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(54) **Telescopic parasol stand**

(57) The invention relates to a telescopic stand (1) for a parasol or the like, which stand comprises:

- a first tubular element (3);
- a second tubular element (4), which is guided into the first tubular element (3);

- a drive (6) for driving the second tubular element (4) relative to the first tubular element (3) between a first retracted position and a second extended position, wherein the drive (6) engages on the outside surface of the second tubular element (4).

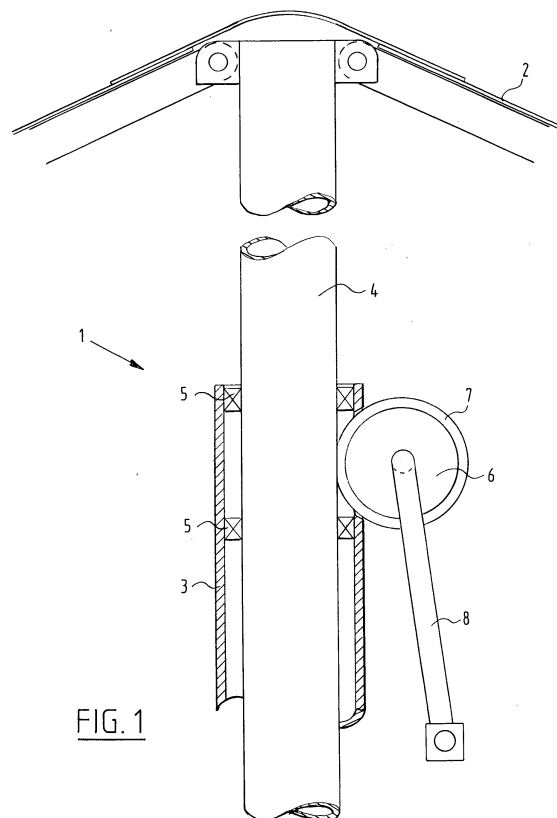


FIG. 1

Description

[0001] The invention relates to a telescopic stand for a parasol or the like.

[0002] US-A-2004/0055628 describes a telescopic stand for a parasol, which consists of a bend first tubular element in which a second, bend tubular element is guided. At the free end of the second tubular element a parasol is suspended. Such a parasol can be placed next to a table while having the parasol above the table. This in contrast to the more regular parasol stands in which the stand has to protrude through the table in order to have the parasol above the table.

[0003] In this publication a mechanism is described for driving the second tubular element relative to the first tubular element. This mechanism comprises a worm gear drivable by a handle, which worm gear drives two reels onto which a cord is wound and unwound. This cord extends through the tubular elements and is guided such that the second tubular element can be extended out of the first tubular element. The cord is also connected to the parasol such that by driving the reels the telescopic stand is first extended and then the parasol is opened. It is however not possible to independently open or close the parasol. Opening of the parasol is only possible having the second tubular element in its fully extended position.

[0004] Furthermore, the mechanism using a cord for moving the second tubular element relative to the first tubular element is rather susceptible for defects for example caused by breakage of the cord or jamming of the cord at one of the several pivot areas around which the cord is guided.

[0005] It is therefore an object of the invention to provide a telescopic parasol stand which is more robust and more reliable and in which the parasol can be operated independently of the position of the second tubular element relative to the first tubular element.

[0006] This object is achieved according to the invention by a stand comprising:

- a first tubular element;
- a second tubular element, which is guided into the first tubular element;
- a drive for driving the second tubular element relative to the first tubular element between a first retracted position and a second extended position, wherein the drive engages on the outside surface of the second tubular element.

[0007] Because the drive engages on the outside surface of the second tubular element a very simple construction is achieved, which is virtually maintenance free and, if some problems occur, repairs can simply be performed as the drive only engages the outer surfaces of the second tubular element.

[0008] In a preferred embodiment of the telescopic stand according to the invention the outside surface of

the second tubular element comprises a tooth rack and the drive comprises a gear engaging on the tooth rack. By using a tooth rack and gear the second tubular element can be positively driven without any slippage between the drive and the second tubular element.

[0009] In another embodiment of the telescopic stand according to the invention the drive comprises a wheel engaging on the outside surface of the second tubular element. Such an embodiment can be manufactured at low costs and still provides a functional and simple design. Preferably at least one of the contact surfaces of the wheel and the outside surface of the second tubular element comprises a friction layer. This friction layer is arranged in order to suppress any possible slippage between the drive wheel and the second tubular element.

[0010] Preferably this friction layer comprises rubber.

[0011] In yet another embodiment of the telescopic stand according to the invention the drive comprises a crank for manual operation of the drive. This is a simple solution, but it is also possible to use a motor in order to operate the drive.

[0012] In another preferred embodiment according to the invention the first tubular element and the second tubular element are in longitudinal direction arched. Preferably the arc of the first and second tubular elements is an arc of a circle. With such an embodiment it is possible to place the stand next to a table while having the parasol above this table.

[0013] The invention further relates to a combination of a telescopic stand according to the invention and a parasol, wherein the parasol is arranged at the free end of the second tubular element.

[0014] Preferably the parasol comprises an operating cord for opening and closing the parasol, wherein the operating cord is guided through the inside of the second tubular element. In this way the operating cord is protected against weather influences, which prolongs the life span of the cord.

[0015] In a preferred embodiment the stand comprises a reel on which the operating cord is wound. By driving the reel, the operating cord can be wound or unwound and in this way the parasol can be opened or closed.

[0016] In yet another embodiment the first tubular element comprises at least one access opening through which the reel is operable. This reel can for example be operated by a crank, which can also be used for manual operation of the drive.

[0017] These and other advantages of the invention will be elucidated in conjunction with the accompanying drawings.

Figure 1 shows a cross sectional view of a first embodiment of a combination according to the invention.

Figure 2 shows a cross sectional view of a second embodiment of a combination according to the invention.

Figure 3 shows a first detail according to the arrow III in figure 2.

Figure 4 shows a second detail according to the arrow IV in figure 2.

Figure 5 shows the combination according to figure 2 in a second position.

[0018] Figure 1 shows a parasol stand 1 and a parasol 2. The parasol stand 1 has a first tubular element 3 and a second tubular element 4. The second tubular element 4 is guided into the first tubular element 3. Bearings 5 keep the second tubular element 4 centered into the first tubular element 3 and enable the two tubular elements 3, 4 to move relatively to each other in longitudinal direction.

[0019] A drive wheel 6 is arranged at the first tubular element 3 and extends partially through the element 3. The wheel 6 has a friction layer 7 of a suitable rubber and is in direct contact with the outer surface of the second tubular element 4. The wheel 6 can be manually operated by a crank 8.

[0020] By rotating the crank 8 the wheel 6 is operated and the second tubular element 4 can be retracted or extended independently of the position of the parasol 2. So with this embodiment according to the invention it is possible to adjust the height of parasol 2 without having to close the parasol as was a disadvantage of the prior art.

[0021] Figure 2 shows a second embodiment of the combination 10 according to the invention. This combination 10 comprises a base 11 in which a first tubular element 12 is placed. This tubular element 12 is curved according to an arc of a circle. In the first tubular element a second tubular element 13 is guided by bearings 14. At the free end of the second tubular element 13 a parasol 15 is arranged.

[0022] At the first tubular element 12 a drive 16 is arranged for retracting and extending the second tubular element 13 relative to the first tubular element 12. The drive 16 is operable by a crank 17. Inside the second tubular element 13 a reel 18 is present along which a cord 19 is wound, which is guided through the second tubular element 13 and is used to open and close the parasol 15.

[0023] In figure 3 a detail of figure 2 is shown. The drive 16 is a gear having teeth 20, which engage onto a tooth rack 21. This tooth rack 21 is arranged on the outside surface of the second tubular element 13. By driving the gear 16 the second tubular element 13 can be extended and retracted without any slippage relative to the first tubular element 12.

[0024] In figure 4 a second detail of the embodiment according to figure 2 is shown. In figure 4 the first tubular element 12 is shown and the last end of the second tubular element 13. This second tubular element 13 is arranged through bearings 14 to the first tubular element 12. A reel 18 is arranged in the second tubular element 13 and this reel 18 is used to operate the cord 19, which

is used to open and close the parasol 15. Preferably the cord 19 is wound at least for one full loop around the reel 18. The reel 18 can be operated by for example a crank 17, which can be put into the reel 18 through an opening in the first tubular element 12.

[0025] In figure 5 the combination 10 according to figure 2 is shown in a second position. By fixing the parasol 15 in a fixed position relative to the second tubular element 13 it is possible to put the parasol 15 under an angle, which could be of an advantage when the sun goes down and would shine under the parasol 15. If the parasol 15 is in a fixed position relative to the second tubular element 13 it only has to be retracted into the first tubular element 12 by operating the drive 16. As the opening or closing of the parasol 15 is fully independent of the position of the second tubular element 13 relative to the first tubular element 12 it is thus possible to place the parasol 15 under an angle. By providing several holes 22 into the first tubular element 12 the reel 18 for operating the cord 19, which operates the parasol 15 can be reached at different positions of the second tubular element 13 relative to the first tubular element 12. It is also possible to provide a slot hole, such that the reel 18 is reachable at any position.

Claims

1. Telescopic stand for a parasol or the like, which stand comprises:
 - a first tubular element;
 - a second tubular element, which is guided into the first tubular element;
 - a drive for driving the second tubular element relative to the first tubular element between a first retracted position and a second extended position, wherein the drive engages on the outside surface of the second tubular element.
2. Telescopic stand according to claim 1, wherein the outside surface of the second tubular element comprises a tooth rack and the drive comprises a gear engaging on the tooth rack.
3. Telescopic stand according to claim 1, wherein the drive comprises a wheel engaging on the outside surface of the second tubular element.
4. Telescopic stand according to claim 3, wherein the at least one of the contact surfaces of the wheel and the outside surface of the second tubular element comprises a friction layer.
5. Telescopic stand according to claim 4, wherein the friction layer comprises rubber.
6. Telescopic stand according to any of the preceding

claims, wherein the drive comprises a crank for manual operation of the drive.

7. Telescopic stand according to any of the preceding claims, wherein the first tubular element and the second tubular element are in longitudinal direction arched. 5
8. Telescopic stand according to claim 7, wherein the arc of the first and second tubular elements is an arc of a circle. 10
9. Combination of a telescopic stand according to any of the preceding claims and a parasol, wherein the parasol is suspended from the free end of the second tubular element. 15
10. Combination according to claim 9, wherein the parasol comprises an operating cord for opening and closing the parasol, wherein the operating cord is guided through the inside of the second tubular element. 20
11. Combination according to claim 10, wherein the stand comprises a reel on which the operating cord is wound. 25
12. Combination according to claim 11, wherein the first tubular element comprises at least one access opening through which the reel is operable. 30

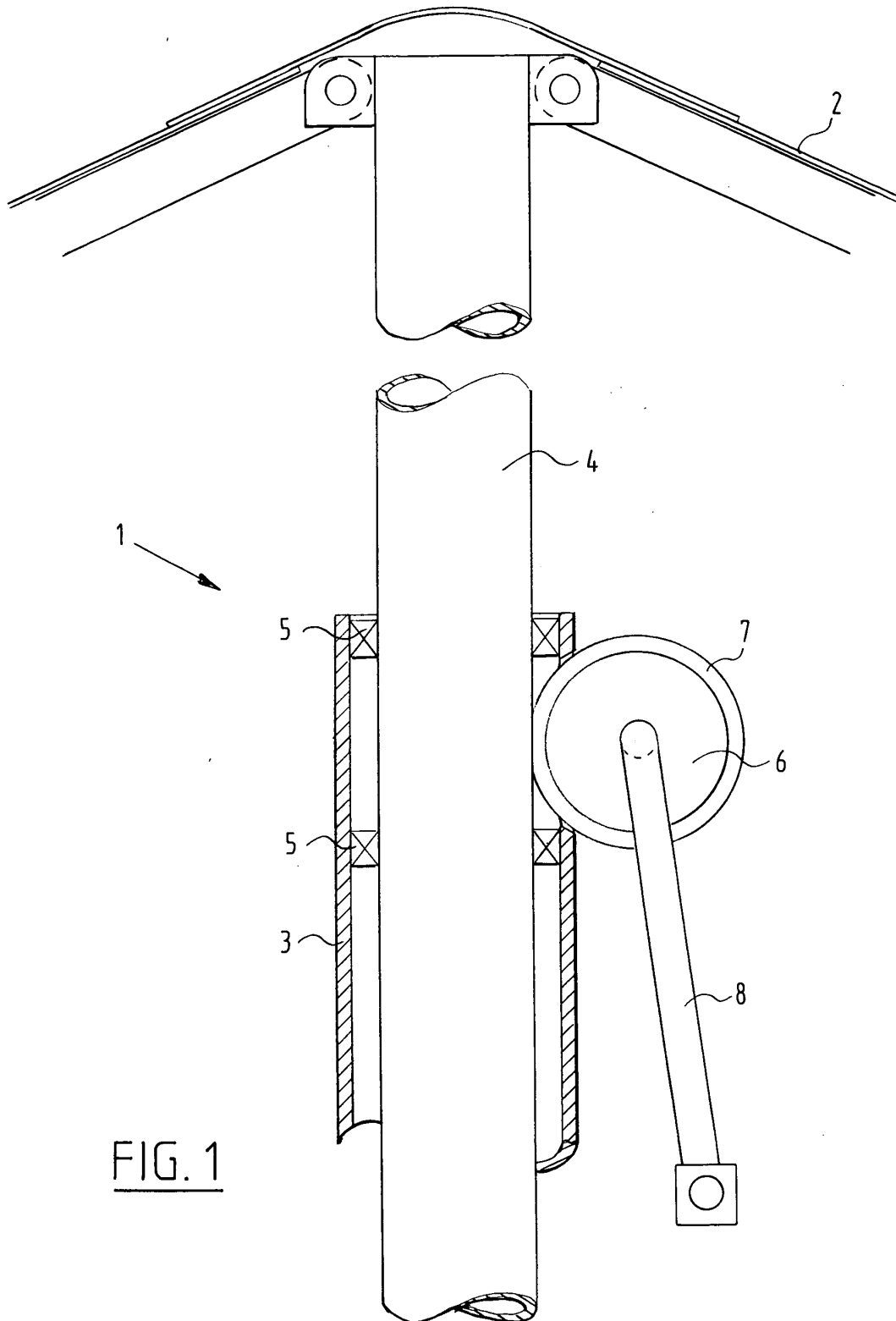
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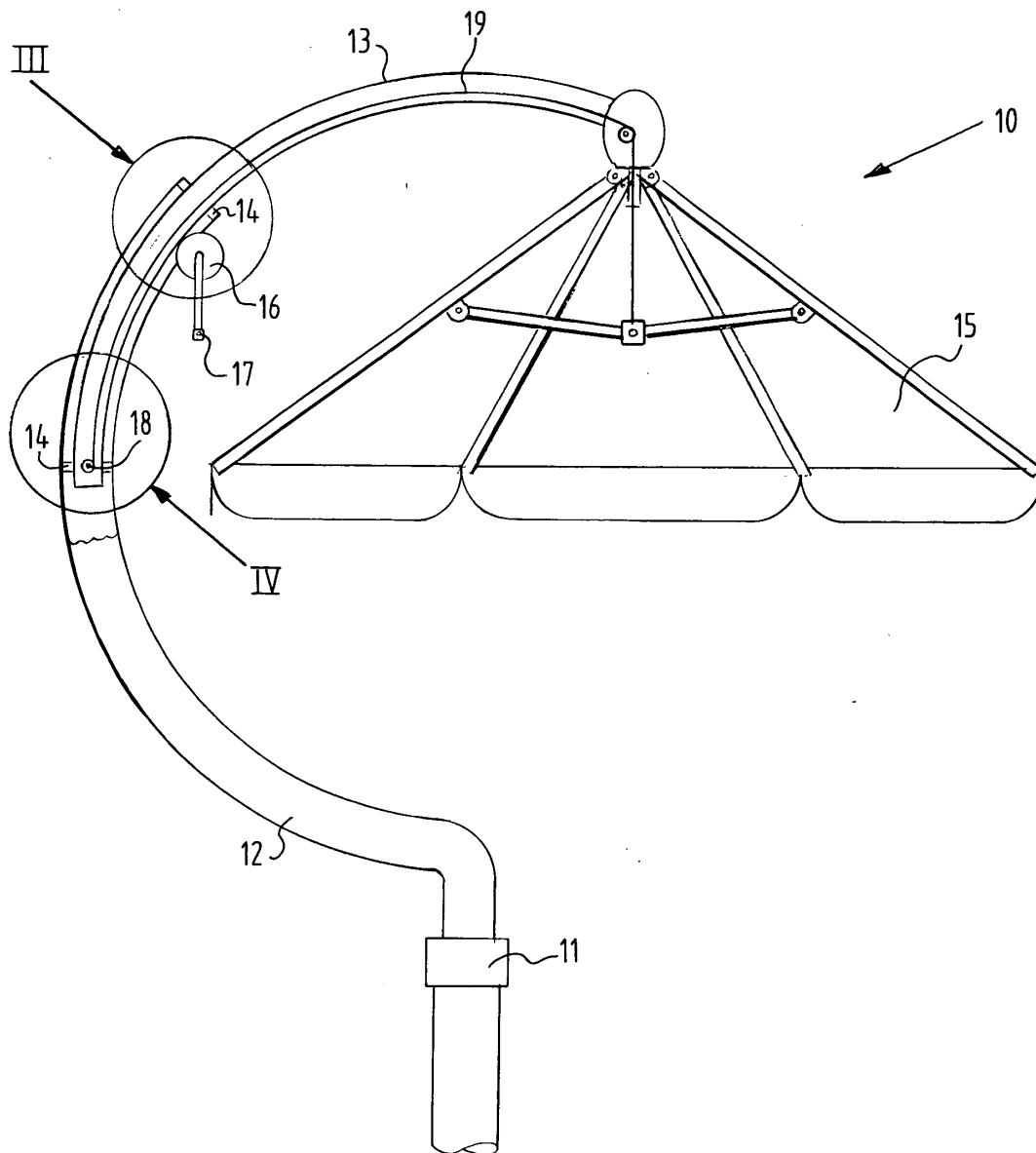


FIG. 2

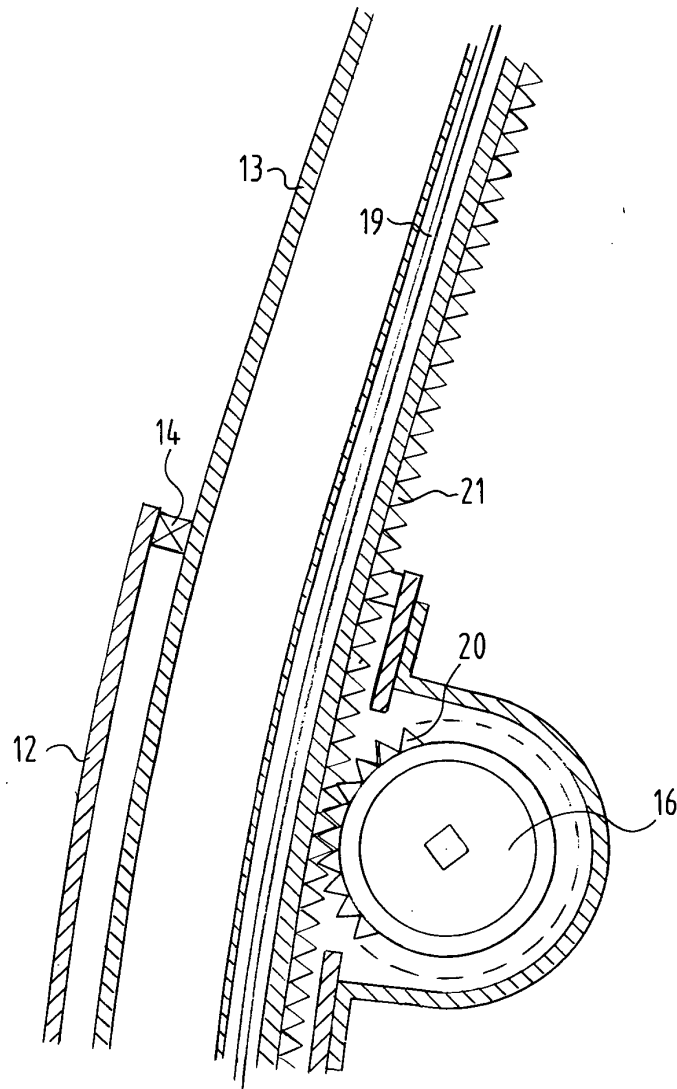


FIG. 3

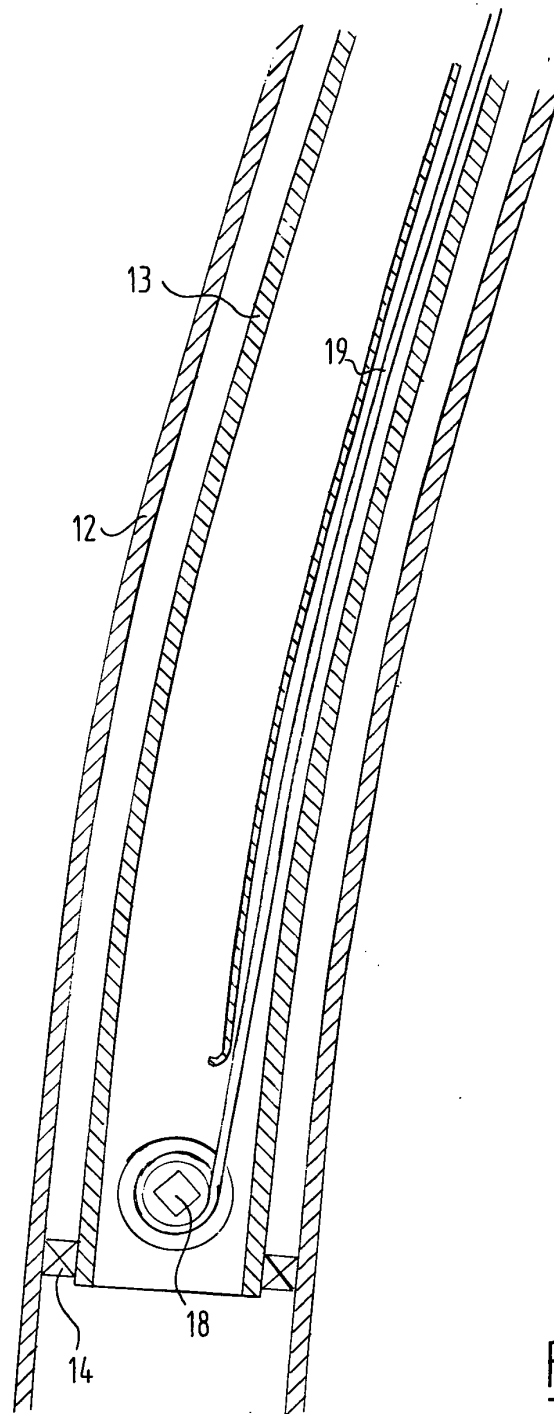


FIG. 4

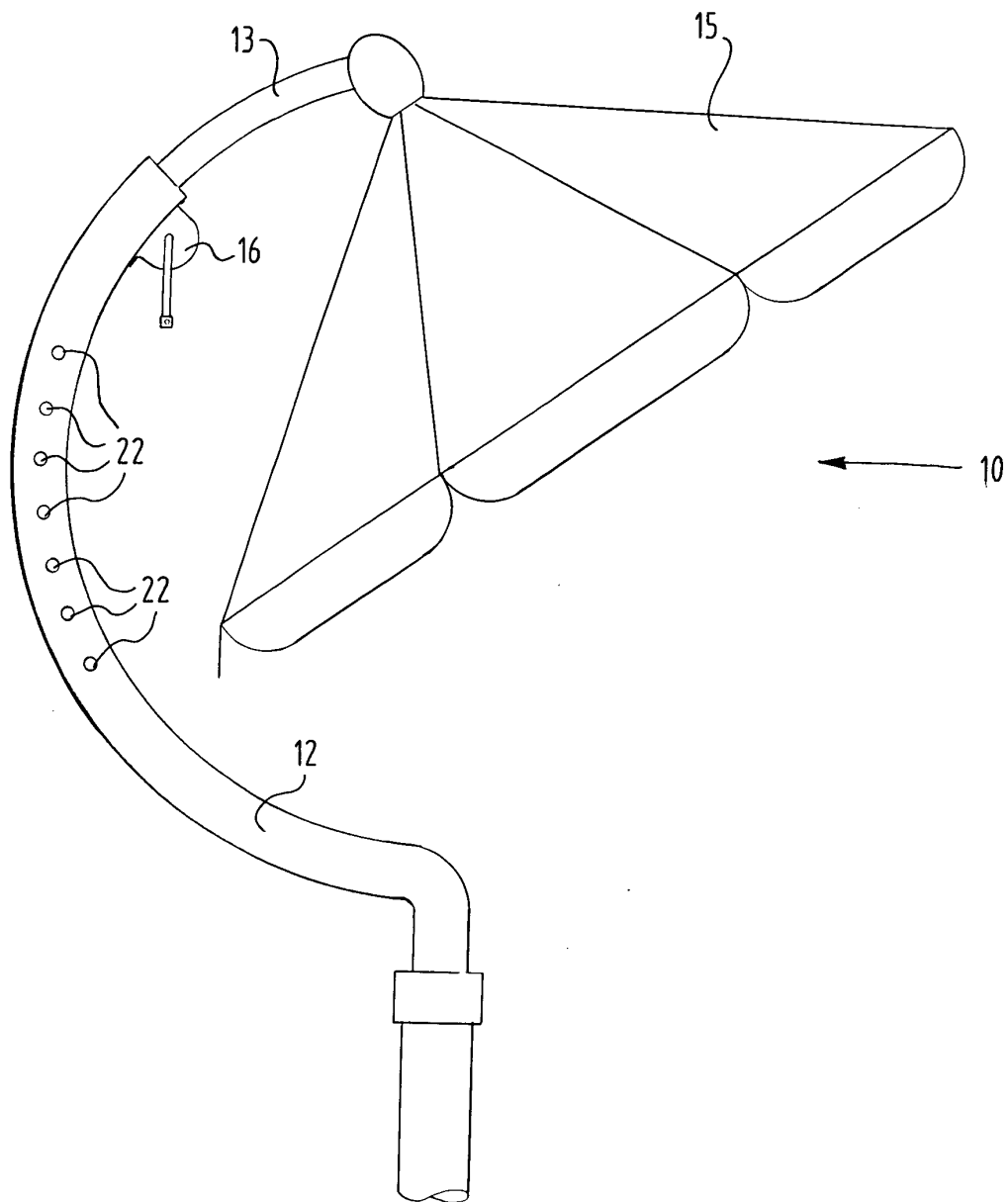


FIG. 5



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EUROPEAN SEARCH REPORT

Application Number
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			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 16 November 2004	Examiner Coniglio, C
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**ANNEX TO THE EUROPEAN SEARCH REPORT
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