United States Patent

[11] 3,625,434

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[54] **DEVICE FOR SUNBATHING HAVING WATER-SPRAY-COOLING MEANS**
7 Claims, 8 Drawing Figs.

[52] **U.S. Cl.** **239/289,** 239/279, 297/180
[51] **Int. Cl.** **B05b 17/00**
[50] **Field of Search** 297/180, 184, 185, 188, 217; 239/279, 289, 211, 207, 266

[56] **References Cited**
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ABSTRACT: A sunbathing system is provided in which a lounge chair having a tubular frame construction carries a number of water nozzles along the frame. The water nozzles have an outlet spray pattern to direct a fine water spray toward a person lying in the lounge chair when a water hose is operatively connected to the tubular frame.

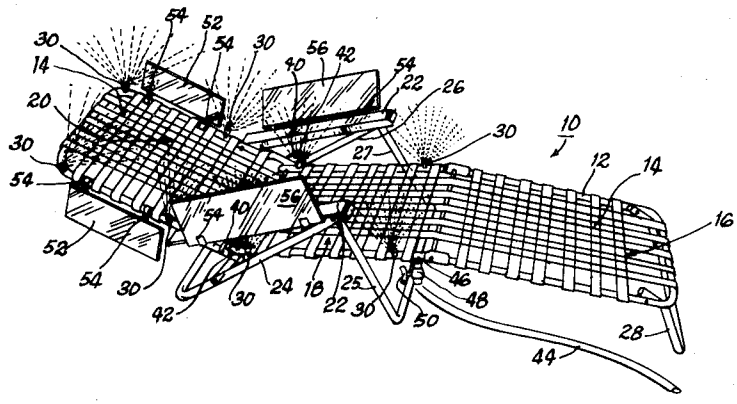


FIG. 1

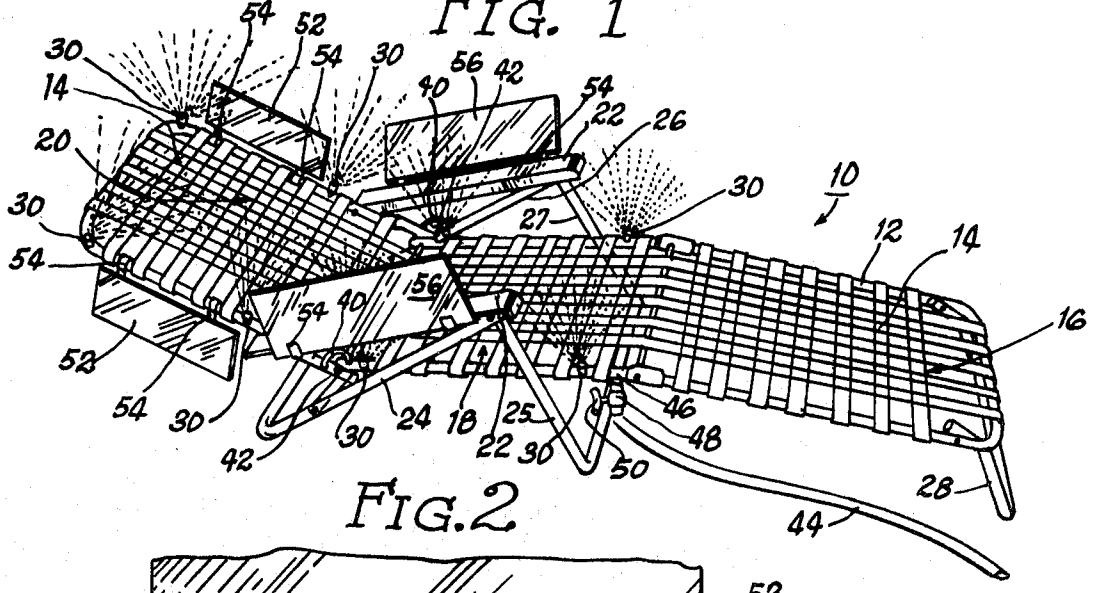


FIG. 2

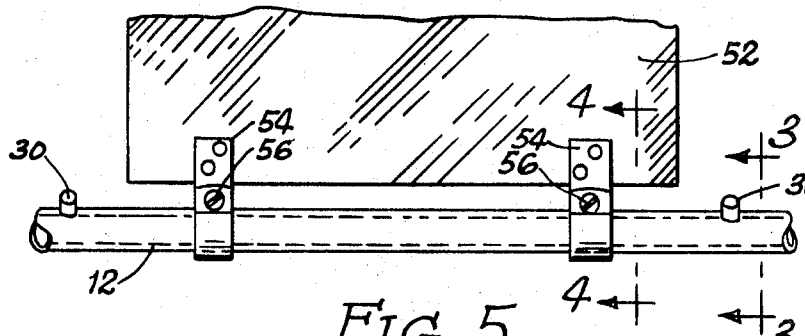


FIG. 3

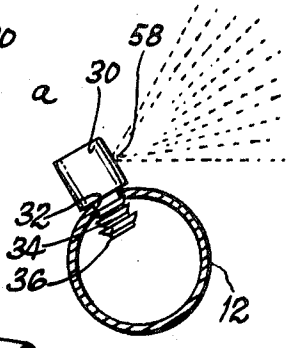


FIG. 5

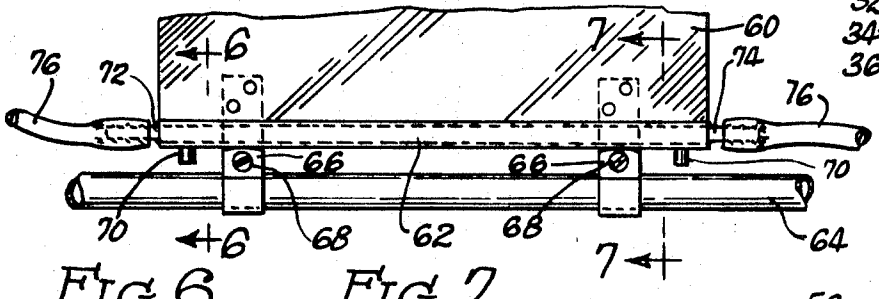


FIG. 6

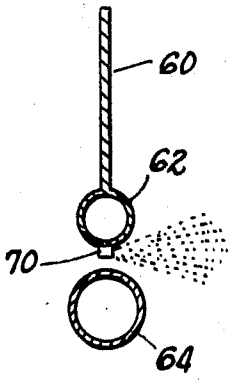


FIG. 7

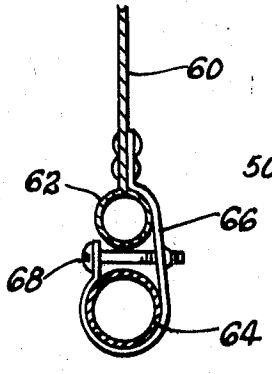


FIG. 8

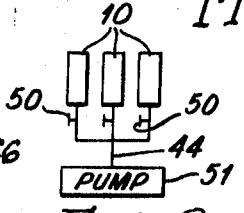
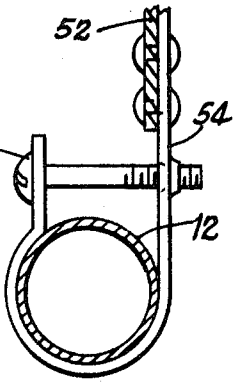


FIG. 4



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DEVICE FOR SUNBATHING HAVING WATER-SPRAY-COOLING MEANS

BACKGROUND OF THE INVENTION

A suntan is often considered desirable because it gives one a "healthy" look and some believe that it enhances one's complexion. However, many persons cannot find time to sunbathe as long as necessary to obtain a desired suntan and many persons find the hot sun to be extremely uncomfortable over the period of time that it generally takes to obtain a desired suntan.

The present invention provides a system in which water is constantly being sprayed upon a sunbather to achieve two purposes. The spray is so fine that it can hardly be felt by the sunbather, yet the water spray is effective (1) to keep the sunbather relatively cool, and (2) to promote relatively rapid tanning. In a form of the invention, movable reflector elements are used to reflect the rays of the sun toward the sunbather to further decrease the time in which it is necessary to obtain the desired suntan.

It is, of course, desirable that a sunbathing device be relatively inexpensive, simple to manufacture and use, and provide safety and comfort to the user. All of these desirable characteristics are present with the system of the instant invention, which utilizes relatively few parts yet is effective to provide a comfortable wetting spray and to promote a rapid suntan.

SUMMARY OF THE INVENTION

In accordance with one embodiment of the present invention, there is provided a sunbathing device comprising a lounge chair having a tubular frame construction with the tubular frame extending around the backrest or pillow portion of the chair. The improvement comprises a flexible hose for connection to a water supply and means are provided for coupling the hose with the tubular frame to provide a water flow path from the water supply through the hose and the tubular frame. A plurality of water nozzles communicate with the water flow path and are located along the tubular frame with the outlet of each of the nozzles being directed inwardly of the frame so as to direct the water during operation of the device toward the person lying in the lounge chair. The nozzles have means therewithin for providing an outlet spray pattern so that the person lying in the chair will receive a fine water spray during operation of the device.

In accordance with a further embodiment of the invention, a sunbathing device is provided which comprises a reflector having means connected thereto for pivotal mounting on a lounge chair. The reflector carries a tubular member which has at least one water nozzle located thereon and communicating with the inside of the tubular member. Means are provided for coupling to the tubular member a flexible hose for connection to a water supply, whereby water flow through the water hose will pass through the tubular member and will exit through the water nozzle. The water nozzle has means for providing an outlet spray pattern and is rotatable about an axis that is substantially perpendicular to its outlet orifice.

A further explanation of the invention is provided in the following description and claims, and is illustrated in the accompanying drawing.

BRIEF DESCRIPTION OF THE DRAWING

FIG. 1 is a perspective view of a lounge chair constructed in accordance with the principles of the present invention;

FIG. 2 is a fragmentary enlarged elevational view of a reflector connected to a portion of the lounge chair of FIG. 1;

FIG. 3 is a sectional elevation taken along the line 3—3 of FIG. 2;

FIG. 4 is a sectional elevation taken along the line 4—4 of FIG. 2;

FIG. 5 is a fragmentary enlarged elevational view of a sunbathing reflector system in accordance with the principles of a second embodiment of the present invention;

FIG. 6 is a sectional elevation taken along the line 6—6 of FIG. 5;

FIG. 7 is a sectional elevation taken along the line 7—7 of FIG. 5; and

FIG. 8 is a schematic diagram of a plurality of lounge chairs constructed in accordance with the principles of the present invention.

DETAILED DESCRIPTION OF THE ILLUSTRATIVE EMBODIMENTS

Referring to FIG. 1, there is shown a lounge chair **10** having a tubular frame **12**. The basic structure of lounge chair **10** is of conventional tubular frame construction with conventional crossed webbing **14** forming a legrest portion **16**, a seat portion **18** and a backrest pillow portion **20**. The lounge chair has arm rests **22** supported by struts **24**, **25**, **26** and **27**. The struts also serve as supporting legs for the lounge chair and pivotally mounted generally U-shaped portion **28** serves to support the legrest portion **16**.

A number of water spray nozzles **30** are distributed about the tubular frame, particularly the seat portion **18** and the pillow portion **20**. Referring to FIG. 3, it can be seen that nozzles **30** are inserted into apertures **32** which are formed in certain locations along the frame **12**. Nozzles **30** preferably comprise conventional aerosol spray buttons and the neck **34** of each nozzle **30** carries a number of barbs **36** for retaining the nozzle within the aperture **32**. The nozzles **30** are formed of a resilient plastic material so that neck **34** can be forced into the aperture and retained therein.

A pair of flexible plastic hoses **40** are used to bridge the joints **42** between seat portion **18** and backrest pillow portion **20**. In this manner, the chair can be folded when desired, yet a water flow path between the seat portion and pillow portion is provided.

A flexible hose **44** which is connected to a water supply is coupled to frame **12** and **46** via coupling valve **48** having a manual valve handle **50**. In a resort area or the like where a number of lounge chairs are to be used simultaneously, each of the chairs would have a separate flexible hose connection with all of the hoses connected to a common water pump or water supply. Each chair should have its own manually operable water valve. This embodiment is illustrated in FIG. 8 wherein it is seen that a number of lounge chairs **10** each have parallel hose connections to a flexible hose **44**, which flexible hose is connected to common water supply or pump **51**.

A number of reflectors **52** are pivotally connected to frame **12** via hinges **54** which are carried by the reflectors. Similarly, a number of reflectors **56** are pivotally connected to armrests **22**. The reflectors are preferably formed of plastic sheet material with a pressure sensitive silver Mylar film attached as the reflective surface. Silver Mylar comprises silver material having a Mylar coating, and has been found to be very effective because of its durability and water imperviousness. The term Mylar is a trademark of E. I. DuPont Nemours & Co., Inc., and is the biaxially oriented film of the condensation polymer of ethylene glycol and terephthalic acid.

Referring to FIG. 4, it is seen that reflectors **52** are riveted to hinge **54**. Hinge **54** comprises a bracket which encircles a portion of tubular member **12** and is rotatable by loosening bolt **56** as is evident from the illustration of FIG. 4.

By utilizing nozzles **30** which have an outlet spray pattern such as the spray pattern provided by aerosol spray buttons, a very fine, soft spray will be provided to the sunbather which the sunbather can hardly feel yet is effective to keep the sunbather cool and to promote tanning. Nozzles **30** are rotatable about axis *a* (FIG. 3), which axis is substantially perpendicular to the outlet orifice **58** of the nozzle. In this manner, the nozzles can be selectively directed by the sunbather.

In the embodiment of FIGS. 5–7, a reflector **60** carrying a tubular member **62** is provided for pivotal connection to the frame **64** of seating means, such as a conventional lounge chair. Reflector **60** and tubular member **62** are connected to a

hinge or bracket 66 which pivotally couples the reflector to frame 64. hinge 66 is similar to hinge 50 of the FIGS. 1–4 embodiment and is pivotable by loosening bolt 68 as indicated in FIG. 7.

A number of nozzles 70, identical to nozzles 30 of the FIGS. 1–4 embodiment, are connected to tubular member 62 as shown in FIGS. 5 and 6. Coupling tubes 72 and 74 are connected at each end of tubular member 62 for coupling flexible hose 76 to the tubular member. When hose 76 is connected to a suitable water supply, the water flow through hose 76 and the coupling tube will provide an exit spray via the outlet orifices of nozzles 70. If desired, and end of tubular member 62 may be blocked whereby water can enter only at the other end and exit only through the nozzles. The nozzles 70 are rotatable about an axis that is substantially perpendicular to the axis of the outlet orifice, as with nozzles 30 of the FIGS. 1–4 embodiment, so that the spray from nozzles 70 may be selectively directed by the sunbather.

It is seen that effective sunbathing devices have been provided which are simple in construction and are easily operable to provide a cooling spray and to aid in obtaining a relatively rapid suntan. Utilizing aerosol spray button-type nozzles, it is estimated that with a water pressure of 10 pounds per square inch, a unit such as that illustrated in FIG. 1 can be operated effectively to expend only about 1 gallon of water per hour. Another advantage of the present invention is that sunbathing control can be achieved by varying the water pressure and varying the position of the reflectors. Further, a FIG. 1 embodiment lounge chair can be folded when desired and can be set up rapidly for use. The embodiment of FIGS. 5–7 provides a relatively inexpensive system that can be attached to any seating means without requiring any physical alteration of the seating means.

Although illustrative embodiments have been shown and described, it is to be understood that various modifications and substitutions may be made by those skilled in the art without departing from the novel spirit and scope of the present invention.

What is claimed is:

1. In a device for sunbathing comprising a lounge chair having a tubular frame construction with the tubular frame extending around the backrest or pillow portion of the chair, the improvement comprising: a flexible hose for connection to a water supply; means coupling the hose to the tubular frame to provide a water flow path from the water supply through the hose and the tubular frame; a plurality of water nozzles communicating with the water flow path and located along the tubular frame with the outlet of each of the nozzles being directed inwardly of the frame so as to direct the water during operation of the device toward the person lying in the lounge chair; and means within the nozzles for providing an outlet spray pattern so that the person lying in the chair will receive a fine water spray during operation of the device.

2. In a device for sunbathing as described in claim 1, in which the tubular frame defines a plurality of holes and the nozzles comprise plastic members having a water breakup outlet to provide an outlet spray pattern, and means for retaining said plastic members within the holes.

3. In a device for sunbathing as described in claim 2, wherein each of said plastic members is rotatable about an axis that is substantially perpendicular to its outlet orifice.

4. In a device for sunbathing as described in claim 1, including a plurality of reflectors pivotally connected to the tubular frame.

5. In a device for sunbathing as described in claim 1, wherein flexible hose means are provided for bridging the joints of the tubular frame; and including manually operable valve means connected to the waterline and operable by a person lying in the chair.

6. In a device for sunbathing as described in claim 1, wherein a plurality of said lounge chairs are provided and are connected by flexible hoses to a common water pump, said hoses being connected in parallel arrangement and each having manually operable valve means connected thereto and operable by a person lying in the chair.

7. A sunbathing device for connection to a lounge chair, which comprises; a reflector having means connected thereto for pivotal mounting of said reflector on the lounge chair, said reflector carrying a tubular member which member has at least one water nozzle located thereon and communicating with the inside of said tubular member; and means for coupling to said tubular member a flexible hose for connection to a water supply whereby water flow through the water hose will pass through the tubular member and will exit through the water nozzle, said water nozzle having means for providing an outlet spray pattern and being rotatable about an axis that is substantially perpendicular to its outlet orifice.

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