

US 20040073996A1

# (19) United States (12) Patent Application Publication Hill (10) Pub. No.: US 2004/0073996 A1 (43) Pub. Date: Apr. 22, 2004

## (54) SOFT GEL INTERIOR TUB

(76) Inventor: Eva H. Hill, Jonesboro, GA (US)

Correspondence Address: CHI CHI OKEZIE 9582 CANVAS BACK COURT JONESBORO, GA 30238 (US)

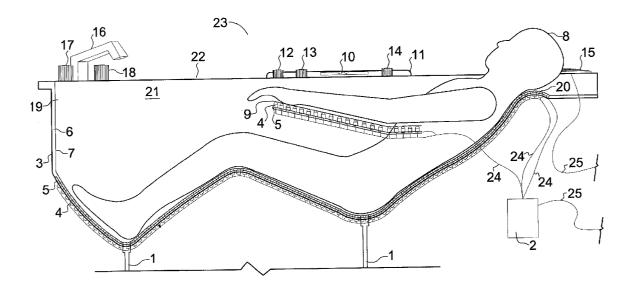
- (21) Appl. No.: 10/274,710
- (22) Filed: Oct. 21, 2002

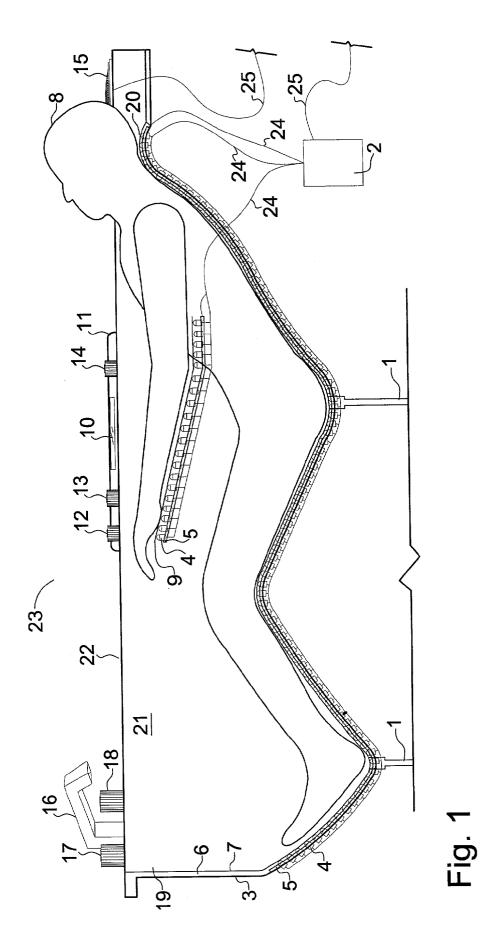
# **Publication Classification**

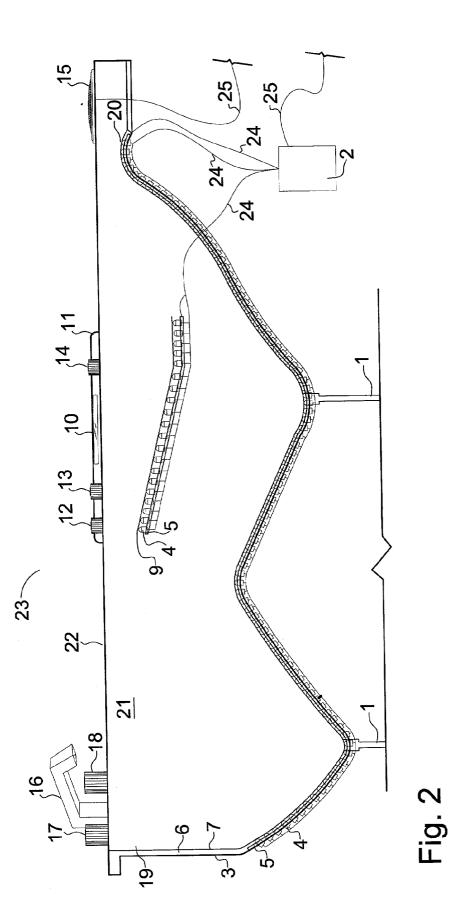
(51) Int. Cl.<sup>7</sup> ...... A47K 3/02

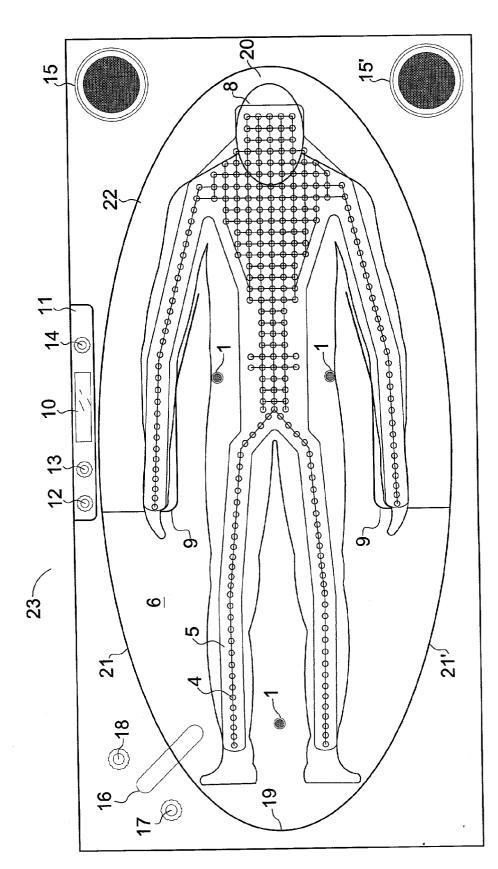
## (57) ABSTRACT

A soft gel interior tub that is longer than the conventional size tubs. It is designed to reduce muscle tension, soreness, and fatigue while providing comfort, relaxation, and rejuvenation. The interior of the soft gel tub is in the shape of the posterior of the human body having raised hemispheres at the side walls and bottom of the interior of the tub. Underneath the raised hemispheres are vibrating elements, equipped with various settings, to apply therapy and relief to aching joints and muscles. The tub is also equipped with the thermostatic heating system and sound system.









ig.

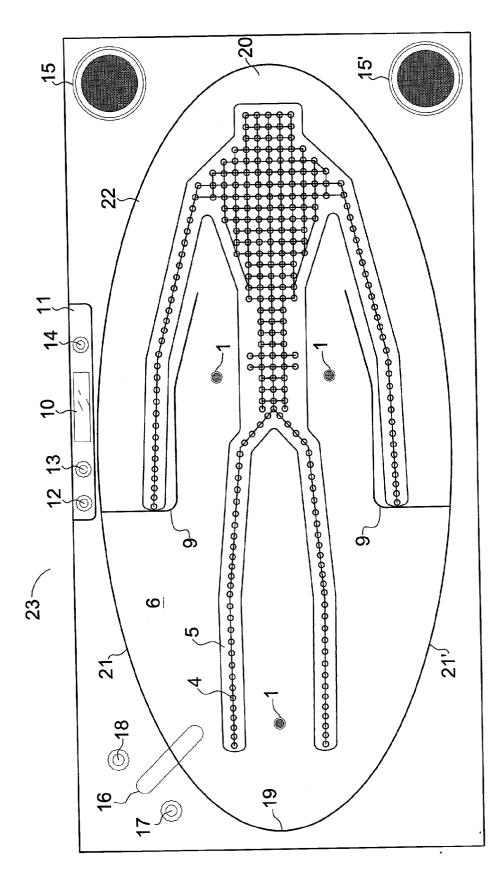


Fig. Z

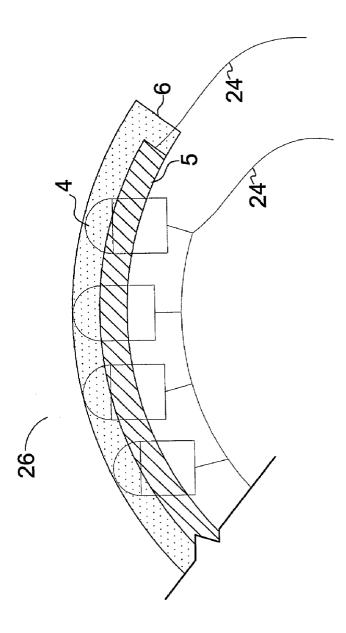


Fig. 5

#### SOFT GEL INTERIOR TUB

### BACKGROUND OF THE INVENTION

[0001] 1. Field of the Invention

**[0002]** The invention relates to a soft gel interior tub that is shaped in the posterior of the human figure with raised hemispheres, incorporates a longer length than previous tubs, vibrating elements at pressure points, as well as heating and sound systems.

[0003] 2. Description of the Prior Art

**[0004]** Most of the bathtubs on the market have hard plastic interior surfaces. The hard surface is uncomfortable to the bather and does not provide support and comfort. Although there are various therapeutic and massage tubs, theses tubs do not provide proper attention to the various pressure points of the human body.

**[0005]** Furthermore, conventional tubs are short in length and do not allow bathers to comfortably recline, allowing continuous blood flow through the body.

**[0006]** Thus, the prior art lacks in particular functions and are in need of drastic improvements. In studying the short comings of the prior art, the inventor has created new elements to modify the traditional bathtub design and function.

## SUMMARY OF THE INVENTION

**[0007]** A bathtub is provided with a soft gel interior made of an acrylic plastic, rubber, or vinyl. The gel lines the inside of the entire tube and has a non-skid surface. The soft gel interior provides a safe and secure atmosphere for the bather and reduces the risk of severe injuries that may be associated with hard surface tubs. The interior of the gel substance is comprised of a viscous, polymer based liquid.

**[0008]** The gel interior of the tub is designed in the shape of the posterior of the human figure. Underneath the human contour shape of the gel are raised hemispheres located at the head, spinal, lumbar, and upper leg region. The conformal interior increases the comfort and support of the bather and relaxes the muscles and joints.

**[0009]** The bather enjoys additional comfort from the extended length of the bathtub. Previous bathtubs are generally shorter and do not allow the bather to recline or comfortably stretch out horizontally. The increased length of the tub permits the bather to relax in the tub, experiencing continuous blood flow through the body.

**[0010]** The invention also incorporates a thermostatic heating system. The various heat settings provide rejuvenation and therapy for soreness, fatigue, and muscle tensions. The applied heat also calms the body and relaxes the mind. In further combination with the heating system, the bathtub has a sound system. This type of music therapy elevates the bather's mood and improves the physical, mental, and emotional functioning. In such a calm atmosphere, pain is easily alleviated and tension is quickly reduced.

[0011] Unlike previous inventions, the soft gel tub is created with vibrating elements at the pressure points of the posterior of the human body. The vibrating coils located underneath the gel surface concentrate on particular joints such as the back of the head region where people usually have neck tension, the arms and elbows which are usually effected by arthritis, and the hip joints and lower back regions, which are common areas for acute or chronic pains.

#### BRIEF DESCRIPTION OF THE DRAWINGS

**[0012]** A preferred embodiment of the invention is described in detail in conjunction with the drawing of which:

**[0013]** FIG. 1 is a sectional view of the soft gel interior tub according to the preferred embodiment in which the longitudinal section cut-line is located at the center of the soft gel interior tub running from head to toe perpendicular to the ground plane where as the bather is included;

[0014] FIG. 2 is the same longitudinal section view of FIG. 1 where as the bather is not included;

**[0015]** FIG. 3 is a top plan view of the entire soft gel interior tub according to the preferred embodiment where as the bather is included;

[0016] FIG. 4 is the same top plan view of FIG. 3 where as the bather is not included;

**[0017]** FIG. 5 is a blown up detail of the massage nodules and heating elements of the soft gel interior tub according to the preferred embodiment.

#### DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

[0018] A soft gel interior tub 23 according to the preferred embodiment is illustrated in FIGS. 1-5. Please refer to FIG. 1 the sectional view of the soft gel interior tub according to the preferred embodiment in which the longitudinal sectional cut-line is located at the center of the soft gel interior tub running from head to toe perpendicular to the ground plane. The bottom of the interior of the tub 7 curves at an angle in the head, lumbar, and leg regions to accommodate the bather in a comfortable, reclined position in the preferred embodiment. Along the side walls 21 and 21', the soft gel interior tub 23 incorporates armrests 9 which resemble raised hemispheres. The bather 8 rests on top of the soft gel interior 6 which covers the massaging nodules 4 that are embedded in the gel interior 6 and are secured to the bottom of the tub 7. Heating elements 5 are located underneath the bottom of the interior of the tub 7. The intensity regulator for the heating elements 2 located in the base 3 of the soft gel interior tub 23 operates through the connecting wires 24 which can be controlled by the bather 8 from the control panel 11. The massage nodules 4 can be regulated from the control panel 11 which is connected to the electrical wires 25.

[0019] The soft gel 6 which lines the interior of the tub 23 is comprised of an acrylic plastic, rubber, or vinyl and the interior of the gel 6 is a coating filled with a viscous, polymer based liquid, according to the manufacturing techniques known to those skilled in the art.

[0020] The bather 8 has the option of using the soft gel tub 23 with or without filling the tub 23 with water. In any case, the bather 8 in FIGS. 1,3 can regulate the water temperature by using knobs 17 and 18 which are located at the foot of the tub 19. The water flows from the faucet 16 directly in the interior of the tub 7. The water exits the tub 23 by way of the three drains 1 located at the lumbar region and at the foot of the tub 19 as seen in FIGS. 3,4. The bather 8 can operate the massage nodules 4 from the control panel 11 without filling the tub 23 with water. The bather 8 can also choose to make use of the heating elements 5 from the control panel 11 without having to fill the tub 23 with water. The bather 8 also has the option of resting in the soft gel interior tub 23 and listening to the sound system 10, which can be controlled from the control panel 11 and heard through the speakers 15, 15' which are connected to wires 25 in the base of the tub 3, without having to fill the tub 23 with water.

[0021] Please refer to FIG. 5 a blown up detail of massage nodules and heating elements. The massage nodules 4 is embedded in the gel 6 secured to the base of the tub 3, connected to the intensity regulator 2 as shown in FIGS. 1,3. The heating elements 5 are located between the gel 6 and the tub 3 in order to heat the gel 6. The massage nodules 4 are located in the gel 6 to administer massages to the bather 8 as seen in FIGS. 1,3.

**[0022]** While the preferred embodiment of this invention has been presented and described in detail, modifications therein may be made to enhance the function or appearance. It is intended therefore to be bound by the scope of the claims which follow.

What is claimed as my invention is:

1. A soft gel interior tub comprising:

- all side walls and bottom of the interior of the soft tub are lined with permanent gel,
- a waterproof gel surface that can be cleaned with soap, water, or other cleaning agents,

- a skid-proof gel surface to lessen the probability of accidents,
- an exterior gel coat made of substances similar to an acrylic plastic, rubber or vinyl,
- an interior gel substance that is filled with a viscous, polymer, based liquid.

2. A soft gel tub as defined in claim 1, wherein the interior of the tub is shaped in the design of the posterior of the human figure incorporating raised hemispheres along the side walls and interior of the tub located at the neck, arm, lumbar, and leg regions.

**3**. A soft gel interior tub as defined in the claim 2, wherein the length of the tub is longer than the conventional size tub to accommodate the design of the posterior shape of the human figure.

**4**. A soft gel interior tub as defined in claim 1, comprising of vibrating elements located underneath the gel surface along the side walls and interior of the tub which massages the pressure point of the human body.

**5**. A soft gel tub interior as defined in claim 1, wherein the thermostatic controlled surface heat system warms up the gel with various heat settings having an automatic timer, shut off.

6. A soft gel interior tub as defined in claim 1, comprising of a sound system connected in the base of the tub wherein speakers are located at the head of the tub to provide music therapy and mental relaxation.

\* \* \* \* \*