ABSTRACT

An adjustable high-intensity light therapy device, and a method of use for treatment of seasonal affective disorder (SAD) and other conditions, diseases, and disorders. The device includes a head with a high-lumen light source configured to emit a band of light having a blue light component. The device may also include a diffuser, a heat sink, a cover, and an electronic circuitry configured to control the light source according to a user input or a predefined program. The head is mounted atop an elongated stand via one or more adjustable joints, and the elongated stand is affixed to a base. The one or more adjustable joints allows balanced movement and stable adjustment of the head for irradiation of a large space and treatment of an individual from a large distance. The method may include adjusting the head of the device, activating the light source, and viewing the band of light.

Light Therapy Device and Method of Use for Treatment of Seasonal Affective Disorder

FIELD

[0001] The present invention relates to an adjustable high-lumen light therapy device and method of use for treatment of seasonal affective disorder (SAD) and adjustment of circadian rhythm. The device, which may include a floor lamp form factor, includes an adjustable head connected to an elongated stand. The head includes a light assembly with a high-lumen therapeutic light source and a heat sink affixed to an upper surface of the light source, such that the heat sink removes heat from the light source during operation. The mount point is centrally positioned on a lower surface of the light source to enable an angle of the head to be stably adjusted via a joint of the elongated stand. The adjustability of the device, combined with the high-lumen light source, enables delivery of sufficient therapeutic light to one or more persons for effective treatment of SAD and other conditions, diseases, and disorders, and adjustment of circadian rhythm in one or more persons, even from a distance.

BACKGROUND

[0002] Depression, or major depressive disorder (MDD), is a physiological state of low mood and aversion to activity and generally affects a person's thoughts, behavior, motivation, feelings, and sense of well-being. Sadness, difficulty in thinking and concentration, and significant changes in appetite or time spent sleeping may be characteristic of depression. In some cases, depression may be associated with suicidal ideation or tendencies; about 2-8% of adults with major depression die by suicide, and about 50% of people who die by suicide had

depression or another mood disorder. Depression is a serious disorder that requires prompt and regular treatment for its management.

[0003] Seasonal Affective Disorder (SAD), a type of major depressive disorder, is a mood disorder in which people who have normal mental health throughout most of the year exhibit depressive symptoms at the same time each year, typically during winter. Symptoms of SAD may include sleeping too much, having little to no energy, and overeating. SAD causes a substantial burden on the healthcare system, as approximately 1% of people worldwide suffer from SAD, many of whom seek treatment – including hospitalization – because of this condition. In addition, most people with SAD experience major depressive disorder, but as many as 20% may have a bipolar disorder. As a result, sufferers of SAD may experience a depressive episode either due to major depressive disorder or as part of bipolar disorder during the winter, and remit in the summer. In this manner, SAD may be a feature of depression, bipolar disorder, or both.

[0004] Treatments for SAD include light therapy, medication, and cognitive behavioral therapy, among others. While the exact cause(s) of SAD remain unknown, the relative effectiveness of bright-light therapy suggests that the cause(s) of SAD may be related to exposure to light, particularly sunlight, which may decrease during winter. There is evidence that many individuals with SAD have a delay in their circadian rhythm, and that bright-light therapy corrects these delays which may be responsible for improvement in these individuals. While medication and therapy may be effective as standalone treatments, these approaches are often combined with light therapy. Light therapy may include exposure to natural light from the sun or exposure to artificial light from a lightbox.

[0005] Lightboxes are characterized by their luminous flux and their illuminance. The SI units for luminous flux and illuminance are the lumen (*lm*) and the lux (*lx*), respectively. The

mathematical relationship between luminous flux and illuminance is $1\ lx = \frac{1\ lm}{d^2}$, where *d* is the distance from the light source to the individual, in meters. In other words, the illuminance (in *lx*) is defined as the luminous flux of the light source (in *lm*) divided by the square of the distance between the light source and an observer (in *m*). Accordingly, for a light source with a constant luminous flux, illuminance decreases with greater distances and increases with lesser distances.

[0006] One effect of this with ordinary lightboxes is the requirement that the individual be very close to the light source to receive the industry standard illuminance for light therapy, which is 10,000 *lux* of white light. Because many ordinary lightboxes operate with a single 1600 *lm* bulb, for the individual to receive 10,000 *lux* of white light, the individual must be 0.4 meters, or 15.7 inches from the lightbulb inside the device to receive effective therapy. However, requiring the individual to closely view the ordinary lightbox for a prolonged period limits the individual's ability to perform other tasks while receiving therapy and often results in the individual viewing the ordinary lightbox from a greater distance, which decreases the dose received and decreases therapeutic effectiveness.

[0007] Requiring the individual to sit closely to a light source for prolonged periods is an unnatural experience and dampens productivity, causes frustration and impatience and, in many cases, aversion to or discontinuation of treatment. Because regular adherence to bright-light therapy is important for effectiveness, ordinary lightboxes have a low success rate for the treatment of SAD and other conditions associated with circadian rhythm dysregulation, even when combined with other treatment approaches. Prior attempts to address these shortcomings include the development of different types of devices, including visors, ceiling-mounted lightboxes, and others. However, wearing therapeutic visors makes it difficult to perform activities such as walking, reading, and viewing a computer screen. Ceiling-mounted lightboxes

require individuals to have wooden ceilings, which is not the case for many. Further, many of these devices have a trough at 460 nm to 490 nm, a band of light which is identified as critical to therapeutic efficacy, and as such are less effective compared to the present invention.

[0008] Finally, many individuals seem to need more illuminance than the industry standard 10,000 *lux* for effective treatment, which suggests a fundamental shift in expectations regarding what is considered effective light therapy. This is supported by the fact that 10,000 *lux* was, for a long time, the brightest that was practical using fluorescent bulbs, which were the best lighting technology available for a long period. As such, the full potential of bright-light therapy has not yet been realized.

[0009] Accordingly, there is a long-felt and unmet need for an improved light therapy device for the convenient and effective treatment of SAD and other conditions, diseases, and disorders. The present invention leverages key insights into the psychology of bright-light treatment and the biology of circadian rhythm regulation to improve on past efforts to treat these conditions, and thereby addresses this unmet need.

SUMMARY

[0010] In one aspect, the present invention provides a light therapy device, comprising a head adjustably connected to an elongated stand at a mount point of the head. The head comprises a light assembly that includes the mount point and a light source, each on a lower surface of the light assembly. Because the light source may generate excess heat, the light therapy device may also include a heat sink on an upper surface of the light assembly. In this manner, the light therapy device may only emit light downward from the lower surface of the light assembly and may not emit any light upward from the upper surface of the light assembly.

[0011] Placement of the mount point on the lower surface of the light assembly allows balanced movement and stable adjustment of the head of the device for irradiation of a large space, and the high-lumen light source enables the effective and convenient treatment of one or more individuals from a larger distance than is ordinarily achievable with lightboxes and related existing devices and systems. In this manner, one or more individuals may receive light therapy while also performing other tasks, and as a result, individuals do not become frustrated or impatient during light therapy sessions. The outcome is better adherence to therapeutic approaches which utilize light therapy. With the present invention, individuals are better able to treat or manage SAD or another condition, disease, or disorder characterized at least in part as being responsive to light therapy.

[0012] In another aspect, the present invention provides a method for treating SAD, or another condition, disease, or disorder, which comprises activating a light source of the light therapy device and viewing one or more bands of light emitted from the light source. Because of the high lumen count of the light source, the method may be performed by one or more individuals positioned a large or relatively large distance from the light therapy device. The light therapy device may be configured to enable the individual to use the light therapy device, not only as a source of light therapy, but also as a source of indoor lighting. In some instances, the device may be configured such that little or no action is needed from the individual for use of the device. For example, the light source may be controlled by an electronic circuitry of the device which enables operation according to a user input or a predefined program that changes a characteristic of the light source as a function of the time of day.

BRIEF DESCRIPTION OF THE DRAWINGS

[0013] Although the characteristic features of the invention will be particularly pointed out in the claims, the invention itself and manners in which it may be made and used may be better understood after a review of the following description, taken in connection with the accompanying drawings, wherein like numeral annotations are provided throughout.

[0014] FIG. 1 depicts a perspective view of an exemplary light therapy device according to the present invention.

[0015] FIG. 2A depicts an exploded lower perspective view of the exemplary light therapy device.

[0016] FIG. 2B depicts a close-up exploded lower perspective view of internal components of the exemplary light therapy device.

[0017] FIG. 3A depicts an exploded upper perspective view of the exemplary light therapy device.

[0018] FIG. 3B depicts a close-up exploded upper perspective view of internal components of the exemplary light therapy device.

[0019] FIG. 4 depicts a close-up perspective view of a head of the exemplary light therapy device.

DETAILED DESCRIPTION

[0020] Reference is made herein to the attached drawings. Like reference numerals are used throughout the drawings to depict like or similar elements of the invention. The figures are intended for representative purposes only and should not be considered limiting in any respect.

[0021] Referring now to FIGs 1 and 4, there are depicted a perspective view of an exemplary light therapy device (FIG. 1) and a close-up perspective view of a head of the

exemplary light therapy device (FIG. 4). A light therapy device 1 comprises a head 2 adjustably connected to an elongated stand 3 at a mount point of the head 2. In the shown embodiment, the light therapy device 1 is comprised of a floor lamp form factor.

[0022] The floor lamp form factor, though perhaps less compact during use compared to some lightbox designs, provides advantages. With the floor lamp form factor, a light source of the light therapy device 1 is easily positioned above the eyes of an individual during a light therapy session, and therapeutic light enters the individual's eyes from an elevated angle which results in improved therapeutic efficacy. This is due to the presence of intrinsically photosensitive retinal ganglion cells in the retina of the individual.

[0023] Intrinsically photosensitive retinal ganglion cells (ipRGCs) are a type of neuron which contribute to the detection of light between 460 nm and 490 nm (a shade of blue light). The detection of this shade of blue light by these cells serves many purposes, but in the context of the present invention, regulates the circadian rhythm of the individual and contributes to the presence and absence of SAD and other conditions, diseases, and disorders which are responsive to light therapy. Because these cells are distributed along the retina such that there are more ipRGCs toward lower portion(s) of the retina of the eye, light which is shone from above the eye will tend to activate or stimulate these cells more effectively than light shone from below the eye. Accordingly, the present invention provides both the light therapy device 1 as well as improved methods of treating SAD and other conditions, diseases, and disorders, by more effectively stimulating ipRGCs in the retina(s) of one or more individuals.

[0024] Generally, the mount point which connects the head 2 to the elongated stand 3 is positioned on the lower surface of the light assembly, which is inside the head 2, underneath a shade 13 of the head 2. The weight of the head 2 rests upon the elongated stand 3, and because

the head 2 is symmetrical and the mass of the head 2 is evenly distributed, the light therapy device 1 maintains balance before, during, and after adjustment of the head 2. In this manner, the light therapy device 1 does not easily tip over or otherwise fall from the upright position.

[0025] In the shown embodiment, the mount point is positioned adjacent to a joint 14 of the elongated stand 3, and the joint 14 is adjustable to define one or more angles of the head 2 to illuminate a particular area. The joint may comprise one or more selected from a group including, but not necessarily limited to, a hinge joint, a ball joint, and any combination thereof. In the shown embodiment, the joint 14 comprises a ball 22 therein, which forms a ball joint and enables both tilting and rolling of the head 2 relative to the elongated stand 3. As would be understood by a person of ordinary skill in the art, a hinge joint would enable tilting or rolling, but not both. The ball 22 of the ball joint is affixed to an extension 15 of the elongated stand 3, which extends from the ball 22 to and through a central aperture of a diffuser 8 of the head 2 and attaches to the mount point therein. Because the extension 15 increases a radial distance of a center of mass of the head 2 relative to the axis of the elongated stand 3, it may be advantageous to design the extension 15 to be short in order to keep the light therapy device 1 balanced. In this manner, the light therapy device 1 is highly stable and does not tip over when upright.

[0026] In some embodiments, a lower joint extension 16 is rotatably affixed to an upper sleeve 17 of the elongated stand 3, and this enables a rotational movement of the head 2 about the axis of the elongated stand 3. This allows the individual to pan the head 2 across different areas of a space, which may be necessary during adjustment of the light therapy device 1 prior to, during, or after use. In this manner, in various embodiments, the head 2 of the light therapy device 1 is capable of tilting, rolling, and panning during adjustment or configuration of the light therapy device 1 for use.

[0027] In some embodiments, the light therapy device 1 is programmable to modulate a luminous intensity of a band of light emitted from the light source. Such programming may involve programming the light therapy device 1 to brighten or dim the band of light based on a pattern or behavior defined by the individual. Exemplary programming may include brightening the band of light for a period before sleep in order to facilitate a later wake time in the morning, dimming the band of light for a period before sleep in order to facilitate an earlier bedtime in the evening, and/or brightening the band of light for a period in the morning to facilitate an earlier wake time than would otherwise occur. These approaches are helpful for individuals suffering from jetlag, travel fatigue, or adjustment of sleep-wake cycles and schedules.

[0028] In some embodiments, the band of light comprises one or more selected from a group including but not necessarily limited to a blue light component, a warm light component, and any combination thereof. Because some individuals may prefer or benefit from only blue light, it is contemplated herein that the band of light of the light source may include only blue light. Similarly, because some individuals may prefer or benefit from blue light combined with one or more other colors of light, it is contemplated herein that the band of light may include blue light and another color of light, including but not limited to a warm color, such as yellow, orange, red, or any variation or combination thereof. An exemplary combination of a blue light component and a warm light component may be a full spectrum of visible light with wavelengths ranging from 400 nm to 740 nm. In such embodiments, the light emitted from the light source may appear white or, to some viewers, green or green white. In embodiments which emit only blue light, it may be beneficial to emit the blue light at the same intensity as the intensity of the blue light of a plurality of different colors of light. Accordingly, among various embodiments the

blue light component, which stimulates ipRGCs in the retina of the individual for therapeutic benefit, may be delivered at a constant or near-constant luminous flux and/or illuminance.

[0029] Generally, the light source of the present invention has a high radiant flux and/or luminous flux, and as such, the light therapy device 1 emits therapeutic light at a much higher intensity compared to ordinary lightboxes. This results in a higher illuminance experienced by the individual during use of the light therapy device 1, even from a significant distance, such as from across a room. In this manner, the individual receiving light therapy receives at least the industry standard 10,000 *lux* of white light, or a therapeutically equivalent amount of blue light, during use of the light therapy device 1. In some embodiments, individuals may receive substantially more illuminance compared to the industry standard for illuminance for light therapy. In this manner, individuals who may not benefit from receiving only 10,000 *lux* may benefit from using the present invention and receiving a higher illuminance during treatment.

[0030] In various embodiments, the light therapy device 1 is connected to a power source by an electrical connection which may include an alternating current plug 24. The electrical connection may be modulated by a controller 23, which may control the amount of electricity delivered to the light source via an electrical wire 25. The controller 23 may comprise one or more of a dimmer, a switch, and a combination thereof. The dimmer may be used to increase or decrease a brightness of the light source, based on a user input and/or a program which automatically dims the light source at a certain time of day, such as evening or night. In this manner the light therapy device may be programmed for behavior that is different in the morning compared to afternoon, evening, and/or night.

[0031] Similarly, the controller may be used to select a mode of operation. Exemplary modes of operation may include a mode for blue light only, a mode for warm light only, a mode

for blue light combined with warm light, a mode for full spectrum (white light), and the like. The controller may be configured to transition between two or more different modes as a function of time, such as throughout a day. In some such embodiments, the light therapy device may be programmed to wake the individual with full spectrum light in the morning, transition to blue light one or more times during the day for light therapy, and/or transition to warm light in the evening prior to bedtime. In some embodiments the different modes may be activated by lighting one or more subsets of lights of the light source. In some embodiments the light therapy device may include one or more light filters which provide the different modes. In this manner, the light source may be customizable according to preference or necessity and may also provide an automated lighting experience which is both convenient and therapeutically effective.

[0032] Referring now to FIGs 2A, 2B, 3A, and 3B, there are depicted exploded lower and upper perspective views of the exemplary light therapy device (FIG. 2A and 3A, respectively) and close-up exploded lower and upper perspective views of internal components of the head of the exemplary light therapy device (FIG. 2B and 3B, respectively). Generally, the head 2 comprises a light assembly 5 which comprises a light source 6 on a lower surface of the light assembly 5. The light source 6 comprises one or more selected from a group including, but not necessarily limited to a light-emitting diode (LED), a plurality of LEDs, a fluorescent bulb, a plurality of fluorescent bulbs, an incandescent bulb, a plurality of incandescent bulbs, and any combination thereof. In the shown embodiment, the light source 6 comprises a plurality of LEDs radially arranged about the mount point 4 of the light assembly. During assembly of the head 2 of the light therapy device, the extension 15 of the elongated stand 3 extends to and through the central aperture 10 of the diffuser 8 of the head 2 and attaches to the mount point 4 on the lower surface of the light assembly 5. The diffuser 8 is secured to the light assembly 5 by way of

making one or more connections between fasteners 7 and fastener receivers 9. In the shown embodiment there are four fasteners 7 and four fastener receivers 9, however, alternate numbers and configurations of fasteners 7 and fastener receivers 9 are contemplated.

[0033] The diffuser 8 may be included or excluded as needed for a particular functionality. The diffuser 8 may be easily removable to facilitate replacement of lights of the light source 6, customization of the color of light emitted from the light source 6, and/or other forms of maintenance or customization. Accordingly, individuals may manually place and displace the diffuser 8 to achieve a desired configuration.

[0034] In the shown embodiment, a heat sink 11 is included in the head 2 of the light therapy device. The heat sink 11 may be affixed to an upper surface of the light assembly 5, according to known methods, such as via a thermal paste or equivalent. The head 2 may also include one or more fans positioned above the heat sink 11, angled toward the heat sink 11, to facilitate removal of heat from the light source 6 and light assembly 5. In such embodiments, the one or more fans may be integral with the head 2 and may not be highly visible from the exterior of the head 2. In like manner, the one or more fans may be powered by the same power source which powers the rest of the light therapy device for ease of construction and use. Because the light therapy device may utilize a large number of lights for the light source 6, the amount of residual heat produced during use, especially extended use, may be such that the heat may reduce the lifespan of the light assembly and/or light source. Accordingly, the heat sink (and one or more fans, where present) may be needed for effective cooling and extension of the lifespan of the light assembly and/or light source.

[0035] In the shown embodiment, one or more of the head 2, the elongated stand 3, and a base 21 affixed to the elongated stand 3 of the device is adjustable to define a configuration of

the device. As described elsewhere herein, the head 2 of the light therapy device may be capable of tilting, rolling, and panning during adjustment or configuration of the light therapy device for use. In addition, a length of the elongated stand 3 may be telescopically adjustable to raise and lower the head 2 of the device during adjustment. For example, in the shown embodiment, the lower joint extension 16 of the joint 14 extends downward into the upper sleeve 17 of the elongated stand 3. The upper sleeve 17 is affixed to an upper clamp 18, and the base 21 is affixed to a lower clamp 20. A middle insert 19 of the elongated stand 3 includes an external diameter that is smaller than an internal diameter of the upper sleeve 17 and an internal dimeter of the base 21, and as such, the middle insert 19 is configured to be inserted into each of the upper sleeve 17 and the base 21 during assembly and use. In the shown embodiment, the middle insert 19 includes a plurality of grooves or apertures thereon which engage the upper clamp 18 and the lower clamp 20 to define and hold a relative position of the upper sleeve 17 and the base 21, respectively. In this manner, a telescopic adjustment of the device is provided.

[0036] In addition, in the shown embodiment, the base 21 comprises a tripod that is retractable to configure the device for storage or transport and expandable to configure the device for upright placement on a surface. The legs of the tripod fold inward toward each other to be parallel or mostly parallel with the elongated stand 3, such that the device is more compact, and extend outward from each other, as shown, for stable engagement of the surface. In this manner, the device does not readily tip over when upright and configured for use.

[0037] In the shown embodiment, the light assembly 5 comprises a printed circuit board (PCB) with a plurality of LEDs (i.e., light sources) affixed thereto, and one or more LEDs of the plurality of LEDs emits a band of light having a blue light component. In an exemplary embodiment, 80 LEDs are included on the PCB. In embodiments, LEDs may be preferable to

other light sources due to their relatively low power consumption, high luminous flux, and low cost. The blue light component of the band of light emitted from the LEDs stimulates the ipRGCs, as described elsewhere herein, for the light therapy regimen. In this manner, the present invention provides both energy efficient and cost-effective light therapy.

[0038] In various embodiments the PCB includes a circuit that operably connects a power source to a selection of LEDs of the plurality of LEDs via a connection (i.e., an electrical connection), such that the connection is controllable by the controller which is operably connected thereto. In some embodiments the selection of LEDs includes a subset of the total LEDs of the plurality, but in other embodiments the selection of LEDs includes the total number of LEDs. The controller may be configured to select, activate, and/or deactivate a mode of operation, as described elsewhere herein.

[0039] In various embodiments the head 2 further comprises the diffuser 8 affixed to the light assembly 5, which is configured to transmit all or a portion of light of the light source 6 therethrough. The aperture 10 of the diffuser 8 accepts the extension 15 of the elongated stand 3 therethrough during assembly. The diffuser 8 may be removably affixed to the light assembly 5, and in this manner, the diffuser 8 may be included or excluded from the light therapy device during use, according to need.

[0040] The present invention also provides a method for treating seasonal affective disorder and other conditions, diseases, and disorders, using a light therapy device of the present invention. Generally, the method comprises activating a light source of the light therapy device and viewing one or more bands of light emitted from the light source. Because the ipRGCs respond to blue light, the one or more bands of light emitted from the light source may include blue light. Accordingly, in various embodiments of the method, the light assembly 5 comprises a

PCB with a plurality of LEDs affixed thereto, such that one or more LEDs of the plurality of LEDs emits a band of light having a blue light component.

[0041] In some embodiments, the method further comprises operating the controller operably connected to the connection (i.e., the electrical connection) of the circuit of the PCB. In such embodiments, the circuit may operably connect the power source to the selection of LEDs of the plurality of LEDs via the connection, such that the connection is controllable by the controller operably connected thereto. In this manner, the light source 6 may be brightened, dimmed, activated, deactivated, and/or one or more light colors thereof changed as part of the method of use.

[0042] In various embodiments, the device is programmable to modulate the luminous intensity of one or more bands of light emitted from the light source 6. In some such embodiments, the method further comprises programming the device to modulate the luminous intensity of the one or more bands of light. The band of light may comprise one or more selected from a group including, but not necessarily limited to a blue light component, a warm light component, and any combination thereof. In some such embodiments, the programming of the device may cause the luminous intensity of the band of light to be modulated as a function of time, for example, throughout a day, a week, a month, a season, and/or a longer period.

[0043] In various embodiments of the method of use, the method further comprises adjusting the head 2, adjusting the elongated stand 3, and/or adjusting the base 21 affixed to the elongated stand 3 of the device. Because the mount point is positioned adjacent to the joint 14 of the elongated stand 3, and the joint 14 is adjustable to define an angle of the head 2, the head 2 may be pointed wherever needed for use. In embodiments wherein the joint 14 comprises one or more selected from a group including but not necessarily limited to the hinge joint, the ball joint,

and any combination thereof, the method may comprise tilting, rolling, and/or panning the head 2 during adjustment or configuration of the light therapy device for use.

[0044] The foregoing descriptions of specific embodiments of the present invention have been presented for purposes of illustration and description. They are not intended to be exhaustive or to limit the present invention to the precise forms disclosed, and modifications and variations are possible in view of the above teaching. The exemplary embodiment was chosen and described to best explain the principles of the present invention and its practical application, to thereby enable others skilled in the art to best utilize the present invention and its embodiments with modifications as suited to the use contemplated.

[0045] It is therefore submitted that the present invention has been shown and described in the most practical and exemplary embodiments. It should be recognized that departures may be made which fall within the scope of the invention. With respect to the description provided herein, it is submitted that the optimal features of the invention include variations in size, materials, shape, form, function and manner of operation, assembly, and use. All structures, functions, and relationships equivalent or essentially equivalent to those disclosed are intended to be encompassed by the present invention.

I claim:

1) A light therapy device, comprising:

a head adjustably connected to an elongated stand at a mount point of the head;

wherein the head comprises a light assembly comprising a light source on a lower surface of the light assembly;

wherein the mount point is positioned on the lower surface of the light assembly.

2) The device of claim 1, wherein the light source comprises one or more selected from a group consisting of: a light-emitting diode (LED), a plurality of LEDs, a fluorescent bulb, a plurality of fluorescent bulbs, an incandescent bulb, a plurality of incandescent bulbs, and any combination thereof.

3) The device of claim 1, wherein the head further comprises a diffuser affixed to the light assembly configured to transmit light of the light source therethrough, wherein an aperture of the diffuser accepts an extension of the elongated stand therethrough.

4) The device of claim 1, wherein one or more of the head, the elongated stand, and a base affixed to the elongated stand of the device is adjustable to define a configuration of the device.

5) The device of claim 4, wherein a length of the elongated stand is telescopically adjustable to raise and lower the head of the device.

6) The device of claim 4, wherein the base comprises a tripod that is retractable to configure the device for storage or transport and expandable to configure the device for upright placement on a surface.

7) The device of claim 4, wherein the mount point is positioned adjacent to a joint of the elongated stand, wherein the joint is adjustable to define an angle of the head.

8) The device of claim 7, wherein the joint comprises one or more selected from a group consisting of: a hinge joint, a ball joint, and any combination thereof.

9) The device of claim 1, wherein the light assembly comprises a printed circuit board (PCB) with a plurality of LEDs affixed thereto, wherein one or more LEDs of the plurality of LEDs emits a band of light having a blue light component.

10) The device of claim 9, wherein the PCB comprises a circuit that operably connects a power source to a selection of LEDs of the plurality of LEDs via a connection, wherein the connection is controllable by a controller operably connected thereto.

11) The device of claim 1, wherein the device is programmable to modulate a luminous intensity of a band of light emitted from the light source.

12) The device of claim 11, wherein the band of light comprises one or more selected from a group consisting of: a blue light component, a warm light component, and any combination thereof.

13) A method for treating seasonal affective disorder, comprising:

activating a light source of a light therapy device; and

viewing one or more bands of light emitted from the light source;

wherein a head of the light therapy device is connected to an elongated stand at a mount point of the head;

wherein the head comprises a light assembly comprising the light source on a lower surface of the light assembly;

wherein the mount point is positioned on the lower surface of the light assembly.

14) The method of claim 13, wherein the light assembly comprises a PCB with a plurality of LEDs affixed thereto, wherein one or more LEDs of the plurality of LEDs emits a band of light having a blue light component.

15) The method of claim 14, further comprising:

operating a controller operably connected to a connection of a circuit of the PCB;

wherein the circuit operably connects a power source to a selection of LEDs of the plurality of LEDs via the connection, wherein the connection is controllable by the controller operably connected thereto.

16) The method of claim 13, wherein the device is programmable to modulate a luminous intensity of a band of light emitted from the light source.

17) The method of claim 16, further comprising:

programming the device to modulate the luminous intensity of the band of light;

wherein the band of light comprises one or more selected from a group consisting of: a blue light component, a warm light component, and any combination thereof.

18) The method of claim 17, wherein the programming the device causes the luminous intensity of the band of light to be modulated as a function of time.

19) The method of claim 13, further comprising:

adjusting the head;

adjusting the elongated stand; and

adjusting a base affixed to the elongated stand of the device.

20) The method of claim 19, wherein the mount point is positioned adjacent to a joint of the elongated stand, wherein the joint is adjustable to define an angle of the head, wherein

the joint comprises one or more selected from a group consisting of: a hinge joint, a ball joint, and any combination thereof.

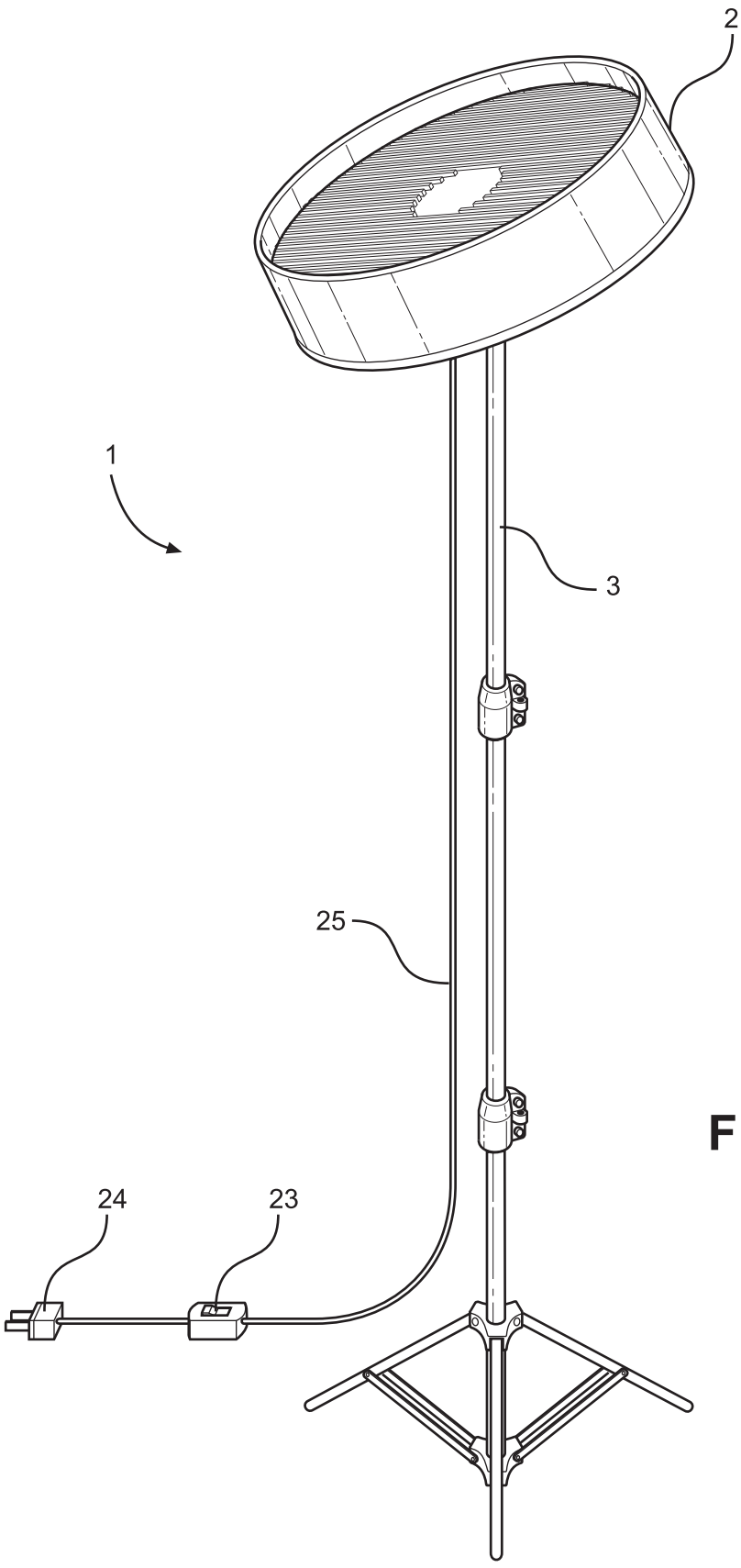

FIG. 1

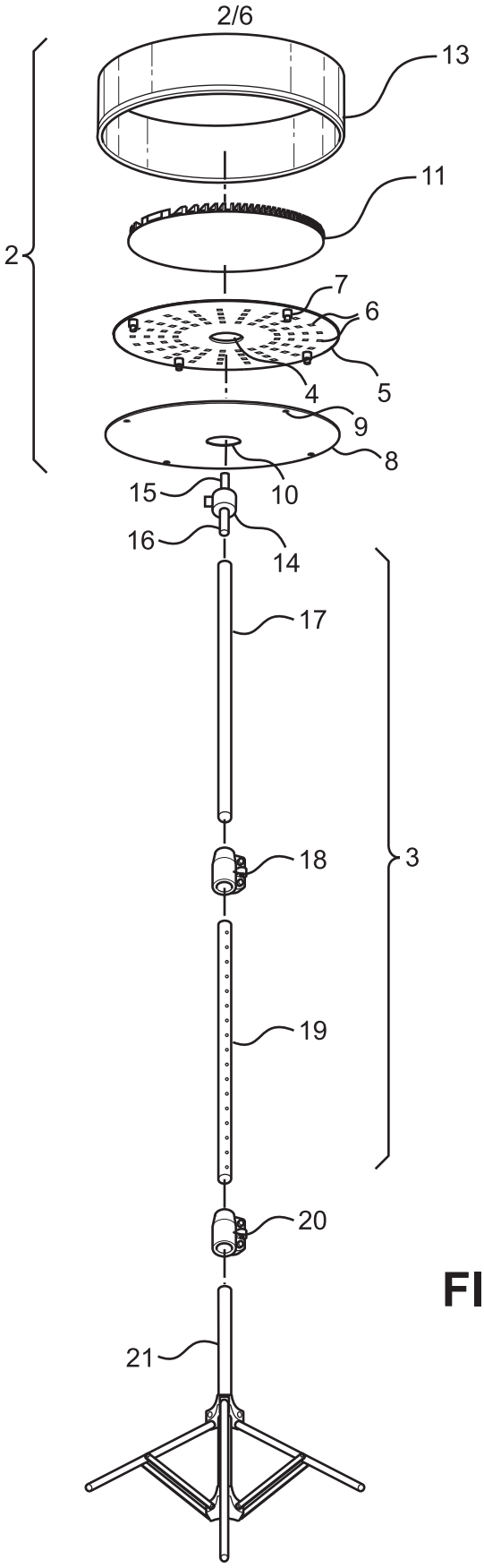

FIG. 2A

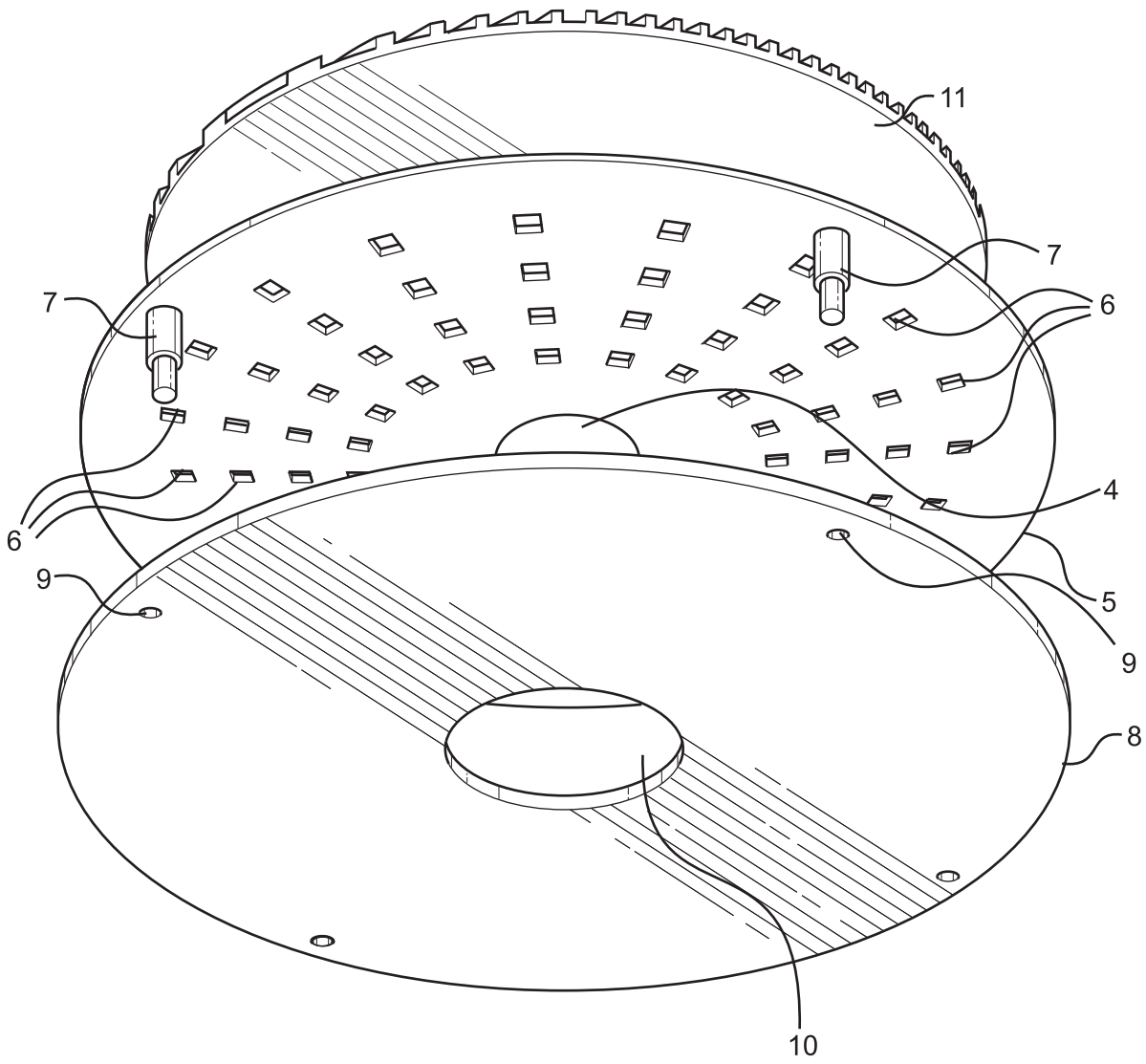

FIG. 2B

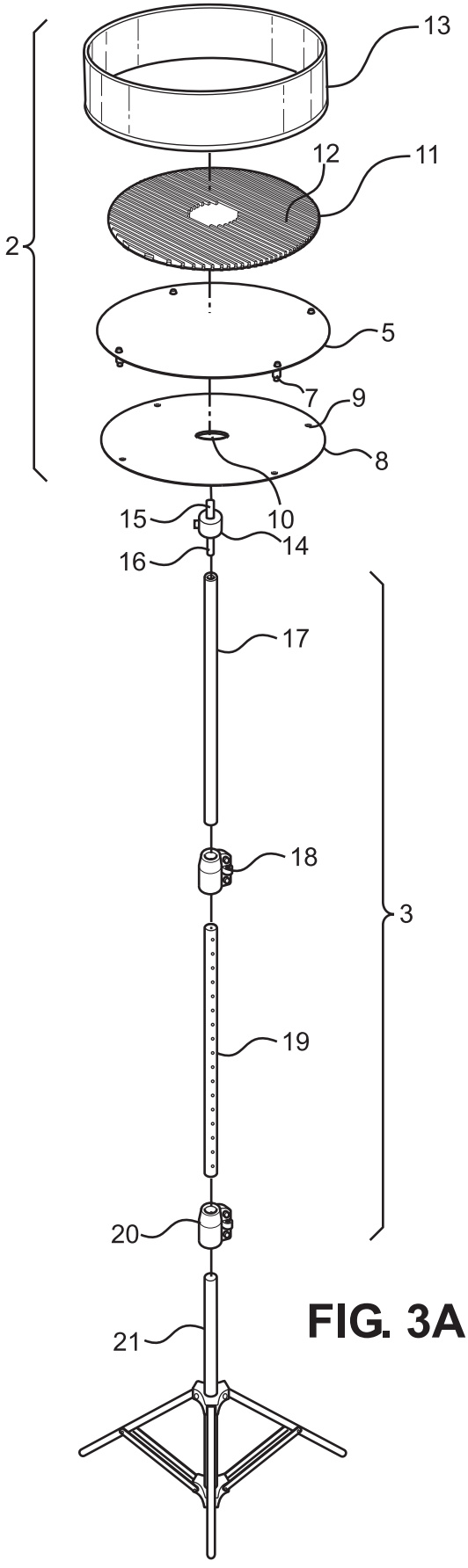

FIG. 3A

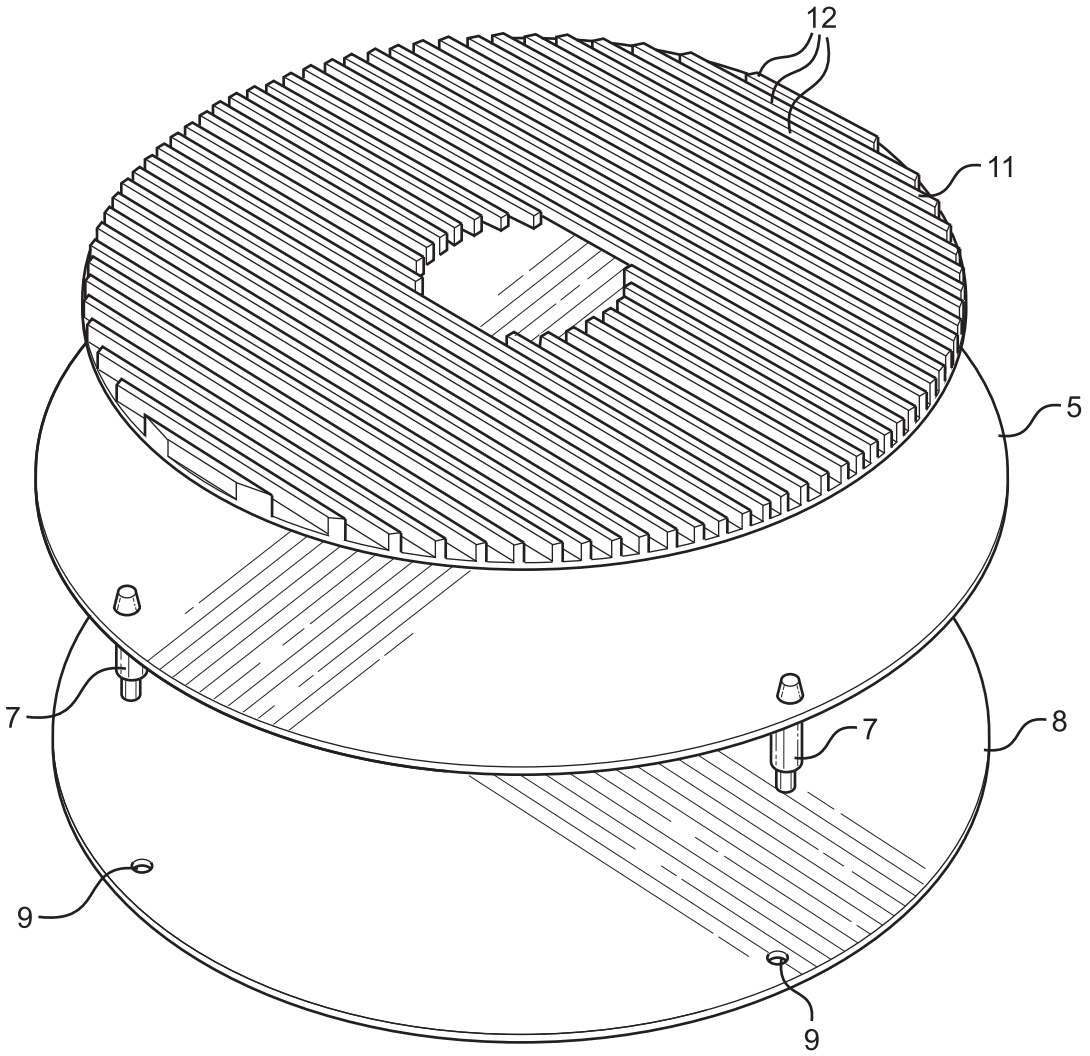

FIG. 3B

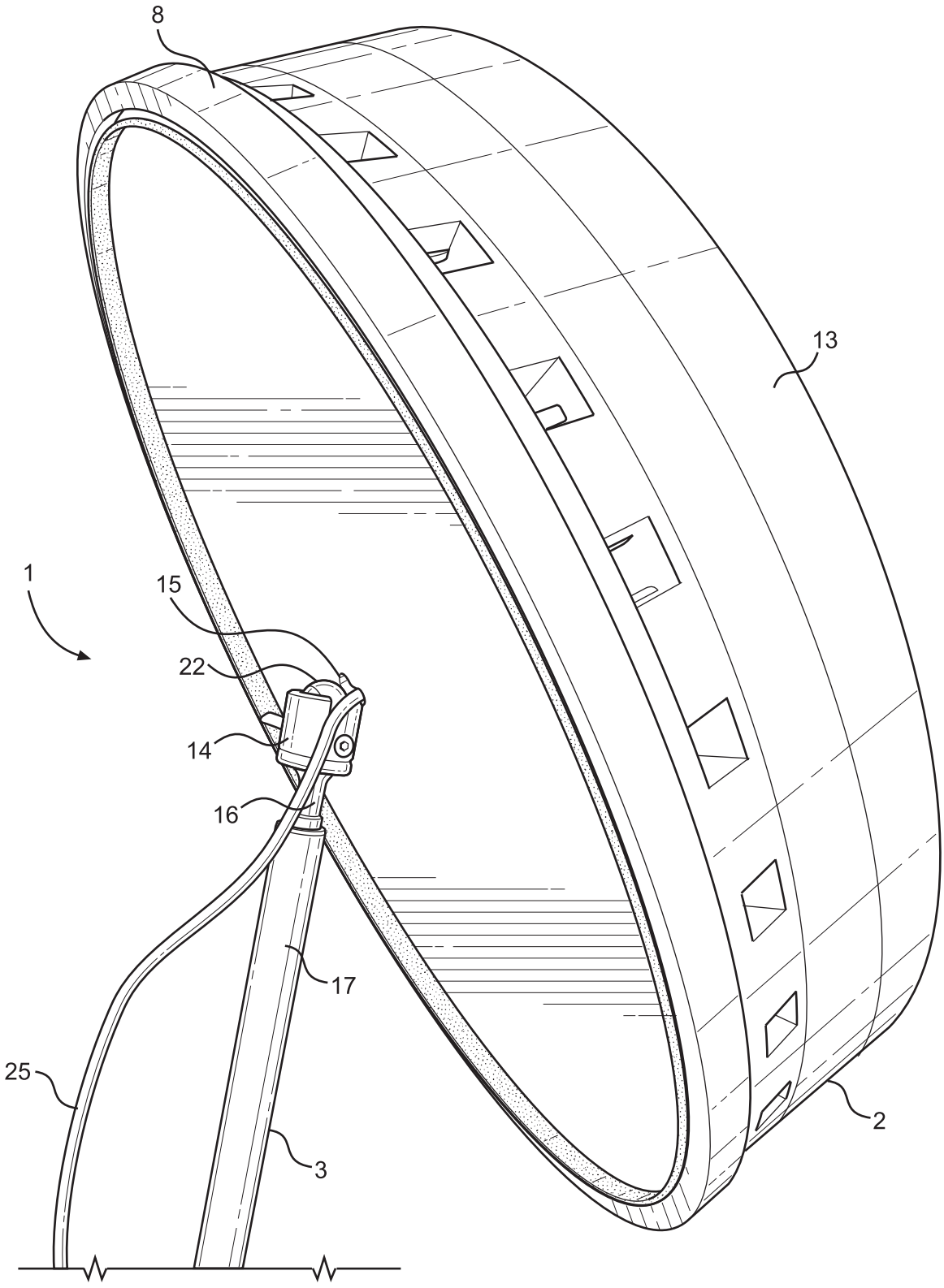

FIG. 4