GARMENT FOR MENTAL CONCENTRATION

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ABSTRACT

There is provided a garment for mental concentration used immediately before a sports competition such as ski alpine starts. The garment is loosely formed, and especially has a big head so that a wearer can put on the garment with a helmet being put on. The garment has also a hood that is formed significantly overhung forward. In the garment, an area from the bottom part under the waist to the end of the garment is continuously and extremely inflated. It is possible for the wearer to maintain physical and mental comfort. In addition, the garment also provides effects of minus ions, and a means for hearing a music. With these synergistic effects, the wearer can concentrates.
GARMENT FOR MENTAL CONCENTRATION

BACKGROUND OF THE INVENTION

[0001] 1. Field of the Invention

[0002] The present invention relates to a garment for use in sports competition. More particularly, the present invention relates to a garment for mental concentration before sports competitions including the skate, the ski alpine, the ski jump, and the track especially performed in a winter season starts.

[0003] 2. Discussion of Background

[0004] Typically, sports players warm up before the above-mentioned sports competitions start. The sports player wears a warm-up garment for warming up on a competition garment until own competition starts. Sometimes, the sports player wears only the warm-up garment without wearing the competition garment, takes off the warm-up garment, and wears the competition garment when own competition starts.

[0005] Recently, there is a common understanding that if the sports player plays own event soon after the warming up, it results in undesirable performance. It is recognized that a time for mental concentration to imagine a course and to allocate a pace is needed between the warming up and the event.

[0006] Conventionally, during the time for mental concentration, the sports player wears a garment mainly for thermal insulation in order not to cool a body. Such garment is not constructed with no psychological aspects taking into consideration, and is insufficient for the mental concentration.

[0007] Accordingly, the sports player has to start with unstable and insufficient mental conditions soon after the warming-up, and may feel strong anxiety for the start.

[0008] It has been revealed that the start significantly affects the final records. It is important to remove the mental instability.

SUMMARY OF THE INVENTION

[0009] 1. Objects of the Invention

[0010] It is an object of the present invention to provide a garment having preferable properties for mental concentration.

[0011] The garment for mental concentration according to the present invention can provide physically and psychologically desirable results, and can relax the wearer with a shape of the garment, adjustable temperature and humidity, a music, and minus ions.

[0012] Specifically, the garment according to the present invention is for mental concentration (static action) between the warming-up (dynamic action) and the competition (dynamic action). In other words, a time until the competition begins can be provided by wearing the novel garment. The wearer can spend the time under preferable conditions for mental concentration.

[0013] 2. Means of Problem-solving

[0014] The garment of the present invention is a loose and thick cocoon or balloon shape. The shape is based on an instinctive and unconscious human sense. The human being prefers a loosely-lapping shape instinctively. Once lapped by a cloth with such a shape, the human being feels fully at rest mentally, and relaxes like in mother's womb, in a cocoon, or in a balloon. In fact, the fact is recognized in the ergonomics art.

[0015] In view of the above, the garment according to the present invention is made to have a size in any directions significantly greater than the size of the wearer. In addition, the garment is made thick and has a small opening, whereby noise can be fully insulated for promoting mental concentration.

[0016] The garment includes a extremely big head and a extremely small opening, and is configured to have a bottom part much larger than an upper part; the upper and bottom parts are defined by a wrist as a border. This shape is very effective for the mental concentration.

[0017] As described above, when the garment is formed in a loose shape and having a size extremely greater than the actual size of the wearer, the wearer feels fully at rest mentally, which is extremely suitable for the mental concentration before the competition starts.

[0018] The garment has the big head. The head has the opening for the face of the wearer, which is significantly overhung forward, and a hood part is also significantly overhung forward. As a result, the third party cannot see the face of the wearer, and it is preferable for the concentration. In addition, the wearer can wear the garment of the present invention with a helmet, if any, being put on. It does not require to take off the helmet, when the wearer puts on the garment of the present invention. Accordingly, the wearer can spend static time effectively before the competition starts.

[0019] In the garment, a bottom part under the waist, i.e., the lower half of the body is formed much larger than the upper half of the body. It is possible for the wearer to maintain physical and mental comfort without any tight feel or pressure, when the wearer who will concentrate mentally is in the sitting position.

[0020] As mentioned above, the garment has the big head, the small opening for the face of the wearer, and the hood part significantly overhung forward. When the wearer sits down and stoops for the mental concentration, the face of the wearer cannot be seen from the outside. Accordingly, no one can prevent the wearer from being mentally concentrated.

[0021] It is conventionally recognized that atmospheric conditions such as humidity of the garment are important, when the garment is put on. At suitable portions inside the garment, conventionally known fabric EKS (trade mark) is used. The fabric EKS removes excess moisture, i.e., absorbs moisture, and generates heat. In addition to the humidity and temperature conditioning, when the fabric is formed in a mesh, aeration can be provided for improved mental concentration.

[0022] It is also conventionally recognized that music is preferable for relaxing. At suitable portions inside the garment, there is provided a first pocket with a fastener for putting into an instrument for hearing a music such as CD, MD or MP3, a second pocket with a hook-and-loop fastener for putting into a headphone code and a remote controller
which are accessories of the instrument, extending from the first pocket, and a plurality of tubes for inserting, passing and fixing the headphone code, extending from the second pocket. The wearer can hear a music with the CD, MD or MP3 player for the mental concentration without the instrument and the accessories such as the code being obstacles.

0023 A middle fabric of the garment can produce minus ions. Two types of ions, i.e., plus ions and minus ions, exist in the atmosphere. The plus ions promote excitation of the human being, while the minus ions increase oxygen transport ability, and promote metabolism of the human being. The minus ions adjust the conditions of the human body including blood flow promotion, fatigue reduction, and stress elimination, and thus provide physically and mentally preferable effects on the human.

0024 Such properties of the minus ions are extremely preferable for the mental concentration by the sports player before the competition starts. In other words, the minus ions can reduce irritation caused by excess excitement and excess stress, and eliminate the stress. It is also possible to promote image training and increase the concentration.

0025 The minus ions are provided by any widely known natural ores such as mineral tourmaline that naturally electries permanently.

0026 In order to provide the middle fabric used in the garment of the present invention, these specific natural ores discharging the minus ions can be applied by the first step of pulverizing the ores into fine particles having an average diameter of 0.1 to 40 attaching and fixing the pulverized fine particles to one side or both side of the middle fabric comprising synthetic fibers, or kneading the pulverized fine particles into the fibers upon fiber forming, or immersing the pulverized fine particles into the middle fabric.

0027 The thus-obtained middle fabric is used to prepare a final fabric for producing the garment of the present invention by a number of typical production methods.

0028 For example, the middle fabric is coated with a binder, and adhered to a rear surface of a front (outermost) fabric. The middle fabric adhered to the front fabric is sewed together, or thermally melted with a back (innermost) fabric. See FIG. 5.

0029 Alternatively, the middle fabric is sandwiched between the front and the back fabrics, and sewed or thermally melted together. See FIG. 6.

0030 In the former production method, a very small gap exists between the middle and the back fabrics when they are sewed. In the latter production method, a very small gap also exists between the front and the middle fabrics, and between the middle and the back fabrics when they are sewed. Such a gap does not adversely affect properties of the garment.

0031 One specific example of the fabric for discharging the minus ions produced as described above is VERBANO (trade mark).

0032 As shown in FIG. 5, the final fabric is obtained by coating the rear surface of a thin front fabric (in a narrower definition), or a thick front fabric (in a broader definition) comprising an urethane foam material with a binder. The binder is obtained by mixing a resin with fine particles of ores producing the minus ions. The binder-coated front fabric is adhered to a non-woven middle fabric. The back fabric is disposed on the middle fabric to sew together.

0033 The fine particles of the ores attached discharge the minus ions continuously to the wearer’s body through the back fabric, and the minus ions provide good effects on the wearer’s body.

0034 It is preferable that one or more of an urethane foam layer, for example as used in a ski jump competition wear, be added to the front fabric (in a broader definition) in order to thicken the whole garment so that thermal insulation or noise elimination is performed for the mental concentration.

0035 The garment for the mental concentration of the present invention is a cloth having a hood made of a suitable material for use in various sports. The garment of the present invention is made to have a size in any directions significantly greater than the size of the wearer, and is formed in a cocoon or balloon shape. The hood is considerably big, and is also significantly overhung forward. In the garment, an area from the bottom part under the waist to the end of the garment, i.e., shins of the legs, is inflated. When the wearer is in the sitting position, the body is fully and loosely wrapped with the garment. The opening for the face of the wearer is formed relatively small as compared with the whole garment.

0036 The hood is preferably formed integrally with the whole garment. The garment is preferably opened or closed only with a center fastener. The center fastener is preferably formed only above the waist.

0037 It is preferable that one or more of an urethane foam layer be added in order to thicken the whole garment.

0038 Inside the garment, there is provided a first pocket for putting into an instrument for hearing a music such as CD, MD or MP3, or a case thereof, a second pocket for putting into an extension code and a remote controller which are accessories of the instrument, and fixed tubes for inserting and fixing the headphone code.

0039 It is preferable that the first pocket be capable of opening and closing with a double fastener from up to down and from down to up directions.

0040 The garment for the mental concentration comprises a humidity and temperature conditioning mechanism, which is formed in a mesh for aeration. The humidity and temperature conditioning and aeration can be provided suitable portions or areas of the garment.

0041 According to the present invention, the cloth that discharges the minus ions is used in the whole or in a part of the middle fabric for the garment. The cloth may be used in the whole of the middle fabric other than sleeves and/or a hood.

0042 The garment of the present invention comprises the front fabric, the middle fabric, and the back fabric. The mineral fine particles that discharge the minus ion are coated and attached on/to one or both surfaces of the middle fabric as the binder. The mineral fine particles may also be immersed in the middle fabric, or be kneaded with the middle fabric upon fiber forming. The middle fabric is adhered to the rear surface of the front fabric with the binder. Alternatively, the front, middle, and back fabrics may be sewed or melted together.
One of the minerals that discharge the minus ions is tourmaline. It is preferable that the fine particles of the tourmaline have an average diameter of about 0.1 to 40 m.

As described above, the garment of the present invention is developed specifically for the purpose of the mental concentration immediately before the competition starts. The conventionally recognized problem regarding the start has been solved. In other words, with the garment, the sports player can spend the time with desirable and stable feeling until the own competition starts, which can significantly affect the records. The garment of the present invention is especially effective for ski alpine and skate where one-hundredth second is important.

Conventionally, there has been no idea that the mental concentration (static action) between the warming-up (dynamic action) and the competition (dynamic action) is important in the competition. The mental concentration includes image training, cool down, and the like. There has been no garment for the mental concentration. Accordingly, the garment of the present invention is developed specifically for the mental concentration for the first time. The present invention provides a new idea for the cloth used in the sports competitions, and there is no doubt that the present invention leads in the sports cloth used in the static action.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a partial cut-out front view of the garment according to an embodiment of the present invention;

FIG. 2 is a front view the garment in which a front fastener is open according to an embodiment of the present invention;

FIG. 3 is a side view of the garment according to an embodiment of the present invention;

FIG. 4 is a front view of the garment according to an embodiment of the present invention;

FIG. 5 is a partial cross-sectional view of the fabric used in the garment according to an embodiment of the present invention; and

FIG. 6 is a partial cross-sectional view of the fabric used in the garment according to an embodiment of the present invention.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

FIGS. 1 to 4 show a garment for mental concentration according to the present invention comprising a front fabric 2, a back fabric 3, a waist section 4, a bottom 4, a head 5, and sleeves 6. In this example, the head 5 is formed integrally with a body of the garment. The garment 1 further comprises an opening for a face 7, a hood 8, a center fastener 9, an end 10, and a humidity and temperature conditioning mechanism 11.

In this example, the center fastener 9 is formed on a front body only above the waist section 4. Under the waist section 4, the garment is open.

When the wearer mentally concentrates, for example imagines a course of own competition, and allocation of a pace, the wearer feels no pressure all over the body since the garment is formed loosely especially under the waist section 4. The garment is also formed thick using one or more urethane foam layer, and has small opening for the face, noise that can become an obstacle of the mental concentration can be fully insulated.

When the wearer wants to hear a music to concentrate or relax, an instrument for hearing the music 13 such as a CD, MD or MP3 is put into a first pocket 12. The first pocket 12 is opened or closed with a fastener 14. The first pocket is capable of opening and closing with the double fastener 14, 14 from up to down and from down to up directions for easy put into/out of the music instrument 13.

The garment has also second pocket 18 that is detachable with a hook-and-loop fastener 19. The second pocket 18 can contain accessories of the instrument 13 including a headphone code 15, or a remote controller 20.

Headphone 16, 16 as well as the headphone code 15 are held by inserting and passing into/through synthetic resin fixed tubes 17, 17 disposed at suitable positions inside of the garment 1 (specifically, fixed on the back fabric 3).

When the wearer hears the music, the music instrument and its accessories are all contained in the garment 1 neatly, whereby the wearer can mentally concentrate with relax and without being nervous.

The garment 1 has the humidity and temperature conditioning mechanism 11. The humidity and temperature conditioning mechanism 11 is made of a synthetic fiber material that can absorb heat and humidity generated from the body of the wearer so that suitable humidity and temperature are maintained. When the humidity and temperature conditioning mechanism 11 is in a mesh structure, air permeability is also provided, whereby the mental concentration is further promoted.

The garment 1 has the big head 5. The wearer can put on the garment 1 without taking off the helmet. The head 5 is significantly overhung forward, and a hood 8 is also significantly overhung forward. Therefore, only if the wearer stoops a little, the wearer can avoid the third party's eyes that become an obstacle for the concentration.

The garment 1 is formed loosely especially under the waist section 4. In other words, the lower half is formed much larger than the upper half. It is possible for the wearer to maintain physical and mental comfort without any tight feel or pressure, when the wearer who will concentrate mentally is in the sitting position. In many cases, the wearers including female and male sports players sit on a bench, a slope or the ground for the mental concentration. When the end 10 of the garment directly touches with the bench, the slope or the ground, no cold air is introduced into the garment 1.

Referring to FIGS. 5 and 6, only a few examples for producing the minus ions are cited among a number of means.

In FIG. 5, there is provided a final fabric for producing the garment of the present invention. The final fabric comprises a front (outermost) fabric 21 (in a broader definition) including synthetic fibers (in a narrower definition) and an urethane foam; a middle fabric (in a broader definition) including a non-woven fabric 22 (in a narrower definition) and a binder 22'; and a back (innermost) fabric 23 made of synthetic fibers.
The binder 22" layer is formed in a sheet shape by mixing a synthetic resin with fine particles 22, 22", . . . having a diameter of 5 m. The fine particles are obtained by pulverizing tourmaline ores discharging the minus ions with an existing pulverizer.

Then, the outermost surface of the non-woven fabric 22 is coated with the binder 22" to be integrally formed. The urethane foam of the innermost surface of the front fabric 21 (in a broader definition) is adhered to the middle fabric including the non-woven fabric 22 (in a narrower definition) and the binder 22".

The urethane foam and the middle fabric including the non-woven fabric 22 (in a narrower definition) and the binder 22" are sandwiched between the synthetic fibers of the front fabric, and the synthetic fibers of the back fabric 23. All of the front, middle, and back fabrics are integrally sewed.


Referring to FIG. 6, a front fabric 24, a non-woven fabric as a middle fabric in which fine particles 25" . . . of ores for discharging minus ions are immersed, and a back fabric 26 are sewed together with no melt nor adhesion.

In this case, there also exists very small gaps, but such a gap does not adversely affect properties of the garment.

In either case shown in FIGS. 5 and 6, the urethane foam is disposed to thicken the garment. The urethane foam may be provided as multiple layers.

The back fabric (innermost) is preferably made of very thin fibers in order to discharge the minus ions sufficiently. As a result, the minus ions that provide preferable effects are continuously discharged to the wearer’s body. Thus, the garment according to the present invention is extremely suitable for the mental concentration.

What is claimed is:

1. A garment having a hood for mental concentration for use in various sports, comprising a suitable material such as a synthetic fiber, wherein the garment is formed in a cocoon or balloon shape extremely larger than the actual size of a wearer, wherein the hood is formed significantly overhung forward, and wherein an area from the bottom part under the waist to the end of the garment, i.e., shins of the legs, is continuously and extremely inflated.

2. A garment according to claim 1, wherein the hood is formed integrally with the garment.

3. A garment according to claim 1, which is capable of opening and closing only at a front body with a center fastener.

4. A garment according to claim 1, which is formed thick.

5. A garment according to claim 4, wherein one or more urethane foam layer is disposed to thicken the garment.

6. A garment according to claim 1, which wraps entirely and loosely a wearer, when the wearer sits.

7. A garment according to claim 1, wherein the hood has an opening for a face of the wearer, and the opening is formed relatively small as compared with the whole garment.

8. A garment according to claim 1, comprising a means for hearing a music, wherein the means comprises a first pocket for putting into an instrument for hearing a music such as CD, MD or MP3, a second pocket for putting into an extension code and/or a remote controller which are accessories of the instrument, and a tube for inserting and fixing a headphone code and the extension code which cannot be included in the second pocket.

9. A garment according to claim 1, comprising a humidity and temperature conditioning mechanism composed of a mesh fiber for aeration formed at a suitable position and over a suitable range.

10. A garment according to claim 1, comprising a middle fabric, wherein a part or all of the middle fabric is made of a fabric for discharging a minus ion.

11. A garment according to claim 1 or 10, wherein the fabric for discharging the minus ion is used all of the garment other than sleeves and/or the hood.

12. A garment according to claim 1, comprising a front fabric, the middle fabric, and a back fabric wherein mineral fine particles for discharging the minus ion are attached to one or both surfaces of the middle fabric with a suitable means, wherein the mineral fine particles are immersed in the middle fabric, or wherein the mineral fine particles are kneaded with the middle fabric upon fiber forming.

13. A garment according to claim 1 or 12, wherein a binder obtained by mixing an adhesive comprising a synthetic fiber as a main component with the mineral fine particles for discharging the minus ion is applied to one or both surfaces of the middle fabric.

14. A garment according to claim 1 or 12, the middle fabric is adhered to a rear surface of the front fabric with the binder.

15. A garment according to any one of claims 1 or 11 to 14, wherein the front, middle, and back fabrics are sewed together.

16. A garment according to any one of claims 1 or 11 to 14, wherein the front, middle, and back fabrics are sewed together.

17. A garment according to any one of claims 10 to 13, wherein the mineral for discharging the minus ion is tourmaline.

18. A garment according to any one of claims 10 to 13, wherein the mineral fine particles for discharging the minus ion has an average diameter of 0.1 to 40 m.

19. A garment according to claim 1, comprising the instrument for hearing the music according to claim 8, and/or the mesh fiber according to claim 9, and/or the fabric according to claim 10.

20. A garment according to claim 1 or 3, wherein the center fastener is formed only above the waist, and wherein the bottom part under the waist remains open.

21. A garment according to claim 8, wherein the first pocket for putting into the instrument for hearing the music is capable of opening and closing with a fastener from up to down and from down to up directions.