching, for example as shown in Figure 4. :

10

6. A kit for forming a carrying unit of type 3. or 4.

In a second aspect, the invention provides a kit for permanently or demountably mounting a holding module for carrying a tablet device on the back of a garment
15 on the wearer of the backpack and/or the back face of a backpack (herein the 'relevant surface'), which comprises

the holding module or a component thereof so constructed and arranged that, when permanently or demountably mounted on the relevant surface it will hold and retain a tablet device in a position between the back, of the wearer and the
20 back face of the backpack, and

precursor mounting means comprising precursors of permanent or releasable fastening means for attaching the holding module or a component thereof to the relevant surface.

25 In this kit, the component of the holding module may comprise:

at least two elongate straps of flexible continuous and/or discontinuous material;

at least two elongate straps of flexible continuous and/or discontinuous material, mutually attached to form an composite holding integer, or adapted to be mutually attached to forma composite holding integer;

30 a sheet of flexible continuous and/or discontinuous material,

each capable together with the relevant surface of forming a receptacle.

In this kit, the component of the holding module may comprise a receptacle having at least two flexible continuous and/or discontinuous walls.

35 The precursor mounting means comprise precursors of fastening means.

Such precursors may comprise precursors of permanent fastening means, such as precursors of stitching, for example a needle or sailmakers spike and as appropriate thread, cord, twine or yarn; an adhesive or bonding agent appropriate to the surfaces, for example a cement, contact adhesive or resin; a pinning precursor; and/or rivets.

Alternatively, they may be comprise precursors of releasable fastening means, such as co-operating pairs of members, such as hook-and-eye fasteners, including areas of plastics micro hook-and-eye fasteners (Velcro), press-studs, quarter-turn locks, catches, including magnetic catches, clasps and clips, straps and buckles, buttons and button-holes, and/or toggles and loops, and the means for permanently or releasably fastening them to the surfaces, which may suitably be the precursors of permanent fastening means listed above.

They may also comprise at least two straps, each capable of forming a loop around a backpack frame member and adapted to being attached or fastened back on itself by permanent or releasable fastening means. Suitable permanent or releasable fastening means for such a loop around a frame member include those listed hereinbefore in respect of permanent or releasable fastening means for attaching a holding module to the relevant surface.

As is conventional, the kit will comprise instructions on how to attach the holding means to the relevant surface. The kit will be particularly advantageous for those who do not wish to purchase a new backpack or garment with the holding module attached, but who may wish to adapt an existing backpack or garment, thereby allowing them to carry a tablet device conveniently hands-free while wearing a backpack, and to access it readily without unslinging the backpack.

The present invention will now be described with reference to the following Figures, in which:

Figures 1a and 1b show perspective views of a frameless backpack with a composite holding integer in the form of a T permanently mounted on the back face of its bag.

Figure 2 shows a perspective view of a frameless backpack with a composite holding integer in the form of a diamond permanently mounted on the back face of its bag.

- 5 Figure 3 shows a perspective view of a frameless backpack with a receptacle holding module in the form of a sleeve or pocket with a single truncated triangular continuous wall permanently mounted on the back face of its bag.

10 Figure 4 shows a perspective view of a frameless backpack with a receptacle holding module in the form of a pocket with a single rectangular continuous wall.

Referring to Figures 1a and 1b, a carrying unit 1 of the present invention comprises a hands-free holding module 2 capable of holding a tablet device 10 and comprising the fabric back face 3 of the bag 4 of a frameless backpack 5 and
15 a composite holding integer 6.

The integer 6 consists of two flexible continuous fabric straps 7a, 7b mutually attached by stitching 8 into the form of a T with its stem in an orientation with its longitudinal axis substantially parallel to the upright axis of the backpack,
20 permanently mounted on the back face 3 of the bag 4 by stitching 9. In this way, each elongate strap 7a, 7b of the composite holding integer 6 forms a loop on the back face of the backpack to receive and hold the device 10.

(Alternatively, the integer 6 and/or its component straps 7a, 7b may be
25 permanently attached by adhering, pinning or riveting to each other and/or to the front 3 of the bag 4 or to a garment on the back of the wearer, or to the frame of an external frame backpack, or could be demountably attached by releasable fastening means, such as co-operating areas of plastics micro hook-and-eye fasteners (Velcro), press-studs and sockets, and the like, to any of the same
30 surfaces.)

Referring to Figure 1a, a tablet device 10 is slidable and accessible by the wearer obliquely upwards and laterally in and out between the back of the wearer and the back face of the backpack 5, while carried on both shoulders of a wearer by a
35 right or left handed wearer (here depicted for a right handed person), without the need for the backpack 5 to be unslung.

Referring to Figure 1b, once slid into the hands-free holding module 2, the tablet device 10 is received snugly in the hands-free holding module 2 between the straps 7a, 7b, and the back face 3 of the bag 4 of the backpack 5. The device 10 in the holding module 2 then extends transversely to the upright longitudinal axis
5 of the backpack 5.

Figure 2 shows a carrying unit 1 of the present invention comprising a hands-free holding module 12 capable of holding a tablet device 10.

10 The module comprises the fabric back face 3 of the bag 4 of a frameless backpack 5 and a composite holding integer 16 of flexible continuous fabric straps 17a, 17b, 17c, 17d, mutually attached by stitching 18 in the form of a diamond permanently mounted on the back face 3 of the bag 4 by the same stitching 18.

15

In this way, each elongate strap 17a, 17b, 17c, 17d of the composite holding integer 16 forms a loop on the back face of the backpack to receive and hold the device 10.

20 (Alternatively, the integer 16 and/or its component straps 17a, 17b, 17c, 17d may be permanently attached by adhering, pinning or riveting to each other and/or to the front 3 of the bag 4 or to a garment on the back of the wearer, or to the frame of an external frame backpack, or could be demountably attached by releasable fastening means, such as co-operating areas of plastics micro hook-and-eye
25 fasteners (Velcro), press-studs and sockets, and the like, to any of the same surfaces.)

A tablet device 10 is slidable and accessible by the wearer obliquely upwards and laterally in and out between the back of the wearer and the back face of the
30 backpack 5, for example under the strap 17a, while the backpack 5 is carried on both shoulders of a wearer, without the need for the backpack 5 to be unslung, as shown in Figure 5.

Once slid into the hands-free holding module 12, the tablet device 10 is received
35 snugly in the hands-free holding module 12 between the straps 17a, 17b, 17c, 17d and the back face 3 of the bag 4 of the backpack 5.

The device 10 in the holding module 2 then extends transversely to the upright longitudinal axis of the backpack 5.

5 Figure 3 shows a carrying unit 1 of the present invention comprising a hands-free receptacle holding module 22 in the form of a sleeve comprising a single truncated triangular continuous wall 26 permanently mounted on the fabric back face 3 of the bag 4 by stitching 28 to receive and hold the device 10.

10 The module has two mouths 29a, 29b, each in the form of an elongate slot between the wall 26 and the back face 3 of the bag 4 of the backpack 5, opening towards the sides of the backpack 5 and/or the wearer and running upwardly from the bottom of the receptacle 22 towards its top

15 (Alternatively, the wall 26 may be permanently attached by adhering, pinning or riveting to each other and/or to the front 3 of the bag 4 or to a garment on the back of the wearer, or to the frame of an external frame backpack, or demountably attached by releasable fastening means, such as co-operating areas of plastics micro hook-and-eye fasteners (Velcro), press-studs and sockets, and the like, to any of the same surfaces.)

20

A tablet device 10 is slidable and accessible by the wearer obliquely upwards and laterally in and out between the back of the wearer and the back face of the backpack 5, for example through either mouth 29a, 29b while the backpack 5 is carried on both shoulders of a wearer, without the need for the backpack 5 to be
25 unslung, as shown in Figure 5.

30 Once slid into the hands-free receptacle holding module 22, the tablet device 10 is received snugly in the hands-free holding module 22 between the wall 26 and the back face 3 of the bag 4 of the backpack 5. The device 10 in the holding module 2 then extends transversely to the upright longitudinal axis of the backpack 5.

35 Figure 4 shows a carrying unit 1 of the present invention comprising a receptacle holding module 32 the form of a pocket with a single rectangular continuous wall 36, permanently mounted on the fabric back face 3 of the bag 4 by stitching 38 to receive and hold the device 10, and having a mouth 39 in the form of an elongate

slot between the wall 26 and the back face 3 of the bag 4 of the backpack 5, opening towards the bottom of the backpack 5 and/or the wearer and running upwardly from one side of the receptacle 22 towards the other.

- 5 The mouth 39 has co-operating members of a closure pair, here a press-stud 40 and socket 41, the press-stud 40 being mounted on a strap 42.

10 (Alternatively, the wall 36 may be permanently attached by adhering, pinning or riveting to each other and/or to the front 3 of the bag 4 or to a garment on the back of the wearer, or to the frame of an external frame backpack, or demountably attached by releasable fastening means, such as co-operating areas of plastics micro hook-and-eye fasteners (Velcro), press-studs and sockets, and the like, to any of the same surfaces.)

- 15 The open-mouthed receptacle 32 has such a position and arrangement that the device 10 may only be slid in and accessed when received in the module 32 upwardly from below through the mouth 39, but still while the backpack 5 is carried on both shoulders of a wearer, without the need for the backpack 5 to be unslung, as shown in Figure 6.

20

Once slid into the hands-free receptacle holding module 22, the tablet device 10 is received snugly in the hands-free holding module 22 between the wall 26 and the back face 3 of the bag 4 of the backpack 5 but is only retained there with the assistance of the strap 42.

25

Claims

1. A carrying unit for a tablet electronic device comprising a hands-free holding means capable of holding the tablet electronic device between the back face of a backpack carried on the shoulders of a wearer and the back of the wearer.
5
2. A carrying unit according to claim 1, wherein the hands-free holding means within the carrying unit for a tablet electronic device consists essentially of the back face of a backpack carried on both shoulders of a wearer and the back of the wearer.
10
3. A carrying unit according to claim 1, which comprises a holding module so constructed and arranged that it will hold and retain a tablet electronic device in a position between the back, of the wearer and the back face of the backpack.
15
4. A carrying unit according to claim 3, wherein the holding module is in the form of an open-mouthed receptacle.
20
5. A carrying unit according to claim 4, wherein the receptacle is made from a flexible material and has a generally flat structure with a longitudinal axis and at least two continuous and/or discontinuous opposing walls, in the form of a muff with at least two mouths or a pocket with at least one mouth, and is held in the holding means with its longitudinal axis substantially transverse to the back face the backpack.
25
6. A carrying unit according to claim 3, wherein the holding module comprises an open-mouthed receptacle which is mounted on a garment on the back of the wearer of the backpack and/or the back face of the backpack.
30
7. A carrying unit according to claim 3, wherein the receptacle is made from a flexible material and has a generally flat structure with a longitudinal axis and at least two continuous and/or discontinuous opposing walls, in the form of a muff with at least two mouths or a pocket with at least one mouth, and is held in the holding means with its longitudinal axis substantially transverse to the back face the backpack.
35

8. A carrying unit according to claim 6 or 7, wherein the receptacle is permanently mounted on the garment or backpack.
9. A carrying unit according to claim 6 or 7, wherein the receptacle is demountably mounted on the garment or backpack.
10. A carrying unit according to claim 6 or 7, wherein the receptacle is directly mounted on the garment or backpack, or is mounted on the front of the frame of a frame backpack by at least one elongate flexible strap attached to the receptacle and forming a loop around a frame member and being attached or fastened back on itself or the receptacle by permanent or releasable fastening means.
11. A carrying unit according to claim 11, wherein the holding module comprises at least one piece of flexible continuous and/or discontinuous material mounted on the back face of a backpack or on a garment on the back of the wearer, at at least three points, to form a receptacle.
12. A carrying unit according to claim 3, wherein the holding module comprises at least one sheet of flexible continuous and/or discontinuous material.
13. A carrying unit according to claim 3, wherein holding module comprises at least two independent elongate straps of flexible continuous and/or discontinuous material, each mounted on the back face of a back pack or on the back of a garment on the wearer, at at least two points.
14. A carrying unit according to claim 3, wherein the holding module comprises two or more straps of flexible continuous and/or discontinuous material, mutually attached to form at least one composite holding integer, mounted on the back face of a back pack or on a garment on the back of the wearer, at at least three points.
15. A carrying unit according to claim 11, wherein the at least one piece of material is permanently mounted on the garment or backpack.
16. A carrying unit according to claim 11, wherein the at least one piece of material is demountably mounted on the garment or backpack.

17. A carrying unit according to claim 11, wherein the receptacle is directly mounted on the garment or backpack, or is mounted on the front of the frame of a frame backpack by at least one elongate flexible strap attached to the receptacle and forming a loop around a frame member and being attached or fastened back on itself or the receptacle by permanent or releasable fastening means.
18. A carrying unit according to claim 12, wherein the sheet of flexible material which is attached to the back of a garment or front of a backpack is generally triangular and attached to a relevant surface to form a generally triangular muff or sleeve with at least two mouths opening obliquely downwardly, and one upwardly.
19. A carrying unit according to claim 12, wherein the sheet of flexible material is rectangular and is attached along three edges to the back of a garment or front of a backpack to form a rectangular pocket with a mouth opening downwardly with a closure
20. A carrying unit according to claim 12, wherein the closure comprises a press-stud mounted on a strap attached to the garment or backpack or receptacle wall on one side of the mouth, co-operating respectively with a socket mounted on the receptacle wall or garment or backpack on the other side of the mouth.
21. A carrying unit according to claim 13, wherein the at least two independent straps extend skewly upright to form a diamond with its longitudinal axis substantially transverse.
22. A carrying unit according to claim 14, wherein the composite holding integer is in the form of a upright T attached to the relevant surface at or near the ends of its arms.
23. A carrying unit according to claim 11, wherein the at least one piece of material is permanently attached to the garment or the bag of a backpack by stitching.

24. A carrying unit according to claim 3, wherein the open-mouthed receptacle has at least one closure on a mouth.

5 25. A kit for permanently or demountably mounting a holding module for carrying a tablet electronic device on the back of a garment on the wearer of the backpack and/or the back face of a backpack (herein the 'relevant surface'), which comprises

- 10 a) the holding module or a component thereof so constructed and arranged that, when permanently or demountably mounted on the relevant surface it will hold and retain a tablet electronic device in a position between the back, of the wearer and the back face of the backpack, and
- b) precursor mounting means comprising precursors of permanent or releasable fastening means for attaching the holding module or a component thereof to the relevant surface.

15

26. A kit according to claim 25, wherein the component of the holding module comprises

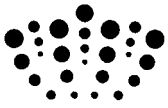
- a) at least two elongate straps of flexible continuous and/or discontinuous material;
- 20 b) at least two elongate straps of flexible continuous and/or discontinuous material, mutually attached to form an composite holding integer, or adapted to be mutually attached to form a composite holding integer; or
- c) a sheet of flexible continuous and/or discontinuous material, each capable together with the relevant surface of forming a receptacle.

25

27. A kit according to claim 25, wherein the precursor mounting means comprise

- a) precursors of stitching, optionally a needle or sailmakers spike and thread, cord, twine or yarn;
- b) an adhesive or bonding;
- 30 c) a pinning precursor;
- d) riveting precursor, optionally hollow rivets, a rivet expansion tool and a hole punch; or
- e) precursors of releasable fastening means and the means for permanently or releasably fastening them to the relevant surfaces.

35



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Claims searched: 1-5, 7-27

Date of search: 9 October 2011

Patents Act 1977: Search Report under Section 17

Documents considered to be relevant:

Category	Relevant to claims	Identity of document and passage or figure of particular relevance
X	1, 3, 4, 5, 7, 8, 11, 12, 15, 23, 24	CA2518127 A1 (HEYS INTERNATIONAL) see paragraphs 0029-0035 and figures 5a and 6
X	1, 3-5, 7, 8, 11-13, 15, 23, 24	KR201021014 A (YOO TED HWAN) see English abstract and figures
X	1, 3-5, 7, 8, 11, 12, 15, 16, 23, 24	US2008/0237288 A (HAMILTON) see paragraph 0018
X	1, 3-5, 7, 8, 11, 12, 15, 23, 24	JP2002058536 A (IKEDA CHIKYU KK) see English abstract and figures
X	1, 3-5, 7, 9, 11, 12, 14, 16, 17, 24, 25	JP10286112 A (HAMANO MASAOKO) - see English abstract

Categories:

X	Document indicating lack of novelty or inventive step	A	Document indicating technological background and/or state of the art.
Y	Document indicating lack of inventive step if combined with one or more other documents of same category.	P	Document published on or after the declared priority date but before the filing date of this invention.
&	Member of the same patent family	E	Patent document published on or after, but with priority date earlier than, the filing date of this application.

Field of Search:

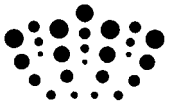
Search of GB, EP, WO & US patent documents classified in the following areas of the UKC^X :

Worldwide search of patent documents classified in the following areas of the IPC

A45C; A45F

The following online and other databases have been used in the preparation of this search report

EPODOC, WPI



International Classification:

Subclass	Subgroup	Valid From
A45F	0003/04	01/01/2006
A45C	0013/18	01/01/2006