### **2008 PAPER P3**

### SAMPLE SCRIPT A

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### A Cable Tidy

The present invention relates to devices for storing cables, in particular to devices for storing unwanted length of cable.

### Prior Art

It is known that cables are needed in a variety of lengths, depending on the situation. Naturally for any given cable length requirement a cable at least that length, and typically somewhat longer, must be used. The excess cable can then be problematic, for example being a trip hazard or more simply just being unsightly.

It is known to address this problem using a drum, where one end of the cable projects from the centre of the drum (perhaps via a socket thereon) and the other end of the cable wraps around the drum. This solution is less than ideal as it tends to cause twisting of the cable when the cable is unwound from the drum.

It would therefore be desirable to provide an improved device for storing unwanted length of cable.

## Statement of Invention

According to a first aspect the present invention provides a device as claimed in Claim 1.

By placing the device at a point on the cable length, relative rotation of the spool and cover portions causes cable from both sides of that point to be wrapped around the cable anchor. Thus the cable can remain plugged in at either end, whilst being effectively shortened and the winding mechanism advantageously does not cause significant twisting of the cable.

In one embodiment, as in Claim 2, the spool and cover portions resist relative rotation, advantageously holding the cable at the desired effective length. This resistance may be provided in a variety of ways, but in one embodiment is provided by inter-engaging bumps and depressions on the spool and cover portions.

In one embodiment, as in claim 4, two pins on the spool portion provide the cable anchor, the cable lying between the pins. The pins rotatably engage a pivot hole in the cover portion.

In one embodiment, as in Claim 5, a snap fit is provided by means of the pins being resilient and having enlarged ends.

The resistance to relative rotation may also be provided by relative shapes of the pins and the pivot hole eg a tight fit or each having flat faces, as in the embodiment of Claim 6.

In one embodiment, as in Claim 7, both ends of the cable enter the device through a single opening therein. In another embodiment, as in Claim 8, each end enters through its own opening.

In embodiments, as in Claims 9 and 10, the spool portion and/or cover portion have digit holes or surface ridges to assist manual winding of the cable.

In one embodiment, as in Claim 11, a transparent spool and/or cover portion enables the user to spot problems inside the device, such as unexpected twisting/slipping.

In one embodiment, as in Claim 12, the device may be provided with some cable already wound onto it. The device can then be deployed immediately.

In one embodiment, as in Claim 13, that cable is network cable. Such cables benefit from the non-twisting storage provided.

An example embodiment will now be described for illustrative purposes only with reference to the appended figures in which:

Figure 1 is an exploded view of a device according to one embodiment of the present invention;

Figure 2 is an elevated view of a section through the device in Figure 1; and Figure 3 is a plan view of the device in Figure 1 showing a partially wound cable.

Figure 1 schematically illustrates a device for storing unwanted length of a cable (colloquially referred to as a "cable tidy") according to one embodiment of the present invention.

The cable tidy is generally formed of two separable parts: cover portion 10 and spool portion 20. These two parts releasably engage one another by means of pins 30 integrally formed on the spool portion 20 and pivot hole 40 in the cover portion 10.

Both cover portion 10 and spool portion 20 are formed by plastics moulding.

In this embodiment both cover portion 10 and spool portion 20 are made of transparent plastics material, enabling the user to see inside.

Cover portion 10 and spool portion 20 are formed with a series of bumps and depressions 50 on their respective edges, these bumps and depressions being formed to engage one another such that rotation of the cover portion relative to the spool portion is possible with moderate effort, but does not happen inadvertently, eg when a cable is lightly tugged.

Intentional rotation of the cover portion 10 relative to the spool portion 20 is facilitated by the provision of finger/thumb holes 60 in the spool portion and vertical ridges 70 on the outer surface of the cover portion 10.

The cover portion 10 is further provided with slots 80 through which a cable can enter the device. These are rounded so as not to damage the cable. Both cables could enter through a single slot, but as illustrated one slot per cable is preferred.

In this embodiment the slots are on opposite side of the cover portion, although they could equally be set at an angle to each other.

The depth of the cover D and the slots are in this embodiment chosen such that a standard network ribbon cable nearly fills this dimension with its broad width. This further improves the avoidance of twisting provided by the device, since the ribbon cable will tend to roll up into a compact roll on the pins (as will be described later with reference to Figure 3).

Figure 2 illustrates how the cover portion 10 and spool portion 20 fit together. Pins 30 are formed of a resilient material (typically the plastics material of the remainder of the device – then only two parts need to be manufactured: cover and spool), allowing them to be slightly bent. They can be bent sufficiently that their enlarged heads 90 will just pass through pivot hole 40, such that the cover and spool portions "snap fit" together. They can be separated again by squeezing the pins together by pinching enlarged heads 90 together.

The use of the device is described now with reference to Figure 3. A cable 100 is laid between pins 30, and the ends of the cable (extending left and right further than as illustrated – Note the omitted portions 110 in figure 3) are laid out diametrically opposite one another on the spool portion 20.

The slots 80 of the cover portion 10 are aligned with the cables and the cover portion is "snap fitted" into place on the pins 30 of the spool portion 20. The user then grasps the spool portion in one hand, inserting fingers and/or thumbs into holes 60, and grasps the cover portion 10 with the other hand (the ridges 70 facilitating this grip).

The user then rotates the cover & spool portions relative to one another and the pins 30 form a cable anchor, with the two ends of the cable being drawn into the device and simultaneously wrapped around the pins, as is illustrated.

The engagement of the bumps and depressions 50 provide moderate resistance, and an audible clicking, as the cable is wound into the device.

The device may be stored with the cable fully wound into it or put straight to use with the desired length of cable left unwound.

If more cable is required the free ends of the cable need merely be pulled with moderate force (to overcome the resistance of the engaged bumps and depressions) until the desired length of cable is unwound.

### Claims

1. A device for storing unwanted length of a cable comprising:

A spool portion, the spool portion having a cable anchor adapted to receive the cable at a point on the cable length; and

A cover portion,

wherein relative rotation of the spool portion and the cover portion causes cable from both sides of said point to wrap around the cable anchor.

- 2. A device as claimed in Claim 1, wherein said spool portion and said cover portion are adapted to resist said relative rotation.
- 3. A device as claimed in Claim 2, wherein resistance to said relative rotation is provided by interengaging bumps and depressions on said spool portion and said cover portion.
- 4. A device as claimed in any preceding claim, wherein said spool portion comprises two pins adapted to rotatably engage a pivot hole in said cover portion, the two pins forming said cable anchor by virtue of the cable lying between the two pins.
- 5. A device as claimed in Claim 4, wherein the two pins are resilient and have enlarged ends to provide a snap fit into said pivot hole.

- 6. A device as claimed in Claim 4 when dependent on Claim 2, wherein resistance to said relative rotation is provided by relative shapes of said pins and said pivot hole.
- 7. A device as claimed in any preceding claim, wherein said cover portion comprises an opening through which said cable from both sides of said point enters the device.
- 8. A device as claimed in any of Claims 1 to 7, wherein said cover portion comprises two openings, cable from one side of said point entering the device through one opening and cable from the other side of said point entering the device through the other opening.
- 9. A device as claimed in any preceding claim, wherein at least one of said spool portion and said cover portion is provided with digit holes to assist manual winding.
- 10. A device as claimed in any preceding claim, wherein at least one of said cover portion and said spool portion is provided with surface ridges to assist manual winding.
- 11. A device as claimed in any preceding claim, wherein at least one of said spool portion and said cover portion is transparent.
- 12. A device as claimed in any preceding claim having at least some cable at least partially wound onto said spool portion.
- 13. A device as claimed in Claim 12, wherein said cable is a network cable.
- 14. A device substantially as herein described with reference to the appended figures.
- 15. A device having at least some cable wound onto it as herein described with reference to the appended figures.

## **Abstract**

# A Cable Tidy

A device for storing unwanted length of cable is provided. A spool portion has a cable anchor to receive cable at a point on its length. A cover portion is rotated relative to the spool portion, causing cable from both sides of the point on the cable to be wrapped around the cable anchor.

# Figure 1

1 page of drawings follows

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### **2008 PAPER P3**

### SAMPLE SCRIPT B

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### A Cable Tidy

The present invention relates to a cable tidy which is adapted to shorten the length of a cable outside the cable tidy.

# **Background**

Cables typically come in standard lengths. For example, network cables come in 1M, 2M, 5M etc standard lengths. However, the appropriate length of cable is often between such standard lengths. A slightly longer cable therefore has to be selected, but the excess cable has to be tidied up, for safety reasons (to minimise trip hazards etc) and aesthetic reasons (excess cable is unsightly).

Often this is resolved by using cable ties. However, they are time consuming to fit and the resulting bundles are still unsightly.

Alternatively, wound electrical extension systems can be used. Such systems have a mains power outlet socket provided on a rotating drum and a cable (with a plug attached thereto) can be selectively unwound from the drum. However, one problem with such a system is that the socket is rotated as the cable is unwound from the drum and a second cable which connects to the socket is twisted, which could damage the cable and limit the amount of cable that can be unwound from the drum. To avoid this, it is necessary to unplug the second cable before winding or unwinding the drum, but this is time consuming and means loss of power/data. Such systems are also relatively expensive and as such are not suited to situations where many cables need to be tidied.

A further potential solution to the problem would be to use conventional coiled cable. However, such coiled cables have an inherent tension within them and this is not suited for many cable applications as the tension can pull the cable plugs from their sockets.

The present invention therefore seeks to address these issues.

# Statement of Invention

According to the present invention there is provided <claim 1>.

Such a cable tidy is advantageous because both portions of the cable are wound around the anchor thereby ensuring that the twisted cables of the prior art does not occur.

The cable tidy may further comprise the features of claims 2 to 4.

Such features are advantageous because they allow the cable tidy to be fitted retrospectively to the cable in question, without having to unplug the cable from its sockets. It is also very straightforward to manufacture these features, for example, the first and second parts could each be single moulded plastic parts.

The cable tidy may further comprise the feature of claim 5. Such a feature is advantageous because the flat faces could limit the rotation of the first and second parts, particularly if they interacted with similar flat faces in the pin hole.

The cable tidy may further comprise the feature of claim 6.

Such a feature is advantageous because it reduces the number of parts required and keeps the cable tidy simple and easy to manufacture.

The cable tidy may further comprise the feature of claim 7. Such a feature is advantageous, because it limits the rotation of the first and second parts thereby preventing the cable length from changing without the parts being deliberately rotated or without a fair degree of tension being applied to the free ends of the cable.

The cable tidy may further comprise the features of claims 8 and 9.

Such features are advantageous as they help in winding the first and second parts relative to each other.

The cable tidy may further comprise the features of claims 10 to 12.

Having just one hole would be advantageous if a longer length of cable is to be tidied and it may be neater to have the cable leave and enter from the same hole, eg if the user didn't want a directional aspect to the cable tidy. Alternatively, having two holes could enable a lighter cable to be provided, the cable tidy neatly being between two plugs/sockets.

The cable tidy may further comprise the feature of claim 13.

Such a feature is advantageous because it would help the cable to run through the holes and would reduce wear and tear on the cables.

The cable tidy may further comprise any of the features in the remaining claims.

Such features are advantageous, for example, having transparent parts allows the user to identify where tangles have occurred inside the cable tidy.

### List of Figures

Embodiments of the invention will now be described by reference to the figures in which

Figure 1 shows an exploded view of the cable tidy and shows both the first and second parts;

Figure 2 shows a side sectional view of the cable tidy; and

Figure 3 shows a plan sectional view of the cable tidy.

# **Detailed Description**

With reference to Fig 1, a cable tidy 2 comprises a first part 4 and a second part 6. The first part 4 comprises an anchor 8 which is a moulded pin with a enlarged end 12 and a slit 10 which is adapted to receive a cable, for example a network cable. The first and second parts 4, 6 are circular in shape and the anchor 8 is placed in the centre of the first part 4. The first and second parts 4, 6 are made from plastic.

The first part 4 further comprises one or more finger or thumb holes 14. In the specific example shown, there are three finger or thumb holes 14, but there may be fewer or more. The first part 4 also comprises a series of protrusions and depressions 16 arranged about its circumference.

The second part 6 comprises a side-wall 18 which extends about the second part's circumference. The side wall 18 has disposed on it a series of protrusions and depressions 20. The protrusions and depressions 20 are positioned and adapted so as to co-operate with the protrusions and depressions 16 of the first part 4. The second part 6 further comprises one or more vertically disposed ridges 22 which are arranged about an outer surface of the side-wall 18. The second part 6 also comprises one or more holes 24 and in the example shown the holes 24 are in the form of slits provided in the side wall 18.

The second part 6 further comprises a pin hole 26 which is located in the centre of the second part 6.

With reference to Figure 2, the pin-hole 26 is adapted to receive the anchor 8 such that the moulded pin fits into the pin hole 26. The pin is slightly compressed as the enlarged end 12 fits through the pin hole 26 and then springs out again, the enlarged end 12 thereby holding the first and second parts 4, 6 together. In this way the first and second parts 4, 6 snap fit together and they can be fitted to an existing cable by placing the cable in the slot 10 before fitting the first and second parts 4, 6 together. The first and second parts 4, 6 can also be separated by squeezing the enlarged end 12 so that the slot 10 is closed at the enlarged end 12 and pulling the first and second parts 4, 6 apart.

Also shown in figure 2 are the protrusions/depressions 16 co-operating with the protrusions/depressions 20. The location of the anchor 8 in the pin hole 26 allows the first part 4 to rotate about the second part 6 (and vice versa). However, the protrusions/depressions 16, 20 serve to limit this rotation. The cable tidy 2 clicks as it is rotated due to the protrusions/depressions 16, 20 running over each other, causing the first and second parts to flex apart as they are turned. This prevents the cable length from changing without the first and second parts 4, 6 being deliberately rotated or without a fair degree of tension being applied to the free ends of the cable. A similar effect can be achieved by making the anchor 8 fit more tightly into the pin hole 26 or by providing flat faces on the anchor 8 and pin hole 26 to inhibit rotation.

As shown in the example in figures 1 and 2, the second part 6 is provided with two holes 24 and these are preferably slots in the side-wall 18. The slots are positioned so that cable ends exit the cable tidy 2 on opposite sides and the cable can run freely through them. The holes 24 (ie slots) could be disposed at other angles about the circumference of the second part 6, eg they could be 90 degrees apart. Alternatively, there may only be one slot (hole 24) with both ends of the cable running through this one slot. The edges of the holes 24 may be rounded to help the cable run through them.

As shown in Figure 3, once the cable tidy has been assembled around a cable 28, the cable is wound into the cable tidy 2 by rotating one of the first and second parts 4, 6 and keeping the other stationary (or rotating both in opposite directions). The thumb holes 14 and ridges 22 help improve grip on the first and second parts to facilitate this winding. The cable 28 then wraps around itself within the cable tidy by wrapping first and second portions 30, 32 of the cable either side of the anchor around the anchor. Using a flat cable, eg a ribbon cable, is good because it prevents any tangling occurring within the cable tidy since the ribbon readily lies on top of itself. Tangling may also be avoided by making the internal height of the side-walls 18 the same size as the width of the ribbon. In any event, the tangles can be spotted through the first and second parts, which are preferably transparent.

The described cable tidy 2 can be used for network cables which connect a computer to a network socket, without placing an excessive tension on the cable such that the cable plug is pulled from the network socket or computer.

The cable tidy 2 enables the length of a network cable (or indeed any other cable, whether electrically conducting or otherwise) to be shortened, whilst remaining plugged in at either end, and without putting any twists in the cable. The excess cable is wound within the cable tidy 2.

A cable may be pre-supplied with the cable tidy 2, in which case the free ends of the cable are pulled apart to create a cable of approximately the appropriate length. Any slack in the cable is then taken up by rotating one of the first and second parts 4, 6. The taking up of the slack can be performed without needing to unplug the cable and without introducing any twists in the cable.

The first and second parts may fit together in any of a variety of different ways so long as one of the first or second parts has an anchor for the cable and the other wraps the two portions of the cable 30, 32 around the anchor. However, it is really easy to use if the first and second parts just snap fit together and they can be fitted to an existing cable.

### Claims

- 1. A cable tidy comprising:
  - a first part, the first part comprising an anchor for holding a cable with first and second portions of the cable being held either side of the anchor; and
  - a second part, the second part comprising one or more holes, the one or more holes being adapted to receive the first and second portions of the cable;
  - wherein the first and second parts are rotatable with respect to one another such that the first and second portions of the cable either side of the anchor are selectively wound around the anchor so as to shorten the length of the cable outside the cable tidy.
- 2. A cable tidy according to Claim 1, wherein the anchor comprises a pin with a slit, the slit being adapted to receive the cable.
- 3. A cable tidy according to Claim 2, wherein the pin has an enlarged end.
- 4. A cable tidy according to Claim 3, wherein the second part has a pin hole adapted to receive the enlarged end of the pin so that the first and second parts snap fit together.
- 5. A cable tidy according to Claim 4, wherein the pin comprises one or more flat faces, and the pin hole comprises one or more co-operating flat faces.
- 6. A cable tidy according to any preceding claim, wherein the anchor comprises a bearing such that the first and second part rotate with respect to one another about said bearing.
- 7. A cable tidy according to any preceding claim, wherein the first part comprises one or more projections and/or depressions and the second part comprises one or more co-operating depressions and/or projections such that rotation of the first and second parts is resisted by the interaction between the respective projections and depressions of the first and second parts.
- 8. A cable tidy according to any preceding claim, wherein the second part comprises ridges provided on an outer surface of the second part.
- 9. A cable tidy according to any preceding claim, herein the first part comprises one or more holes suitable for receiving a users fingers and/or thumbs.
- 10. A cable tidy according to any preceding claim, wherein the second part comprises one hole, the one hole being adapted to receive both the first an second portions of the cable.

- 11. A cable tidy according to any one of claims 1 to 9, wherein the second part comprises two holes, a first hole being adapted to receive the first portion of the cable and a second hole being adapted to receive the second portion of the cable.
- 12. A cable tidy according to Claim 11, wherein the first and second holes are disposed on opposite sides of the second part.
- 13. A cable tidy according to any preceding claim, wherein the one or more holes in the second part have rounded edges.
- 14. A cable tidy according to any preceding claim, wherein the first and second parts together form an enclosure for storage of excess cable.
- 15. A cable tidy according to any preceding claim, wherein movement of the one or more holes in the second part relative to the first part urges the first and second portions of the cable to be wound around the anchor.
- 16. A cable tidy according to any preceding claim, wherein the cable tidy is provided with a cable.
- 17. A cable tidy according to any preceding claim, wherein the cable is a network cable.
- 18. A cable tidy according to any preceding claim, wherein the cable is a ribbon cable.
- 19. A cable tidy according to any preceding claim, wherein the first and/or second parts are transparent.
- 20. A cable tidy substantially as described herein with reference to, and as shown in, the accompanying drawings.

## **Abstract**

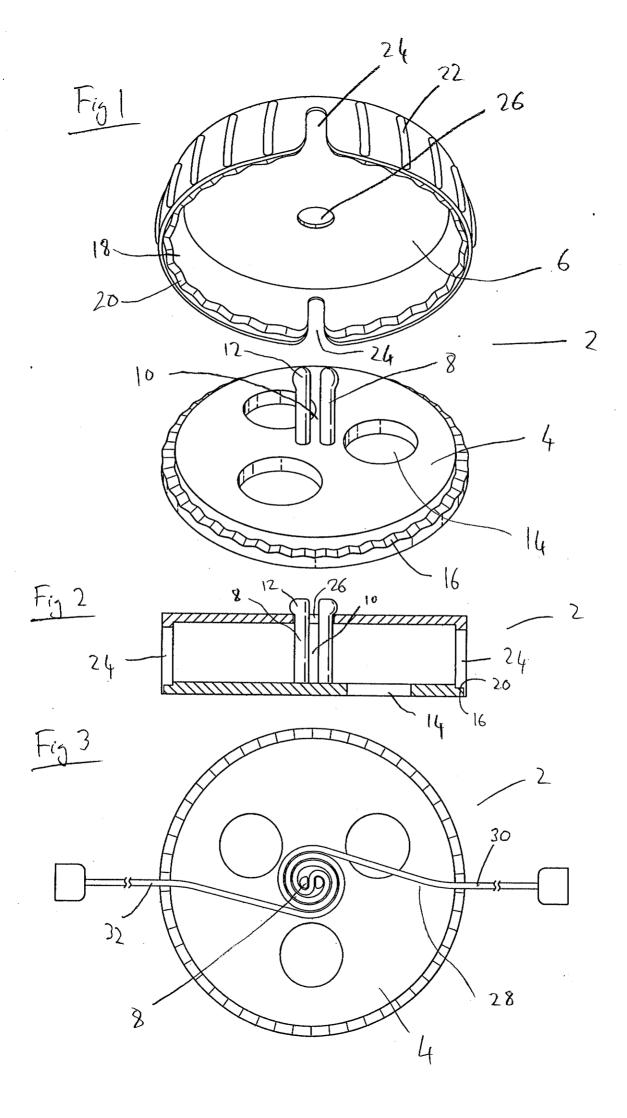
## A Cable Tidy

A cable tidy (2) comprising: a first part (4), the first part (4) comprising an anchor (8) for holding a cable (28) with first and second portions (30, 32) of the cable (28) being held either side of the anchor (8); and a second part, the second part comprising one or more holes, the one or more holes being adapted to receive the first and second portions (30, 32) of the cable; wherein the first and second parts are rotatable with respect to one another such that the first and second portions of the cable either side of the anchor (8) are selectively wound around the anchor so as to shorten the length of the cable outside the cable tidy. The first and second parts together form an enclosure for storage of excess cable.

[Figure 3]

One page of drawings follows.

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### **2008 PAPER P3**

### SAMPLE SCRIPT C

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### **A Cable Extension Service**

The invention relates to a cable extension device, and in particular to a network cable extension device. Network cables have a standard type of plug at each end and cable in a variety of different standard lengths (1m, 2m, 5m etc). As a result a skilled person needs to carry a selection of each type so that he/she can choose the most appropriate cable for the job. These cables may become tangled if they are transported in the same bag or pocket. Furthermore, the skilled person has to choose a cable that is slightly longer than required. The excess cable then has to be tied up (usually by using cable ties to bundle the cable up) which is unsightly and time-consuming.

Extendible network cables are known. For example, extension systems have been provided whereby one plug is attached to a network cable which rotates on a drum, and the other plug is attached to a short length of cable. Before plugging the plug in, the cable is unwound from the drum to get the appropriate length. However, when further cable is required, the cable is often pulled, twisting the short length of cable and often causing damage to the cable. Furthermore, this is an expensive product and may not be suitable in many circumstances.

This invention therefore attempts to overcome the disadvantages of the prior art. Thus according to first aspect of the invention there is provided a cable extension device comprising a housing defining at least one channel for exit in use, of both ends of the cable, wherein the housing comprised a first part having an anchor for detachable attachment to the cable and a second part rotatable in relation to the first part such that, in use, rotation in one direction causes the cable to wrap around the anchor.

The device has the advantage of enabling the length of a cable to be extended or shortened (ie both plugs are attached to a portion of the cable which can be extended or shortened), whilst remaining plugged in at either end, and without putting any twists in the cable. The excess cable can be wound within the device, and extended to a suitable length when required. The device has the further advantage that many of the devices can be transported in the same bag or pocket without cables becoming tangled.

In one embodiment, (feature of Claim 2). This enables easy rotation of the first and second parts.

In one embodiment, (feature of Claim 3). In a further embodiment, (feature of Claim 4), The use of two channels, particularly when they are aligned, enables the cable to run freely through them. In yet a further embodiment, (feature of Claim 5), so as to help the cable run through them. In one embodiment, (feature of Claim 6). This allows the first and second parts to be easily separated, thus allowing the addition, removal or replacement of the cable.

In one embodiment, (feature of Claim 7) in another embodiment, (feature of Claim 8) eg (feature in claim 9). This allows easy attachment of the cable to the device.

In one embodiment, the anchor engages with an aperture formed in the second part. In a further embodiment, (feature of Claim 10), which holds the first and second part together.

In one embodiment, (feature of Claim 11) and/or (feature of Claim 12). This inhibits rotation of the first part and second part, which therefore prevents the cable length from changing without the device parts being deliberately rotated or without a fair degree of tension being applied to the free ends of the cable.

In one embodiment, (feature of Claim 13), which also prevent the device from being unintentionally rotated. In a further embodiment, the indexing means comprises a plurality of bumps on the rim of the first or second part, and a plurality of depressions on the other. In a further embodiment, the first part comprises the plurality of bumps. In one embodiment, (feature of Claim 15). In a further embodiment, the second part comprised the ridges. In another embodiment, (feature of Claim 16) eg three holes. Both these features help to improve grip on the two parts to facilitate the rotation,.

In one embodiment (feature of Claim 17). This enables any tangles to be spotted, and therefore fixed, when the device is being rotated.

In another embodiment, (feature of claim 18). This helps to avoid tangling.

The device may be made of plastic or suitable resilient material. Preferably the device is used with a network cable. In a further aspect there is provided (Claim 19). In one embodiment, (feature of Claim 20). This is advantageous because it prevents tangling occurring within the device since the ribbon cable readily lies on itself.

The invention will now be described by way of example only, with reference to the accompanying figures in which

Figure 1 shows a perspective view of the first part and second part according to one embodiment of the invention;

Figure 2 shows a side cross section of the device according to one embodiment of the invention; and

Figure 3 shows a top view of the first part attached to a cable according to one embodiment of the invention.

A cable extrusion device, shown generally as 1, comprises two transparent circular parts: a first part, 10 and a second part, 20. The first part has a moulded pin, 12, in the centre, which has an enlarged end, 12a, and a slit, 14, into which he network cable, 40, is placed. In this embodiment, the cable 40, is a ribbon cable which helps to prevent any tangling occurring within the device since the ribbon cable, 40 readily lies on top of itself. The first part, 10, has some finger or thumb holes, 16, on its face, 12, to help with winding, as well as some bumps, 18, which lock into some depressions, 22, on the second part, 20, which help to fix the cable, 40, at the selected length.

The second part, 20, comprises a hole, 24, for receiving the moulded pin, 12, as illustrated in Figure 2. The pin,12, is slightly compressed as the thickened end, 12a, fits through the hole, 24, and then springs out again, the end, 12a, holding the two parts, 10, 20, together. The second part, 20, also defines two channels, 26,28, through which each end of the cable, 40, exits the device, 1.

The channels, 26, 28, are positioned so that the cable, 40, exits the device on opposite sides and the cable, 40, runs freely through them. The edges of the channels, 26,28, are rounded so help the cable, 40, run through them. Vertical ridges, 30, are provided around the outer surface, 32, of the second part, 20, to help with winding.

Once the cable, 40, has been put in the slit, 14, in the central pin, 12, the channels, 26, 28, in the side wall, 32, of the second part, 20, are lined up with the cable, 40, and the second part, 20, is snap fitted on top. The cable, 40, is wound into the device, 1, by rotating one of the parts, 10, 20, and keeping the

other stationary. The round holes, 16, and ridges, 30, help improve grip on the two parts, 10, 20, to facilitate this winding. The pin, 12, anchors the cable, 40, and so the cable, 40, is wound up round the pin, 12. Once the cable, 40, has been wound on, the device, 1, is ready for use. When a cable, 40, is required to connect a computer to a network socket, the free ends of the cable, 40, are pulled apart to create a cable, 40, of approximately the appropriate length and the two plugs are placed into the socket. Any slack is then taken up by rotating one of the parts, 10,20. The taking up of the slack can be performed without needing to unplug the cable, 40, and without introducing any twists. The bumps, 18, and depressions, 22, lock the two parts, 10, 20, together to fix the cable, 40, at the selected length.

### Claims

- 1. A cable extension device comprising:
  - a housing defining at least one channel for exit of both ends of the cable, wherein the housing comprises:
  - a first part having an anchor for detachable attachment to the cable; and
  - a second part rotatable in relation to the first part such that, in use, rotation in one direction causes the cable to wrap around the anchor.
- 2. A cable extension device according to Claim 1, wherein the first and second parts are circular.
- 3. A cable extension device according to any preceding claim, wherein the housing comprises two channels wherein the first channel is for exit of one end of the cable, in use, and the second channel is for exit of the other end of the cable in use.
- 4. A cable extension device according to Claim 3, wherein the channels face each other and are substantially aligned.
- 5. A cable extension device according to any preceding claim, wherein the edges of the at least one channel are rounded.
- 6. A cable extension device according to any preceding claim, wherein the first part and second part form a snap-fit connection.
- 7. A cable extension device according to any preceding claim wherein the anchor is centrally located on the first part.
- 8. A cable extension device according to any preceding claim, wherein the anchor comprises a pin with a slit.
- 9. A cable extension device according to Claim 8 wherein the pin is a moulded pin.
- 10. A cable extension device according to Claim 8 or Claim 9, wherein the pin comprises a thickened end and engages with an aperture found in the second part.
- 11. A cable extension device according to Claim 10 wherein the pin comprises a flat face.
- 12. A cable extension device according to Claim 10 or Claim 11 wherein the pin forms an interfacing fit with the aperture.
- 13. A cable extension device according to any preceding claim wherein the device comprises indexing means.

- 14. A cable extension device according to Claim 13, wherein one of the first or second part comprises a plurality of bumps on its rim and the other part comprises a plurality of depressions.
- 15. A cable extension device according to any preceding claim, wherein the housing comprises vertical ridges on its exterior.
- 16. A cable extension device according to any preceding claim, wherein the housing comprises at least one finger or thumb hold.
- 17. A cable extension device according to any preceding claim, wherein the housing is transparent.
- 18. A cable extension device according to any preceding claim wherein the height of the housing is substantially the same as the width of the cable.
- 19. A kit comprising:

a network cable; and

a cable extension device as defined in any of Claims 1-18.

- 20. A kit as defined in Claim 19 wherein the network cable is a ribbon cable.
- 21. A cable extension device substantially as described hereinbefore, with reference to Figures 1-3.

### **Abstract**

### A Cable Extension Device

A cable extension device, 1, which enables the length of a network cable, 40 (not shown), to be shortened. The device, 1, comprises a housing defining at least one channel, 26,28, which provide exits for the network cable. The housing comprises a first part, 10, having an anchor, 12, for detachable attachment to the cable. The housing also comprises a second part, 20, which is rotatable in relation to the first part, 10, such that rotation causes the cable to wind around the anchor, 12.

[To be accompanied when published by Fig 1]

One page of drawings follows.

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