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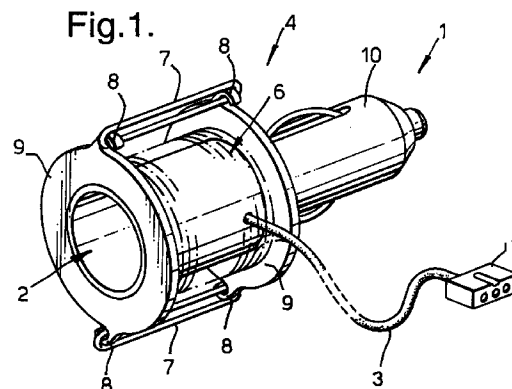
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(54) **A plug**

(57) The invention relates to a plug (1) for providing electrical connection for at least two devices (not shown), comprising a fixed (2) and a movable (3) connector. The plug (1) has a body (4) with a tubular socket at one end comprising the fixed connector (2) and an extension (10) for plugging into an existing cigar or cigarette port of a vehicle. The movable connector (3) comprises a spool (6) rotatably mounted on and rotatable about the port (2). The movable connector is in the form of an electrical lead with a plug (5) on the opposite end to that connected to the body (4) and can be unwound by rotation of the connector to a desired amount for connection with a second appliance, the first connector (2) making connection with a first appliance. There is an elastic strap (7) for retaining the lead in position.



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Description

[0001] The invention relates to a plug, particularly to an electrical plug for providing electrical connection for at least two electrical devices.

[0002] It is often desired to use two electrical appliances or devices at the same time, for which purpose a plug has been provided which adapts the outlet for provision of power to more than one device. However, such an adaptor plug whilst appropriate for mains supply, is inadequate for use in say a vehicle cigar or cigarette port as the space available is confined at a vehicle fascia so that the fixed multiple outlets of existing plugs do not allow for connection of more than one appliance or device at a time.

[0003] It is accordingly an object of the invention to seek to mitigate this disadvantage.

[0004] According to the invention there is provided a plug for providing electrical connection for at least two electrical devices, comprising a fixed and a movable connector.

[0005] The movable connector may comprise an electrical lead. This provides flexibility in operation as one device can be positioned where desired in relation to say a vehicle fascia.

[0006] There may be a spool for the electrical lead. This allows the lead to be stowed, and to be unwound for subsequent use.

[0007] There may be means for retaining the lead on the spool. This provides a neat construction, which can retain the lead in an untangled condition, particularly when the retaining means may comprise an elastic strap.

[0008] The spool may comprise anchorage means for the elastic strap.

[0009] This provides for ease of use particularly when the anchorage means may comprise spaced apart hook means on side cheeks of the spool.

[0010] The spool may be rotatable round the fixed connector. This provides a compact construction, particularly when the fixed connector may comprise a cylindrical tubular port for receiving a cylindrical plug.

[0011] The plug may comprise a cylindrical projection for connection with an electrical port. This provides a simple bayonet type connection with say a cigar or cigarette lighter port of a vehicle,

[0012] According to a second aspect of the invention there is provided a vehicle including a plug as hereinbefore defined.

[0013] A plug for providing electrical connection with at least two electrical devices is hereinafter described, by way of example, with reference to the accompanying drawings.

Fig. 1 shows a perspective view of a cigar or cigarette lighter plug of a vehicle, according to the invention; and

Fig. 1A is an end elevational view of the plug of Fig. 1.

[0014] Referring to the drawings, there is shown a plug 1 for providing electrical connection for at least two devices (not shown) comprising a fixed 2 and a movable 3 connector.

[0015] The plug has a body 4 with a cylindrical tubular socket at one end comprising the fixed connector 2, for receiving a cigar or cigarette lighter or additional device, and an electrical lead comprising the movable connector 3, which is movable in the sense that it can be adjusted in position in order to plug via its plug 5, into a device (not shown) which is being used, for example a vehicle vacuum leaner, or a shaver, or a torch. In the embodiment, the lead 3 is wound onto a spool 6, the cylindrical body of which is mounted on and is rotatable about the port 2. Thus the movable lead 3 is extensible on rotation of the spool 6. Retaining means in the form of an elastic strap 7 or straps retain the lead 3 on the spool 6 so that it remains neat and untangled. The strap(s) 7 is/are anchored in position by oppositely facing hook means 8 on side cheeks 9 of the spool 6.

[0016] The end of the lead opposite the plug 5 and the port 2 are in electrical connection with an extension 10 for plugging the plug into an existing cigar or cigarette lighter port of the vehicle, thereby powering both connectors 2, 3 from the one power source, in this case the battery of the vehicle.

[0017] The plug 1 described herein with reference to the drawings thus provides a neat, adaptable plug which enables more than one electrical device to be powered from a single power port and which is operative in a limited space adjacent that port.

Claims

1. A plug for providing electrical connection for at least two electrical devices, characterised by a fixed (2) and a movable connector (3).
2. A plug according to Claim 1, characterised by the movable connector (3) comprising an electrical lead.
3. A plug according to Claim 2, characterised by a spool (6) on which the electrical lead (3) is wound.
4. A plug according to Claim 3, characterised by means (7) for retaining the lead (3) on the spool (6).
5. A plug according to Claim 4, characterised by the retaining means (7) comprising an elastic strap.
6. A plug according to Claim 5, characterised by the spool (6) comprising anchorage means (8, 9) for the elastic strap (7).

7. A plug according to Claim 6, characterised by the anchorage means (8, 9) comprising spaced apart hook means (8) on side cheeks (9) of the spool (6).
8. A plug according to any of Claims 3 to 7, characterised by the spool (6) being rotatably mounted on the fixed connector (2). 5
9. A plug according to Claim 8, characterised by the fixed connector (2) comprising a cylindrical tubular port for receiving a cylindrical plug. 10
10. A plug according to any preceding claim, characterised by a cylindrical projection (10) for connection with an electrical port. 15
11. A vehicle, including a plug as hereinbefore defined.

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Fig.1.

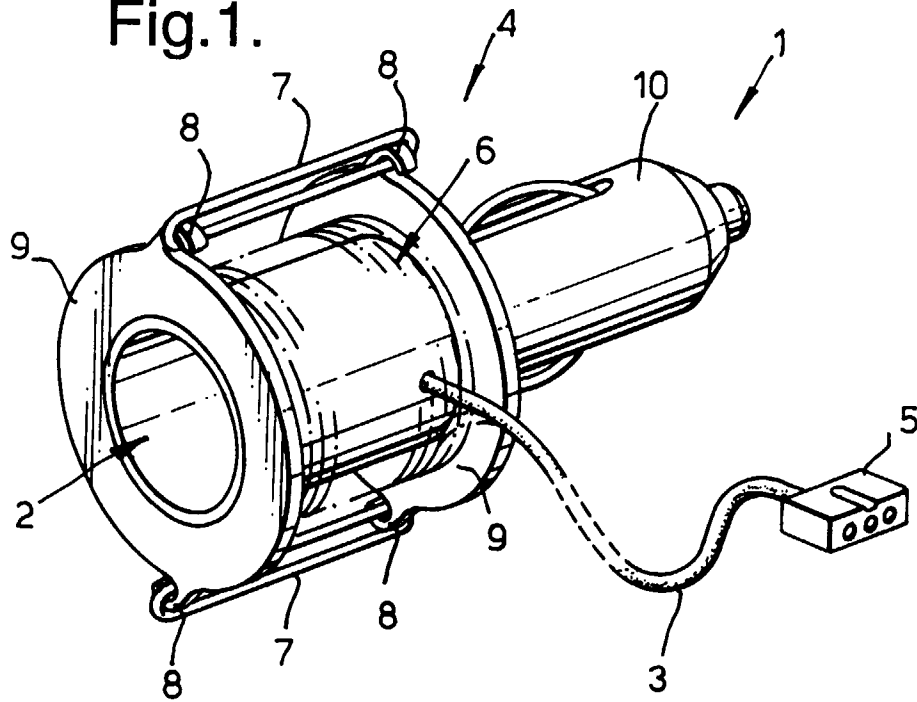


Fig.1A.

