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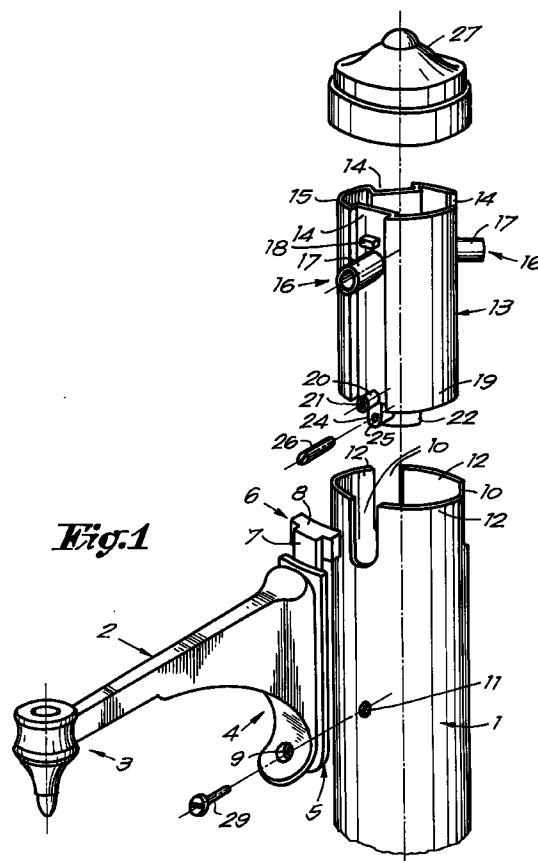
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(54) **Lamppost**

(57) Lamppost, characterized in that it mainly consists of the combination of a support (1) with a tube-shaped top end in which is provided at least one groove (10) which extends downward up to a certain height; at least one carrier (2) for a lighting element connected sideways to it and having a foot (5) which is provided with connecting means (6) which form a connection with the support (1) and which at least consist of a sliding piece (7) with a protruding head (8) which can work in conjunction with the above-mentioned groove (10); and a connecting piece (13) fitting in the support (1) which, on the one hand, has the shape of a tube with at least one vertically tapered groove (14) having a width and a depth which is larger than the width and the thickness of the above-mentioned protruding head (8) of the sliding piece (7) and which, on the other hand, is provided with positioning means (16) which provide for a suitable positioning of the carrier (2) in relation to the connecting piece (13) and also in relation to the support (1).



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Description

The invention concerns a lamppost, in particular the constituent parts for the assembly thereof.

It is generally known to place lampposts in a garden or along the drive of a house.

Lampposts are known whereby several, in particular two or three lighting elements such as lanterns are mounted on a common vertical support by means of horizontal carriers.

However, these known lampposts have a number of disadvantages.

Thus, the assembly of such lampposts is quite difficult and time-consuming, so that these lampposts or parts thereof must be assembled beforehand at the manufacturer's.

As a result, these lampposts take up much space during transport, so that the transport costs can be quite high.

Also, the above-mentioned lampposts are made of metal such as for example aluminium, cast iron or such, so that there is an actual danger that such a lamppost is charged when an electric wire makes contact with a part of the lamppost.

Also, the invention aims an improved lamppost which can be easily assembled by any user and whereby the danger for electrocution is perfectly excluded.

To this end, the invention concerns a lamppost which is characterized in that it mainly consists of the combination of a support with a tube-shaped top end in which is provided at least one groove which extends downward up to a certain height; at least one carrier for a lighting element connected sideways to it, and having a foot which is provided with connecting means which form a connection with the support and which at least consist of a sliding piece with a protruding head which can work in conjunction with the above-mentioned groove; and a connecting piece fitting in the support which, on the one hand, has the shape of a tube with at least one vertically tapered groove having a width and a depth which is larger than the width and the thickness of the above-mentioned protruding head of the sliding piece and which, on the other hand, is provided with positioning means which provide for a suitable positioning of the carrier in relation to the connecting piece and also in relation to the support.

In order to better explain the characteristics of the invention, the following preferred embodiment of a lamppost according to the invention is given as an example only without being limitative in any way, whereby:

figure 1 shows an exploded view in perspective of a lamppost according to the invention;
figure 2 shows a vertical section of the top part of the lamppost;
figures 3 and 4 show a section to a larger scale according to lines III-III and IV-IV respectively in figure 2.

As represented in the figures 1 and 2, a lamppost according to the invention mainly consists of a support 1, in particular in the shape of a vertical tube, and at least one, and in this embodiment three carriers 2 which are connected sideways to the above-mentioned support 1, but of which for clarity's sake only one carrier 2 is represented in the figures.

These carriers 2 are preferably made hollow, whereby a lighting element can be provided at their free end 3 such as for example a lantern, and whereby they are provided at their other end 4 with a foot 5 which has coupling elements 6 at the top and at the bottom which consist of a sliding piece 7 which has a protruding head 8 at its free end and of an opening 9 respectively.

The above-mentioned support 1 is provided at its top end with grooves 10 which are equally distributed over the perimeter of the support 1 and open into the top edge of the above-mentioned support 1. Downward, the grooves 10 extend up to a certain height.

Vertically at some distance under the above-mentioned grooves 10, the support 1 is provided with openings 11.

The width of the grooves 10 is such that the above-mentioned sliding piece 7 can be provided in the groove 10 whereas the protruding head 8 grips behind the standing wall 12 of the support 1.

The number of grooves 10 depends of the number of carriers 2 which one wants to fix to the support 1, whereby, in this embodiment, three grooves are provided in the support at a mutual angle of 120 degrees.

In the lamppost, and in particular in the support 1, is provided a connecting piece 13 which is preferably made of an insulating material, in particular a synthetic material such as PVC or such.

This connecting piece 13 is preferably a round tube with three vertical grooves 14 with a width and a depth which is larger than the width and the depth of the above-mentioned protruding head 8 of the sliding piece 7.

The connecting piece 13 is provided at its perimeter with three positioning means 16 which each consist of a horizontal protrusion, in particular a supporting element 17, each in the shape of a tube with a diameter which is smaller than the width of the above-mentioned grooves 10 and situated in the above-mentioned grooves 14.

At some distance above the above-mentioned supporting elements 17 is provided a stop 18 in the grooves 14.

Near the bottommost end 19 of the connecting piece 13 is provided a protrusion 20 with a threaded hole 21 in the above-mentioned grooves 14. This protrusion 20 has a limited length, so that it does not extend outside the circumference of the connecting piece 13.

The bottommost end 19 of the connecting piece 13 further has a narrowing 22 with a central passage for an electric wire 23. This narrowing 22 is preferably provided with a pull relief 24 in the shape of a threaded hole 25 with a screw 26.

The whole of a support 1 and a connecting piece 13 is covered by a little guard 27.

The assembly of a lamppost according to the invention is very simple and as follows.

The electric wire 23 is drawn through the hollow support 1 via the narrowing 22 into the connecting piece 13, such that it partly protrudes at the top end of the connecting piece 13.

The electric wire 23 is then safeguarded against possible pull reliefs by tightening the screw 26 in the threaded hole 25.

Subsequently, the connecting piece 13 is provided in the support 1, whereby the three supporting elements 17 rest on the bottom of the three vertical grooves 10.

Starting from the free end 3 of each carrier 2, a pair of electric wires is drawn through each hollow carrier 2 and through the respective hollow supporting elements 17 to finally open into the connecting piece 13 where the above-mentioned electric wires are connected in pairs to the electric wire 23 via an adapter 28.

Since the connecting piece 13 and thus also the hollow supporting elements 17 are made of an insulating material, the lamppost is extra secured and any danger that this lamppost is charged is excluded.

The position of these supporting elements 17 is hereby such that the protrusions 21 at the bottom side of the connecting piece 13 coincide with the respective openings 11 in the support 1.

Subsequently, the carriers 2 are slid with their sliding piece 7 in the vertical grooves 10, whereby the protruding head 8 grips behind the standing wall 12 of the support 1.

The carrier 2 can hereby be slid downward in the vertical groove 10 until the bottom side of the protruding head 8 rests on the stop 18 of the connecting piece 13.

This stop 18 is positioned such on the connecting piece 13 that, when the carrier 2 has been slid in its lowest position, the opening 9 in the foot 5 coincides with the opening 11 in the support 1.

The carrier 2 can then be fixed on the support 1 by tightening a screw 29 through the above-mentioned openings 9 and 11 in the protrusion 20 provided with thread 21.

As the protrusion 20 has a certain length, the above-mentioned screw 29 has a better grip than if it were tightened directly in the wall of the support 1.

The little guard 27 is subsequently clicked over the support 1 and over the sliding pieces 7 of the respective carriers 2 in order to prevent any rain from penetrating.

It is clear that a lamppost is obtained in this way which can be easily and quickly assembled by the user itself.

Consequently, the above-mentioned lampposts can be transported unassembled, so that much less place is taken up during transport and the transport costs are much lower.

Also, as already mentioned above, a lamppost according to the invention is safer as the electric wires go through a non-conductive connecting piece 13.

This invention is by no means limited to the above-described embodiment represented in the figures; on the contrary, such a lamppost according to the invention can be made in various shapes and dimensions while still remaining within the scope of the invention.

Claims

1. Lamppost, characterized in that it mainly consists of the combination of a support (1) with a tube-shaped top end in which is provided at least one groove (10) which extends downward up to a certain height; at least one carrier (2) for a lighting element connected sideways to it and having a foot (5) which is provided with connecting means (6) which form a connection with the support (1) and which at least consist of a sliding piece (7) with a protruding head (8) which can work in conjunction with the above-mentioned groove (10); and a connecting piece (13) fitting in the support (1) which, on the one hand, has the shape of a tube with at least one vertically tapered groove (14) having a width and a depth which is larger than the width and the thickness of the above-mentioned protruding head (8) of the sliding piece (7) and which, on the other hand, is provided with positioning means (16) which provide for a suitable positioning of the carrier (2) in relation to the connecting piece (13) and also in relation to the support (1).
2. Lamppost according to claim 1, characterized in that the support (1) is provided at some distance underneath the above-mentioned groove (10) provided in it with an opening (11), and in that the above-mentioned foot (5) is provided with a corresponding opening (9), whereby these openings allow for a mutual connection.
3. Lamppost according to the preceding claim, characterized in that near the bottommost end (19) of the connecting piece (13) is provided a protrusion (20) with a threaded hole (21) in the above-mentioned groove (14), whereby a screw (29) is provided through the above-mentioned openings (9-11), which meshes in the threaded hole (21).
4. Lamppost according to any of the preceding claims, characterized in that the positioning means (16) consist at least of at least one supporting element (17) protruding sideways from the connecting piece (13) which fits in the groove (10) concerned and can take place in it at the bottom.
5. Lamppost according to the preceding claim, characterized in that the above-mentioned supporting element (17) has the shape of a tube which forms an extra safeguard for the electric wires.
6. Lamppost according to claim 4 or 5, characterized in that a stop (18) for the above-mentioned head (8)

is provided in the groove (14) of the connecting piece (13) at some distance above the above-mentioned supporting element (17).

7. Lamppost according to any of the preceding claims, characterized in that the above-mentioned connecting piece (13) consists of a synthetic material. 5
8. Lamppost according to any of the preceding claims, characterized in that it is provided with a little guard (27). 10

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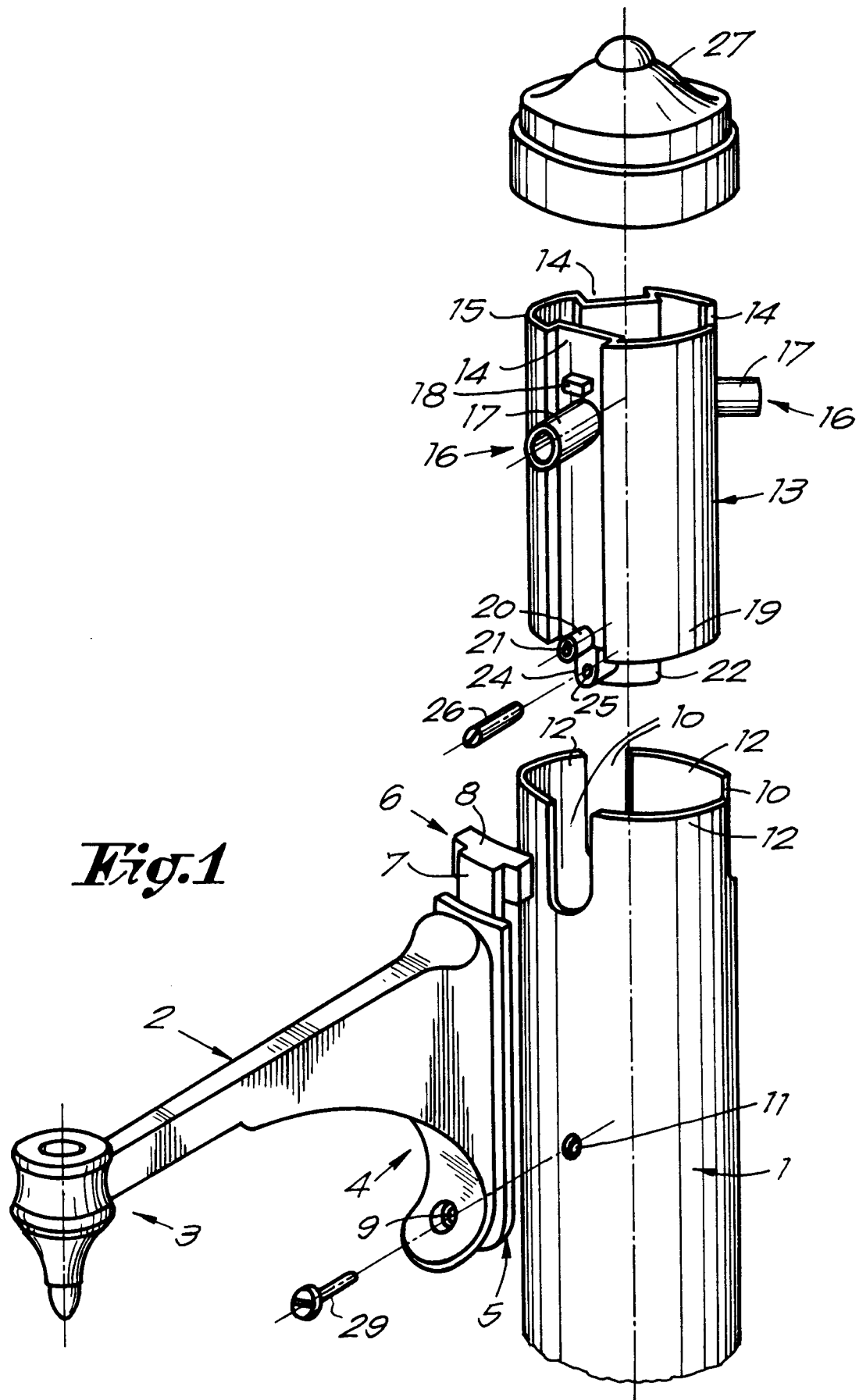
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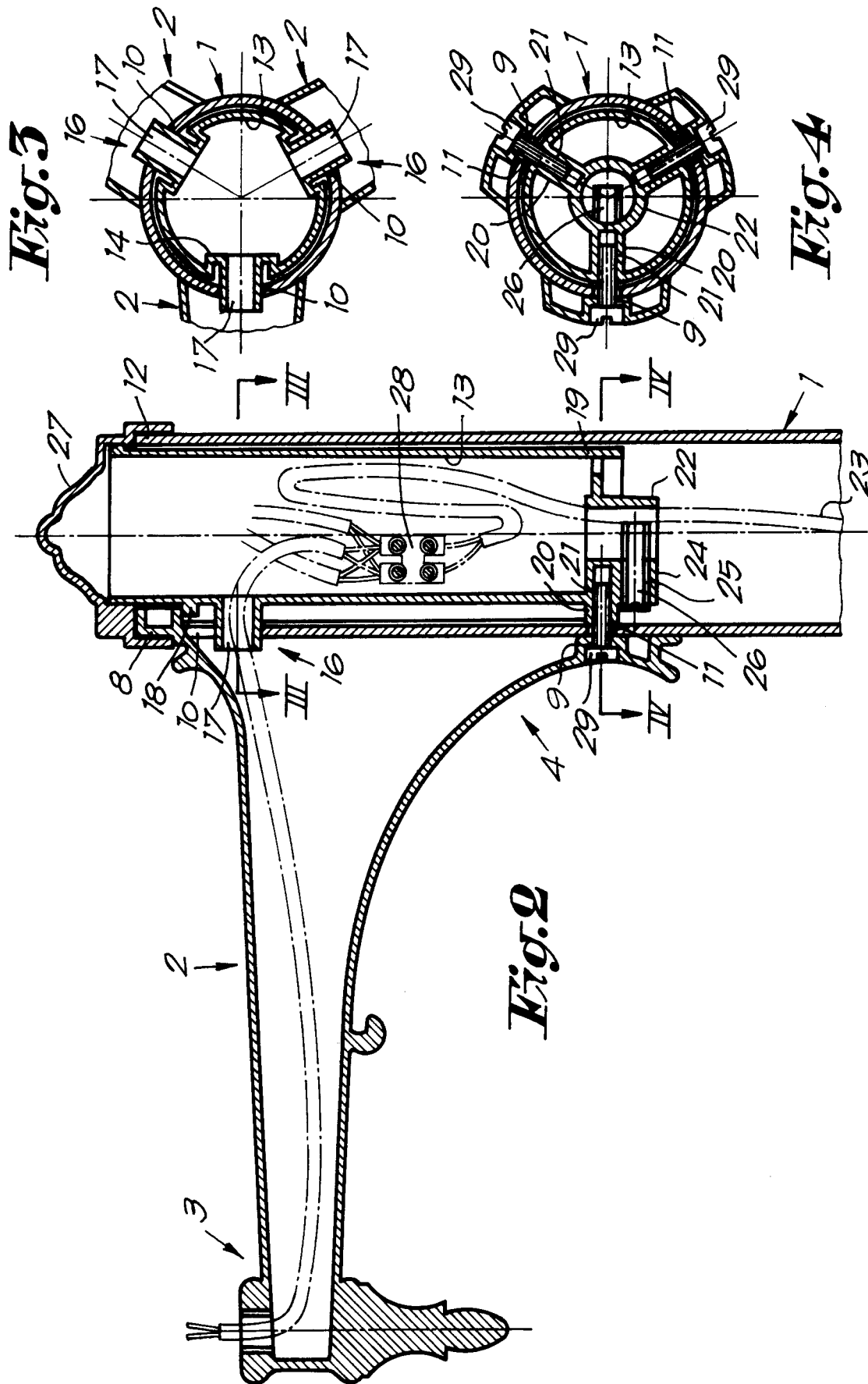
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EUROPEAN SEARCH REPORT

Application Number
EP 95 20 2696

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
A	DE-U-89 02 750 (SIEMENS AG) * page 3, line 8 - line 17 * * page 4, line 12 - line 15 * * page 4, line 25 - line 30; figures 1-7 * ---	1,10	F21V21/10
A	FR-A-1 424 766 (DESKEY ET AL.) * page 2, column 2, line 48 - page 3, column 1, line 37; figures 1-6 * ---	1	
A	US-A-4 195 808 (ANDERSON) * column 2, line 28 - line 62; figures 1-5 * ---	1	
A	GB-A-2 272 007 (PEARCE GOWSHALL LTD) * page 4, line 7 - page 6, line 6; figure 1 * -----	1,10	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int.Cl.6) F21V F21S E04H
Place of search THE HAGUE		Date of completion of the search 21 February 1996	Examiner Martin, C
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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