(11) EP 3 560 377 A1

(12)

EUROPEAN PATENT APPLICATION

(43) Date of publication:

30.10.2019 Bulletin 2019/44

(51) Int Cl.:

A45F 5/00 (2006.01)

A45F 3/14 (2006.01)

(21) Application number: 19171153.0

(22) Date of filing: 25.04.2019

(84) Designated Contracting States:

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated Extension States:

BA ME

Designated Validation States:

KH MA MD TN

(30) Priority: 25.04.2018 GB 201806786

(71) Applicant: Aburnet Limited Manners Industrial Estate

Ilkeston

Derbyshire DE7 8EF (GB)

(72) Inventors:

 Burnet, Richard Ilkeston, Derbyshire DE7 8EF (GB)

 Parsons, Paul Ilkeston, Derbyshire DE7 8EF (GB)

 Head, Steven Ilkeston, Derbyshire DE7 8EF (GB)

 Catrina, Mihail Ilkeston, Derbyshire DE7 8EF (GB)

(74) Representative: Adamson Jones

BioCity Nottingham Pennyfoot Street

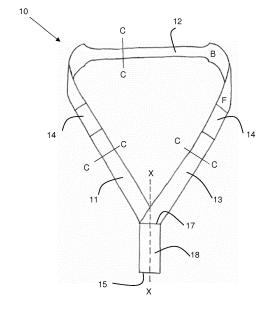
Nottingham NG1 1GF (GB)

(54) LANYARDS

(57) This invention relates to a lanyard. The lanyard comprises an elongate material having opposing front and back faces, the front face being printed. The lanyard further comprises first, second and third sections, the first, second and third sections being disposed sequentially along the length of the lanyard such that the second

section is located between the first and third sections. The second section has a cross-sectional width which is less than a cross-sectional width of both of the first and third sections. The lanyard is arranged such that, in use, the printed front face is visible.

FIGURE 1



EP 3 560 377 A1

15

30

40

45

[0001] This invention relates to lanyards.

[0002] A lanyard is a strap or cord which is worn about the neck, shoulder or wrist, most commonly the neck, and which is used to carry small items such as identification cards, access passes, keys, tickets or medals, or to aid in supporting large items such as trays or medical devices.

1

[0003] Lanyards are used in a wide range of environments, and typically have a means of attachment such as a clip, wallet, ski reel, or tag, which is designed to contain or to which can be attached the relevant means of identification, security pass, ticket etc. In industry, lanyards are often supplied by employers for employees to carry information which it is desirable to have on view or to have easy access to, such as security passes, access passes and/or ID cards. Venues such as exhibition centres and trade shows often supply lanyards as a means of carrying and displaying tickets and exhibitor passes. They may also be used at concerts and sporting events for holding and displaying tickets and/or passes.

[0004] It is known to make lanyards from a range of materials. They are typically formed of a simple, flat piece of fabric or braid of sufficient length to extend about the wearer's neck (or wrist) and to reach the middle of the chest. The two ends of the fabric or braid are normally stitched or welded together, to form a loop which is placed about the wearer's neck (or wrist). Normally, lanyards are between about 10 mm and 20 mm in width along their entire length, as this is a sufficient width to display simple printed text, whilst still being comfortable for the wearer. [0005] Lanyards which have printing on the surface (eg promotional information) are commonly known. As lanyards are typically mass-produced items, a single design of lanyard bearing a promotional message is designed for a workplace or event, and individual information (eg security or ID information) is contained in the security pass, ID card, or ticket, which is attached to the lanyard. [0006] However, ID and security cards for use in this arrangement typically have low quality pictures and, in use, are positioned some way from the wearer's face such that it is difficult to simultaneously view the wearer's face and their picture on the card. This increases the risk that someone wearing an incorrect ID badge would not be identified.

[0007] The pass, ID card, ticket or other item attached to the lanyard necessarily carries a manufacturing cost, and can be heavy and/or unwieldy to wear. Normal movement by the wearer can cause the attachment to swing creating a pendulum effect, both causing annoyance for the user and giving rise to a risk of entanglement.

[0008] When worn, lanyards often move and twist. In addition to being awkward for the wearer, this means that it is necessary for any promotional printing to be applied to both sides of the lanyard to ensure that it is in view at all times. This significantly increases the cost of production, as well as making it difficult to read the printed in-

formation and thus reducing the value of using a lanyard as a means of displaying promotional material.

[0009] There is now provided a lanyard which overcomes and/or substantially mitigates the above mentioned and/or other problems associated with the prior art.

[0010] According to a first aspect of the invention, there is provided a lanyard comprising an elongate material having opposing front and back faces, the front face being printed, the lanyard comprising first, second and third sections, the first, second and third sections being disposed sequentially along the length of the lanyard such that the second section is located between the first and third sections, the second section having a cross-sectional width which is less than a cross-sectional width of both of the first and third sections, and the lanyard being arranged such that, in use, the printed front face is visible. [0011] The lanyard of the invention is a strap or band which is intended to be worn about the neck, shoulder or wrist. In particular, the lanyard of the invention may be worn about the neck. The ends of the lanyard may be joined to form a loop which can be worn about the neck (or wrist, or shoulder).

[0012] The lanyard of the invention comprises an elongate material. The lanyard may be formed of an elongate material. The elongate material may be flat, and may be a strip of material of sufficient length to extend around the back of the neck of the wearer and down and extend on the wearer's front down to their mid-torso.

[0013] The elongate material may be a knitted, woven or nonwoven material. It may be a flexible material that conforms to the shape of the body when worn, and does not easily crease. The elongate material may have a substantially flat surface, suitable for printing, for example digital printing.

Additives may be included in the fabric to increase comfort for the wearer or to improve other features of the lanyard. Alternatively or additionally, coatings and/or finishes may be applied to the yarn to affect the appearance, for example making it brighter or more attractive. Additives include silicone or other softeners which improve the feel of the material and so increase the wearer's comfort. Bright trilobal yarns may be incorporated into the fabric to increase brightness, thus increasing the impact of any promotional or other printed information which is printed on the surface of the lanyard. Additives may also be incorporated into the fabric to improve hygiene, for example, antimicrobial agents may be used to reduce pathogen contamination and repel or reduce odour in lanyards which are intended to be worn repeatedly, coatings may be applied to repel dirt, and/or wicking yarns or wicking coating treatments may be incorporated to facilitate the wicking properties of the lanyard fabric, helping to remove sweat and thus increase the wearer's comfort. **[0014]** The lanyard of the invention has opposing front

and back faces, that is, the elongate fabric from which the lanyard is formed has a front face and a back face, the front and back faces being on opposing sides. The

15

front face of the elongate fabric is printed, and is visible while the lanyard is being worn. The back face of the elongate fabric may or may not be printed, and may be invisible, or only minimally visible, when the lanyard is worn correctly.

[0015] It is important that the lanyard is worn the correct way round, so that the printed front face is visible. The biggest hurdle to achieving this is compliance by the wearer, or the willingness of the wearer to wear the lanyard the correct way round. To that end, the back face may include features which make the wearer desirous of wearing the lanyard the correct way round. For example, the back face of the lanyard may include stitching or folds which look untidy, or may carry a printed message which encourages the user to display the front face of the lanyard may be such that it only lies flat on the body when worn the correct way round, and twists or distorts when worn incorrectly.

[0016] The front face of the elongate material is printed. The front face may be digitally printed. Digital printing enables high quality, multi-colour images to be applied to the lanyard. Digital printing also permits short print runs enabling small quantities, or even individual lanyards, to be produced to a specific specification.

[0017] The use of high quality digital images also mean that ID information can be applied directly or indirectly to the fabric of the lanyard, without the need for a pendant card or pass to be attached. For example, identification photographs of the wearer can be printed directly onto the lanyard. Typically, photographs would be printed on the first and/or third sections of the lanyard in a position so that, when the lanyard is worn, they are situated near the shoulder of the wearer. The photographs would thus be close to the face, and easy to check for security reasons.

[0018] QR codes, barcodes and/or other identification means may also be printed directly onto a lanyard, enabling the lanyard itself to be used as a security pass, ticket or authorisation without the need for a separate pass.

[0019] High quality digital printing also enables good quality promotional material to be printed onto the lanyard, which may be desirable at exhibitions and trade shows, where sponsors wish to have their branding visible to all visitors. The lanyard of the invention is arranged such that, in use, the printed front face of the lanyard is visible, ensuring that high quality promotional material is visible at all times, giving a greater impact than may be achieved with lanyards of the prior art.

[0020] The significant cost of digital printing has previously meant that it was cost prohibitive to use digital printing on lanyards, as the cost of printing was often more than the cost of the lanyard itself. It may therefore be preferable for the elongate material to only be printed on the front face, with the back face not being printed. As the lanyard is arranged such that the front face is visible, any information printed on the front face will be visible

during normal use.

[0021] A further advantage of the use of digital printing is that it enables bespoke lanyards, or small numbers of lanyards, to be economically produced in an automated process. This enables, for example, an employer to use the lanyard of the invention as an ID or security tag, or for conferences or other events to use lanyards as a ticket or exhibitor pass. Automation allows bespoke printing where the labour cost would previously have been prohibitive. In addition, the arrangement of the lanyard such that the printed front face of the lanyard is visible means that it is not necessary for the back face of the lanyard to be printed, again reducing the cost of manufacture and making it possible to print a lanyard in a single run.

[0022] Production of the lanyard may be carried out in batches, with individual lanyards separable by means of tearing or cutting along a perforated line. Where multiple lanyards are ordered they may be supplied individually or as a chain, the chain being separable by tearing or cutting along a perforated line. Multiple lanyards may alternatively be supplied in a set arranged in a predetermined sequence (eg in ticket number order), with each lanyard attached to the set by means of a detachable tab. In order to dispense a lanyard, the desired lanyard is identified in the set and removed from the detachable tab, for example by cutting or tearing along a perforated line. The detachable tab may be retained by the dispenser as evidence that the lanyard has been dispensed.

[0023] Depending on the environment in which the lanyard is intended to be used, and its desired functionality, other security means may be incorporated either into the elongate material, or into the printed images. These include but are not limited to embedding an RF tag or microchip into the elongate material, including conductive materials (eg copper or steel) in the elongate material incorporating GPS, GSM and/or Bluetooth technology for location detection, and/or applying a watermark, ultraviolet inks, a hologram and/or other authentication technology to prevent counterfeiting.

[0024] It is believed that the provision of a bespoke printed lanyard as a means of identification is new, and according to a second aspect of the invention there is therefore provided a lanyard comprising an elongate material having opposing front and back faces, the front face being printed with at least one form of personal identification, the lanyard being arranged such that, in use, the printed front face is visible.

[0025] "Personal identification", within the context of the invention, means a form of identification which is specific to an individual and is intended to identify that individual. Personal identification includes, but is not limited to, a name, an identifying number (eg ticket number, order number, employee number, visitor number etc), photograph, individual barcode or individual QR code. Any feature described in relation to one aspect of the invention is hereby also disclosed in combination with the other aspects of the invention.

[0026] The lanyard of the first aspect comprises first,

second and third sections. The lanyard of the second aspect may comprise first, second and third sections. The first, second and third sections are disposed sequentially along the lanyard. That is, they are disposed one after the other along the length of the elongate material. The second section is disposed between the first and third sections, with the first, second and third sections extending longitudinally along the length of the elongate material.

[0027] The second section may, when worn, extend about the neck of the wearer, while the first and third sections may extend from the shoulder down the front of the torso.

[0028] The first and third sections may be the same length, or may be of different lengths, and may be between approximately 200mm and 450mm long, or between about 250mm and about 400mm long. The second section may be of sufficient length that it extends only around the back of the neck of the wearer, between the wearer's shoulders. The second section may be approximately 100-500mm, 200-500mm or 230-500mm long.

[0029] In the first aspect of the invention, the second section has a cross-sectional width which is less than a cross sectional width of both of the first and third sections. In the second aspect of the invention, the second section may have a cross-sectional width which is less than a cross sectional width of both of the first and third sections. The cross-sectional width is the width of the elongate material measured perpendicular to the longitudinal axis, which extends along the length of the elongate material. It has been found that the presence of a narrowed section positioned about the neck increases comfort for the wearer, as it prevents the edges of the lanyard from rubbing on their neck.

[0030] Any of the first, second or third sections may have a consistent width along the length of the section, or may vary in width along their length. In particular, any or all of these sections may have a taper either along a portion of its length, and/or may taper at the end of the section, particularly at the transition between the different sections. Thus, the minimum cross-sectional width of the second section may be less than the maximum cross-sectional width of the first and third sections. Additionally or alternatively, the mean average cross-sectional width of the second section may be less than the mean average cross-sectional width of the first and third sections.

[0031] The cross-sectional width of the second section may be, or may have a mean average of between about 1mm and 20mm, 5mm and 20mm or 10mm and 20mm.
[0032] The cross-sectional width of the first and third sections may be the same or different. The cross-sectional width of the first and third sections may independently be, or may have a mean average of between about 20mm and about 70mm, or between about 25mm and 60mm, for example 30mm or 40mm. Thus, the first and third sections may be wider both than the second section, and wider than conventional lanyards known in the art.
[0033] It has been found that having the first and third

sections with widths falling within the ranges described above provides sufficient space for a high quality, recognisable image of a human face to be printed onto the lanyard. The inclusion of wide first and third sections is enabled by the presence of the narrower second section, which improves comfort for the wearer who may otherwise find a broad band about the back of the neck uncomfortable. The ability to produce a broader lanyard enables a larger range of high quality printed identification and promotional information to be applied to the fabric, as well as recognisable facial images.

[0034] The lanyard may be produced from a unitary piece of fabric, or may be produced from a plurality of lengths of fabric which have been joined together by any appropriate means known in the art, for example, sewn, sonic welded, glued, otherwise bonded, clipped, tagged or stapled. Where a plurality of lengths of fabric are joined together they may correspond to the first, second and third sections and may have different widths and/or may have a different fabric composition. For example, the fabric used to form the second section which passes about the wearer's neck may be designed to increase comfort, and may therefore be a softer material or one with impact absorbent properties.

[0035] Particularly where the lanyard is produced from a unitary piece of fabric, the narrower second section may be produced by any suitable method which results in the formation of a narrower section of fabric. In one embodiment, the fabric may be shaped during manufacture or cut after manufacture to form a scalloped edge along the length of the second section, such that the elongate fabric narrows along one or both edges.

[0036] Alternatively, the narrowed second section may be formed by folding the fabric in the region of the second section. In one embodiment, the fabric of the second section may be folded such that the outer edges of the elongate material meet along the length of the second section. The outer edges may then be sealed together by stitching or welding, and/or the two layers of fabric may be stitched, welded, glued or joined by any other means known in the art at each end of the second section, and/or at intervals along the second section. This folded structure creates a pocket of air within the fold, which absorbs movement and increases comfort for the wearer.

[0037] In an alternative embodiment, the two outer edges along the length of the portion of fabric forming the second section may be folded across the centre of fabric such that they overlap, or are folded towards each other such that the join is concealed, and sealed in place using stitching, sonic welding, gluing, stapling or any other suitable means at each end of the second section, at intervals along the folds, and/or along the length of the fold. Again, this creates a pocket of air within the fold, and helps to conceal the edges of the fabric which may cause irritation against the neck.

[0038] In embodiments where the second section is narrowed by folding the fabric, a section of reinforcing fabric may be incorporated into the fold at each end of

the second section, and held in place by the bonding means used to hold the fold in place. It has been found that the inclusion of reinforcing fabric at each end of the second section helps the lanyard to lay flat on the neck of the wearer at this point, enabling any printed information to be clearly visible.

[0039] Features may be incorporated to encourage the lanyard to lie flat about the wearer's shoulders, for example, a small fold or tuck located at each end of the second section has been found to help the lanyard lie flat when it is worn the correct way round, while distorting the lanyard if it is worn back-to-front, thus encouraging compliance by the wearer.

[0040] Other components may be incorporated into the second section to increase the wearer's comfort. For example, fabric, spacer fabric or sponge material may be bonded to the fabric of the second section, or may be folded or rolled into the fabric of the second section to create a cushioned area to increase wearability.

[0041] The lanyard is arranged such that, when worn, the printed front face of the lanyard is visible. The lanyard is arranged such that, when worn, the front face is reliably visible, and may be arranged such that substantially none of the back face of the lanyard is visible. The back face of the lanyard may include stitching or folds which look untidy, or may carry a printed message which encourages the user to display the front face of the lanyard. Alternatively or additionally, the structure of the lanyard may be such that it only lies flat on the body when worn the correct way round, and twists or distorts when worn incorrectly.

In some embodiments, the first and third sections may join at an attachment point. The first and third sections may join at an attachment point in a "V" shape, and the "V" shape may have an acute angle of between 5° and 60°, or of between 10° and 50°, or of between 20° and 40°, or of between 25° and 35°, for example 27°, 28°, 29°, 30°, 31° or 32°. At the "V" shaped attachment point, the front face of one of the first and third sections may come into contact with the back face of the other of the first and third sections, ie such that the front face of the lanyard on both the first section and the third section face the same general direction, eg outwardly facing when worn. That is, one of the first and third sections may partially overlay the other of the first and third sections at the attachment point. It has been found that, where the first and third sections join at an attachment point in a "V" shape, particularly with an angle as described above and in the overlaying manner as described above, the lanyard lays flat on the chest of the user when the lanyard is worn with the printed front face exposed, preventing twisting and distortion of the lanyard. If the lanyard is worn back-to-front, the "V" shape will not lay flat on the chest of the user but cause the lanyard to distort, discouraging the wearer from wearing the lanyard the wrong way round.

[0042] The first and third sections may join at an attachment point in a "V" shape as described in the pre-

ceding paragraph, wherein the front face of both the first and third sections are on the same face of the "V", that is, that the first and third sections are orientated such that the front face of both the first and third sections are visible simultaneously. This arrangement means that, when worn, only the printed front face of the lanyard is visible: substantially none of the back face of the lanyard is visible. This orientation also resists twisting and distortion of the lanyard as the wearer moves.

[0043] The lanyard may be formed from an elongate material comprising two free ends. In this embodiment, the attachment point may be a point at which two points at or close to the free ends of the elongate fabric are bonded together to form a "V" shape, the first and third sections being defined by being either side of the "V" shape. After bonding, an end portion at each end of the elongate material may extend below the attachment point. The end portion at one end may be longer than the end portion at the other end, ie the end portion at one end may extend further below the attachment point than the end portion at the other end. The longer end portion may be folded over the shorter end portion, ie to conceal the shorter end portion from view. After folding, the longer end portion may be bonded with a face of the lanyard.

[0044] Alternatively, the elongate material may comprise a continuous piece of fabric, ie formed as a loop of fabric. In this embodiment, the attachment point may be a point at which the continuous piece of fabric is bonded and folded to form the required "V" shape, the first and third sections being defined by being either side of the "V" shape. After bonding, an end portion of the continuous piece of fabric may extend below the attachment point, and may have the form of a loop of material. The end portion may be folded backwardly, ie away from the front face of the lanyard and towards the back face of the lanyard, and bonded with the back face of the lanyard.

[0045] The attachment point may alternatively be an additional component. The attachment point may be an attachment member, to which the first and third sections are attached. The attachment member may have a V or U shape, wherein the first and third sections are each attached to one end of the attachment member. The attachment member may be formed of any suitable material, for example a plastic or textile material.

45 [0046] A fourth section of elongate fabric may extend below or depend from the attachment point, onto which further information (for example a barcode or QR code relating to an access or security pass) can be printed. This section may be formed integrally with the lanyard.
 50 A clip, wallet, tag or similar may also be coupled to the attachment point or to the fourth section, to permit the accompanying use of removable/interchangeable ID or passes

[0047] Where the lanyard is formed from an elongate material comprising two free ends, and the attachment point is a point at which two points at or close to the free ends of the elongate material are bonded together to form a "V" shape, the longer end portion may form the fourth

section of elongate material that extends below or depends from the attachment point. The longer end portion may fold forwardly, ie away from the back face of the lanyard and towards the front face of the lanyard, to fold over the shorter end portion. An intermediate part of the longer end portion may be bonded to a point close to the attachment point, and may be folded back over itself, such that the remainder of the longer end portion depends from the attachment point, and extends below the attachment point when worn. The folding and bonding of the longer end portion may be arranged to substantially align the longer end portion, and hence the fourth section of the elongate material, with a bisecting axis of the "V"shaped attachment point. For example, the bonding of the intermediate part of the longer end portion close to the attachment point may be along a bonding line that is substantially perpendicular to the bisecting axis of the "V"-shaped attachment point.

[0048] However, where no fourth section of elongate fabric is present, the longer end portion may fold backwardly, ie away from the front face of the lanyard and towards the back face of the lanyard, to fold over the shorter end portion. A point at or close to the free end of the longer end portion may be bonded to point at or close to the free end of the shorter end portion. This allows the free ends of the end portions to be concealed during use of the lanyard.

[0049] Where the first and third sections join at an attachment point in a "V" shape, the first and third sections may further join at a second attachment point. The second attachment point may be positioned towards the second section from the first attachment point, ie upwardly of the first attachment point when worn by a user. The first and third sections may join at the second attachment point by stitching, sonic welding, gluing, stapling or any other suitable means. The second attachment may be positioned between 5mm and 50mm, or between 10 and 30mm from the first attachment point. This prevents twisting of the lanyard and helps to ensure that the lanyard lays flat against a wearer with the printed face facing outwardly, particularly when the wearer is wearing an open neck collar.

[0050] In some embodiments, the elongate fabric may have a proximal end and a distal end, the proximal end and the distal end, or points close to the proximal end and the distal end, of the fabric being fixed together at an attachment point such that, in use, the front face of the lanyard is visible. The proximal and the distal ends of the fabric, or points close to the proximal end and the distal end, may be fixed together such that, in use, substantially none of the back face of the lanyard is visible. The proximal and distal ends of the fabric may be fixed together by any suitable means, which include stitching, bonding, gluing and welding.

[0051] The proximal and distal ends of the fabric, or points close to the proximal end and the distal end, may be joined together such that the front face of the proximal end (or a point close thereto) comes into contact with the

back face of the distal end (or a point close thereto), that is, that the distal end overlays the proximal end, such that the front face of the lanyard is uppermost on both the proximal and distal ends.

[0052] The proximal and distal ends of the fabric (or points close thereto) may be joined together in a "V" shape with an angle of between 5° and 60°, or of between 10° and 50°, or of between 20° and 40°, or of between 25° and 35°, for example 27°, 28°, 29°, 30°, 31° or 32°. This helps the lanyard to lay flat on the chest of the user, preventing twisting and distortion of the lanyard, and encourages the wearer to wear the lanyard in the correct orientation.

[0053] Where a point close to either or both of the proximal or distal end is joined, the remaining length of fabric between the attachment point and the proximal or distal end of the fabric may extend below the attachment point to form the fourth section, onto which further information (for example a barcode or QR code relating to an access or security pass) can be printed. A clip, wallet, tag or similar may also be coupled to the attachment point or to the fourth section, to permit the additional use of removable/interchangeable ID or passes.

[0054] By "close to" the proximal end or distal end is meant, in the context of the invention, that the attachment point is located within 200mm of the proximal and/or distal end, or within 150mm of the proximal and/or distal end, or within 100mm of the proximal and/or distal end.

[0055] In an alternative embodiment, the elongate material may be formed of a continuous loop of fabric. In this embodiment, the first and third sections may form a continuous section, broken only by the comparatively narrowed second section. The lanyard may be shaped to lie on the body through a series of spaced tucks or pleats in the first and third sections. Alternatively, the lanyard may be shaped using a heat press.

[0056] In any embodiment, the lanyard of the invention may also comprise at least one fastener., The fastener may comprise a buttonhole or a clip, for attachment to the wearer's clothing, to prevent substantial movement of the lanyard while it is worn. For example, where present the fourth section may comprise one or two buttonholes which affix to the wearer's shirt or blouse. Alternatively, the lanyard may comprise one or more clips which attach to the wearer's waistband or belt. As well as preventing movement of the lanyard which may irritate the wearer, this arrangement reduces the risk of entanglement and helps to ensure that the lanyard remains with the front face visible. The at least one fastener may be positioned such that it does not overlay a printed portion of the lanyard.

[0057] In lanyards of the invention, the elongate fabric may comprise two or more fasteners, eg buttonholes or clips, for attachment to points on the wearer's clothing, wherein the lanyard is not intended to go about the wearer's neck. For example, the lanyard may be formed from a strip of fabric which is attached to the wearer's shirt at two points, the fabric of the lanyard extending between

40

45

those two points. The two or more fasteners may be positioned such that they do not overlay a printed portion of the lanyard.

[0058] The lanyard of the invention may further comprise one or more break points, or clips, which release under a small amount of pressure, to reduce the risk of entanglement. The break points, or clips, may be arranged such that they are located away from any security or identification device, eg a photograph, barcode or hologram. Particularly where there are multiple break points or clips, these are located away from any security or identification device (eg they may be located in the second section, which sits at the back of the neck) such that it is not possible to remove or replace a security or identification device.

[0059] Certain embodiments of the invention will now be described in further detail by reference to the following Figures.

Figure 1 - an embodiment of a lanyard according to the invention;

Figure 2a - a cross sectional view of the lanyard of Figure 1 along the line X-X;

Figure 2b - an alternative embodiment of the view of Figure 2a;

Figure 3 - an alternative embodiment of a lanyard according to the invention

[0060] Figure 1 shows a lanyard 10 comprising a first section 11 and a third section 13, with a second section 12 disposed between the first and third sections 11, 13 such that the first, second and third sections 11, 12, 13 are disposed sequentially along the length of the lanyard. The two sides of the second section have been cut out to form a scalloped shape, giving the second section 12 a narrower cross-sectional width along the line C-C than the first and third sections 11, 13.

[0061] The front face F of the lanyard is printed, and carries photographs 14 of the wearer as a form of ID. The photographs 14 are located about two thirds of the way along the first and third sections 11, 13, such that they will be close to the wearer's face when the lanyard is worn, enabling easy comparison of the photographs to the wearer's face.

[0062] When worn, the front face F of the lanyard is visible, while the back face B of the lanyard faces the body and is substantially invisible.

[0063] The lanyard 10 is formed from a single piece of elongate material having a distal end 16 on the first section 11 and a proximal end 15 on the third section 13 (see Figures 2a and 2b). The distal end 16 of the elongate material is joined to a point approximately 5-100mm from the proximal end 15 in a folded arrangement, as depicted in Figures 2a and 2b.

[0064] The first and third sections 11, 13 meet in a "V" shape, with the distal end 16 of the fabric abutting the underside (the back face) of the second section 13 at a point slightly further than 100mm from the proximal end

15. The second section 13 is folded over the distal end 16, before being folded back on itself at a point approximately 100mm from the proximal end 15, forming the depending section 18. When the second section 13 is folded back on itself, the angle is adjusted such that the resulting depending section 18 hangs vertically. The fold is sealed by a line of stitching across the width of the elongate material 17.

[0065] In the alternative embodiment shown in Figure 2b, a 20-50mm portion of fabric at the distal end 16 of the lanyard is folded and sealed against the back face of the first section 11, such that the front face of the folded portion is exposed. This creates a folded distal end 19, while the distal end 16 is sealed to the underside of the first section 11. The first and third sections 11, 13 meet in a "V" shape, with the folded distal end 19 of the fabric abutting the underside (the back face) of the second section 13 at a point slightly further than 100mm from the proximal end 15. The second section 13 is folded over the folded distal end 19, before being folded back on itself at a point approximately 100mm from the proximal end 15, forming the depending section 18, and leaving the distal end 16 exposed. When the second section 13 is folded back on itself, the angle is adjusted such that the resulting depending section 18 hangs vertically. The fold is sealed by a line of stitching across the width of the elongate material 17.

[0066] This results in a portion of the front face F adjacent to the distal end 16 being visible from the reverse side of the lanyard, onto which a printed message may be applied encouraging the wearer to wear the lanyard the correct way round. This also creates an unsightly appearance on the reverse of the lanyard, again encouraging the wearer to wear the lanyard the correct way around.

[0067] The depending section 18 may optionally be folded towards the back of the lanyard and sealed along the line of stitching 17 to provide the depending section 18 with a double thickness of fabric, wherein the printing on the front face F (eg a barcode) will appear on both sides for ease of use.

[0068] The folded arrangement shown in Figures 2a and 2b provides a depending section 18 which may be printed with an access pass (eg a QR code or barcode), making it easy for the wearer to access such a pass for moving through a secure building.

[0069] Figure 3 depicts a lanyard 30 comprising a first section 31 and a third section 33, with a second section 32 disposed between the first and third sections 31, 33, such that the first, second and third sections 31, 32, 33 are disposed sequentially along the length of the lanyard. In the second section 32, the edges of the section are folded towards the back face of the lanyard so that they overlap, with the fold being held in place by regular lines of stitching 34. The lines of stitching 34 may equally be lines of welding, glue, or other suitable bonding means, and the fold may additionally or alternatively be bonded along the length of the fold.

35

5

20

25

30

35

45

50

The lanyard 10 is formed from a single piece of elongate material having a proximal end 35 on the first section 31 and a distal end 36 on the third section 33. The first and third sections 31, 33 meet at a point 37 approximately 90mm from the proximal and distal ends 35, 36, at an angle A of approximately 29°. The first and third sections 31, 33 are joined together along the edge of the fabric by stitching or welding between the point 37 at which they meet and the proximal and distal ends 35, 36. The proximal and distal ends 35, 36 are folded towards the back of the lanyard by approximately 10mm to provide a neat finish, and to form a loop to which a clip 38 may be attached for the connection of a wallet or additional card or pass.

13

[0070] This structure will only lay flat on the wearer when it is worn the correct way round; when worn backto-front, the "V" shaped join distorts the shape of the lanyard such that it does not lay flat on the user's chest, and looks unsightly.

Claims

- 1. A lanyard comprising an elongate material having opposing front and back faces, the front face being printed, the lanyard comprising first, second and third sections, the first, second and third sections being disposed sequentially along the length of the lanyard such that the second section is located between the first and third sections, the second section having a cross-sectional width which is less than a cross-sectional width of both of the first and third sections, and the lanyard being arranged such that, in use, the printed front face is visible.
- **2.** A lanyard according to Claim 1 wherein, in use, substantially none of the back face is visible.
- 3. A lanyard according to any preceding claim, wherein the front face is digitally printed.
- **4.** A lanyard according to Claim 3, wherein the digital printing includes at least one form of personal identification printed on the first and/or third sections.
- 5. A lanyard according to any preceding claim, wherein, in use, the second section extends between the wearer's shoulders, and/or wherein the second section is between 200mm and 500mm long.
- 6. A lanyard according to any preceding claim, wherein the mean average cross-sectional width of the second section is between about 1mm and 20mm, and/or wherein the mean average cross-sectional width of the first and third sections is between about 20mm and about 70mm.
- 7. A lanyard according to any preceding claim, wherein

the section of the elongate material which forms the second section is folded.

- **8.** A lanyard according to any preceding claim, wherein the first and third sections join at an attachment point.
- **9.** A lanyard according to any preceding claim, wherein the first and third sections are joined at an attachment point in a "V" shape.
- **10.** A lanyard according to Claim 9, wherein the "V" shape has an acute angle of between 10° and 50°, or between 20° and 40°.
- 5 11. A lanyard according to any of Claims 8 to 10, wherein a fourth section of elongate fabrics depends from the attachment point.
 - 12. A lanyard according to any of Claims 1 to 7, wherein the elongate fabric has a proximal end and a distal end, and the proximal and distal end, or points close to the proximal and distal end, are joined together such that the front face of the proximal end, or a point close thereto, is in contact with the back face of the distal end, or a point close thereto.
 - **13.** A lanyard according to Claim 12, wherein the proximal and distal ends, or points close to the proximal and distal ends, are joined together in a "V" shape with an acute angle of between 20° and 40°.
 - 14. A lanyard according to Claim 12 or Claim 13, wherein the proximal and distal end, or a point within 150mm of the proximal or distal end, are joined together such that the front face of the proximal end, or a point within 150mm of the proximal end, is in contact with the back face of the distal end, or a point within 150mm of the distal end.
- **15.** A lanyard according to any preceding claim, wherein the lanyard further comprises at least one fastener for attachment to a wearer's clothing.

FIGURE 1

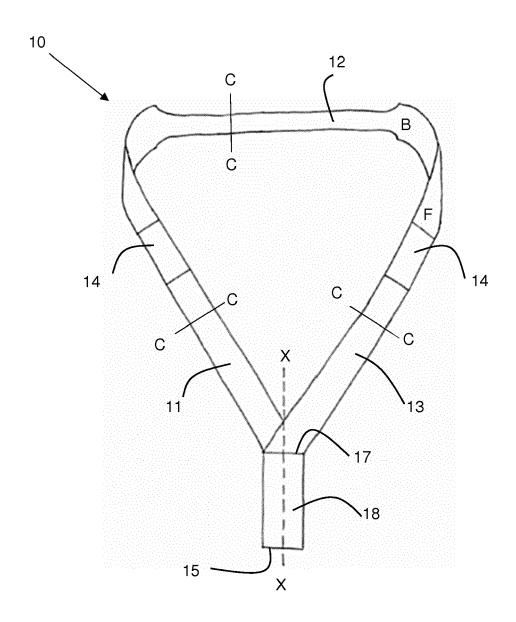


FIGURE 2a

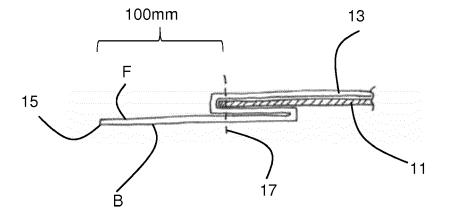


FIGURE 2b

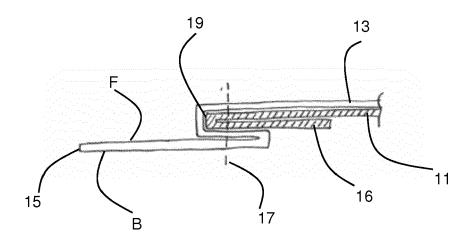
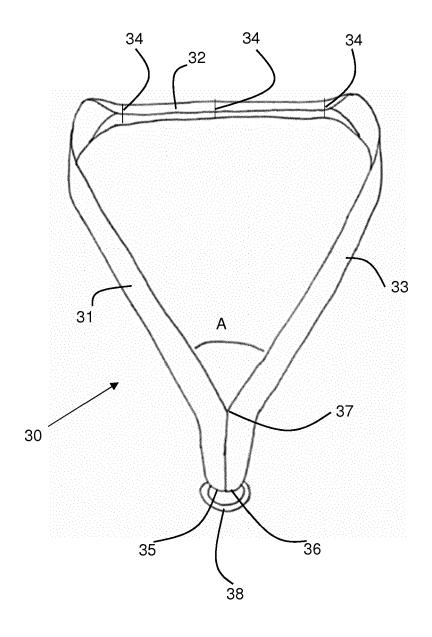


FIGURE 3





EUROPEAN SEARCH REPORT

Application Number EP 19 17 1153

	Category	Citation of document with in	dication, where appropriate,	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)		
10	X	US 6 276 029 B1 (BU 21 August 2001 (200 * column 1, line 61 * figures *	1-15	INV. A45F5/00 A45F3/14			
15	X Y	KR 2009 0008740 U (31 August 2009 (200 * the whole documen	9-08-31)	1-7 8-15			
20	X A	US 2003/080165 A1 (1 May 2003 (2003-05 * paragraphs [0029] * figures 1,2,5 *		1-10, 12-15 11			
25	X A	US 2016/135571 A1 (ET AL) 19 May 2016 * paragraphs [0013] * figures *	GALLOWAY KELLY J [US] (2016-05-19) - [0069] *	1-6,8-15 7			
30	A	US 6 036 066 A (GIA 14 March 2000 (2000 * abstract * * figures *	CONA III CORRADO [US]) -03-14)	1-15	TECHNICAL FIELDS SEARCHED (IPC) A45F A45C		
35	Υ	US 2008/203127 A1 (ESTELLA M [US]) 28 August 2008 (200 * the whole documen	8-08-28)	8-15			
40	A	CN 201 540 433 U (P 4 August 2010 (2010 * abstract * * figures *		8-15			
	X	CN 104 522 971 A (C NON WOVEN FABRICS P 22 April 2015 (2015 * the whole documen	-04-22)	1-7 8-15			
45							
1	The present search report has been drawn up for all claims Place of search Date of completion of the search				Examiner		
50 (100)	I '		22 August 2019	Frank, Lucia			
1503 03.82 (P04001)	CATEGORY OF CITED DOCUMENTS T : theory or principle		e underlying the invention sument, but published on, or e				
55 EPO PO P	doc A : tech O : nor	document of the same category A: technological background O: non-written disclosure P: intermediate document L: document cited for other reasons **Emember of the same patent family, corresponding document					

EP 3 560 377 A1

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 19 17 1153

5

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

22-08-2019

10	Patent document cited in search report		Publication date	Patent family member(s)		Publication date
	US 6276029	В1	21-08-2001	NONE		
15	KR 20090008740	U	31-08-2009	NONE		
	US 2003080165	A1	01-05-2003	US 2003080 US 2004206		01-05-2003 21-10-2004
	US 2016135571	A1	19-05-2016	NONE		
20	US 6036066	Α	14-03-2000	NONE		
	US 2008203127	A1	28-08-2008	NONE		
25	CN 201540433	U	04-08-2010	NONE		
	CN 104522971	Α	22-04-2015	NONE		
30						
35						
40						
40						
45						
50						
,						
55						

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82