Title

# Male Underpants Structure Provided With Means to Augment Perineal Muscles

## Field of the present Invention

The present invention relates generally to underpants, and more particularly to a male underpants structure which is provided with means to furnish a low frequency pulsating current to stimulate the muscles of perineum of a man when wearing the male underpants structure.

## Background of the present Invention

The impotence of the male is attributable to the aging of the perineal muscles. The contraction and the expansion of bulbocavernosus and ischiocavernosus play an important role in the human sexual intercourse such that they enable the spongy tissue in the penis to fill with blood so as to bring about the erection of the penis. In addition, an augmentation of contraction and expansion of ischiocavernosus is helpful in discharge of residual urine from the urethra in the male. Such genital disorders as described above can not be cured completely by drugs or surgical treatment.

A conventional physical therapy involves the application of an electrically-conductive rubber piece to the perineal cavity so as to stimulate the muscles in perineum with a low frequency pulse. The conventional physical therapy is defective in design in that the conductive rubber piece is often not attached properly to the perineum of a subject, thereby undermining the effectiveness of the physical therapy. In addition, the subject must remain in the stationary state while the therapy is in progress, so as to prevent the displacement of the conductive rubber piece.

## Summary of the present Invention

The main objective of the present invention is to provide a male underpants structure comprising a pant which is provided with an electrically-conductive rubber piece corresponding in location to perineum in the male. The electrically-conductive rubber piece is insusceptible to displacement regardless of the posture of a wearer thereof.

## Brief Description of Drawings

Fig. 1 is a perspective view of a male underpants structure according to a preferred embodiment of the present invention.

Fig. 2 is a sectional view of the electrically-conductive rubber sheet, along section line A-A of Fig 1, according to the above preferred embodiment of the present invention.

Fig. 3 is a side sectional schematic view of a male underpants structure according to the above preferred embodiment of the present invention showing worn by a male.

Fig. 4 is a schematic view of a male underpants structure according to the above preferred embodiment of the present invention showings the pulsating current supplying unit attached to a left waistband of the seat.

Fig. 5 is a schematic view of a male underpants structure according to the above preferred embodiment of the present invention showings a fastening means attached between a bottom surface of the electrically-conductive rubber sheet and an inner side of the seat.

## Detailed Description of the Preferred Embodiment

Referring to Figs. 1 to 3 of the drawings, a male underpants structure according to a preferred embodiment of the present invention is illustrated. The male underpants structure comprises a left waistband 10, a right waistband 20 and a seat 30 covering the buttocks.

The left waistband 10 is expandable and provided with a first end 11 and a second end 12 opposite to the first end 11.The second waistband 20 is expandable and provided with a first end 21 and a second end 22 opposite to the first end 21. The seat 30 has a left fringe 31, a right fringe 32, a front fringe 33, and a rear fringe 34. The left fringe 31 has one end 311,which is connected with the first end 11 of the left waistband 10. The left fringe 31, further has other end 312, which is connected with the second end 12 of the left waistband 10. As a result, a left leg hole 35 is formed by the left fringe 31 and the left waistband 10. The right fringe 32 has one end 321, which is connected with the first end 21 of the right waistband 20. The right fringe 32 further has other end 322, which is connected with the second end 22 of the right waistband 20. As a result, a right leg hole 36 is formed by the right fringe 32 and the right waistband 20. A waist hole 37 is formed and defined by the front fringe 33, the rear fringe 34, the left waistband 10, and the right waistband 20. The seat 30 is provided with an opening 38 which is separated from the front fringe 33 by an appropriate distance. The seat 30 is used to cover the buttocks of the male such that penis and scrotum of the male are exposed via the opening 38 of the seat 30, as shown in Fig. 3.

As shown in Figs. 1 and 2, the seat 30 is further provided in an inner side 39 thereof with an electrically-conductive rubber sheet 40 attached thereto such that the electrically-conductive rubber sheet 40 is located under the opening 38. The electrically-conductive rubber sheet 40 is corresponding in location and size to perineum of the male. The electrically-conductive rubber sheet 40 is provided with a bonding wire 41 which is provided at an outer end thereof with a plug 42.

Referring to Figs. 1 and 3, the male underpants structure of the preferred embodiment of the present invention is used by the men such that the seat 30 covers the buttocks of the male, and that the left leg and the right leg of the male are put respectively through the left leg hole 35 and the right leg hole 36, and further that penis and scrotun of the men are exposed via the opening 38, and still further that the electrically-conductive rubber sheet 40 comes in close contact with perineum “B” of

the male. The male underpants structure of the preferred embodiment of the present invention provides wearing comfort to a wearer. In addition, the electrically-conductive rubber sheet 40 remains in close contact with perineum "B" of the wearer regardless of the posture of the wearer.

As shown in Figs. 1, 3, and 4, the male underpants structure of the preferred embodiment of the present invention works to augment muscles of the perineum "B" of a male in such a way that the plug 42 of the bonding wire 41 is inserted into a current output hole 51 of a pulsating current supplying unit 50, and that a low frequency pulsating current is transmitted to the electrically-conductive rubber sheet 40 by the bonding wire 41 so as to stimulate the perineum "B" of the male. The pulsating current supplying unit 50 comprises a hook 52 by which the unit 50 can be retained by the left waistband 10, as shown in Fig. 4.

Referring to Fig. 5, the male underpants structure of the preferred embodiment of the present invention further comprise a fastening means 60. The fastening means 60 comprises at least a first fastener 61 and a second fastener 62, wherein the first fastener 61 firmly connected to a bottom surface 41 of the electrically-conductive rubber sheet 40, the second fastener 62 integrally affixed to the inner side 39 of the seat 30 for detachably connecting with the first fastener 61. The electrically-conductive rubber sheet 40 is attached onto the inner side 39 of the seat 40 by meaning of the fastening means 60 which must enable the electrically-conductive rubber sheet 40 to be selectively mounted on the inner side 39 of the seat 30 firmly and to be detached from the inner side 39 of the seat 30 by pulling for cleaning.

The embodiments of the present invention described above are to be regarded in all respects as being illustrative and nonrestrictive. Accordingly, the present invention may be embodied in other specific forms without deviating from the spirit thereof. The present invention is therefore to be limited only by the scopes of the following claims.

WHAT IS CLAIMED IS:

1. A male underpants structure, comprising:

a left waistband of a length and having a first end and a second end opposite to said first end;

a right waistband of a length and having a first end and a second end opposite to said first;

a seat having a left fringe, a right fringe opposite to said loft fringe, a front fringe, and a rear fringe opposite to said front fringe, said seat being joined with said left waistband in such a manner that one end of said left fringe of said seat is connected with said first end of said left waistband, and that other end of said left fringe of said seat is connected with said second end of said left waistband, thereby resulting in formation of a left leg hole between said left fringe of said seat and said left waistband, said seat further being joined with said right waistband in such a manner that one end of said right fringe of said seat is connected with said first end of said right waistband, and that other and of said right fringe of said seat is connected with said second end of said right waistband, thereby resulting in formation of a right leg hole between said right fringe of said seat and said right waistband, said front fringe and said rear fringe of seat forming a waist hole along with said left waistband and said right waistband, said seat being provided with an opening which is separated from the front fringe by an appropriate distance; and

an electrically-conductive rubber sheet attached thereto an inner side of said seat and located under the opening of said seat. The electrically-conductive rubber sheet is corresponding in location and size to perineum of the male. The electrically-conductive rubber sheet is provided with a bonding wire which is provided at an outer end thereof with a plug.

2. A male underpants structure, as recited in claim 1, further comprising a fastening means which have at least a first fastener and a second fastener, wherein the first fastener firmly connected to a bottom surface of said electrically-conductive rubber sheet, the second fastener integrally affixed to the inner side of the seat for detachably connecting with the first fastener.