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(54) **WATER CONSERVATION SYSTEM**

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(57) **ABSTRACT**

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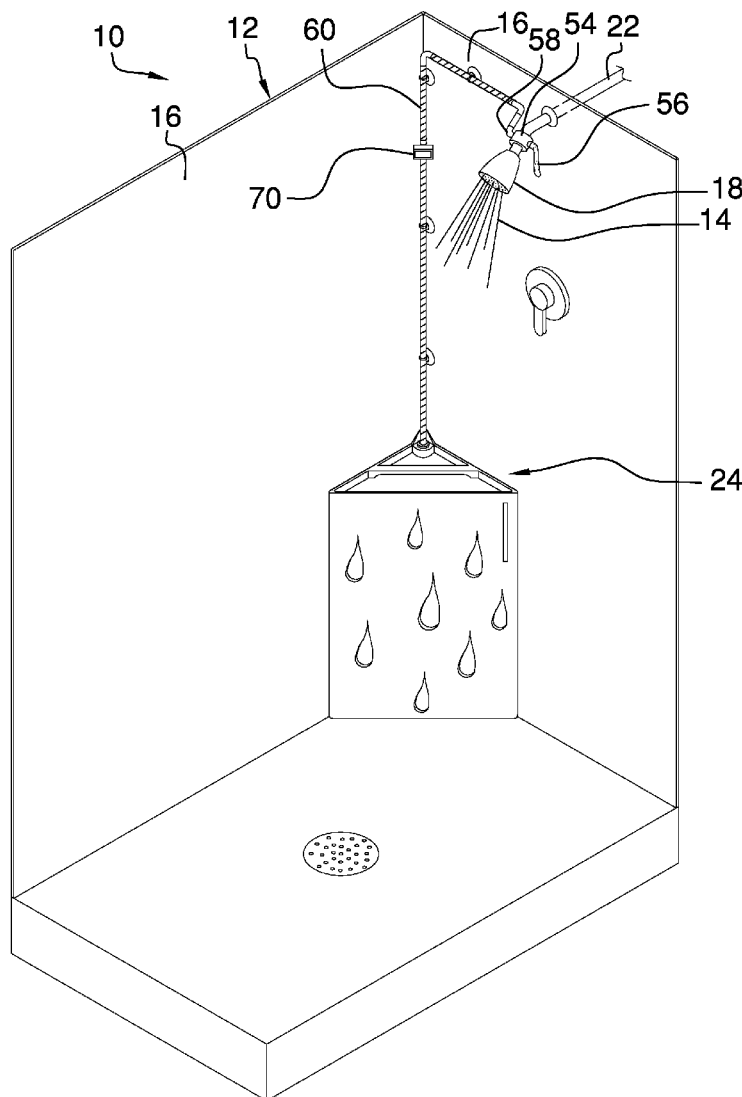
A water conservation system includes a shower that may deliver a fluid. The shower has a pair of intersecting walls, a shower head and a drain. The shower head may be fluidly coupled to a fluid source thereby facilitating the shower head to deliver the fluid. A storage unit is positioned in the shower and the storage unit is fluid communication with the shower head. The storage unit is positioned in an open position when the shower is initially turned on. Thus, the storage unit stores cold fluid until heated fluid travels to the shower head thereby inhibiting the cold fluid from passing through the drain. The storage unit retains the cold fluid to be used at a later time.

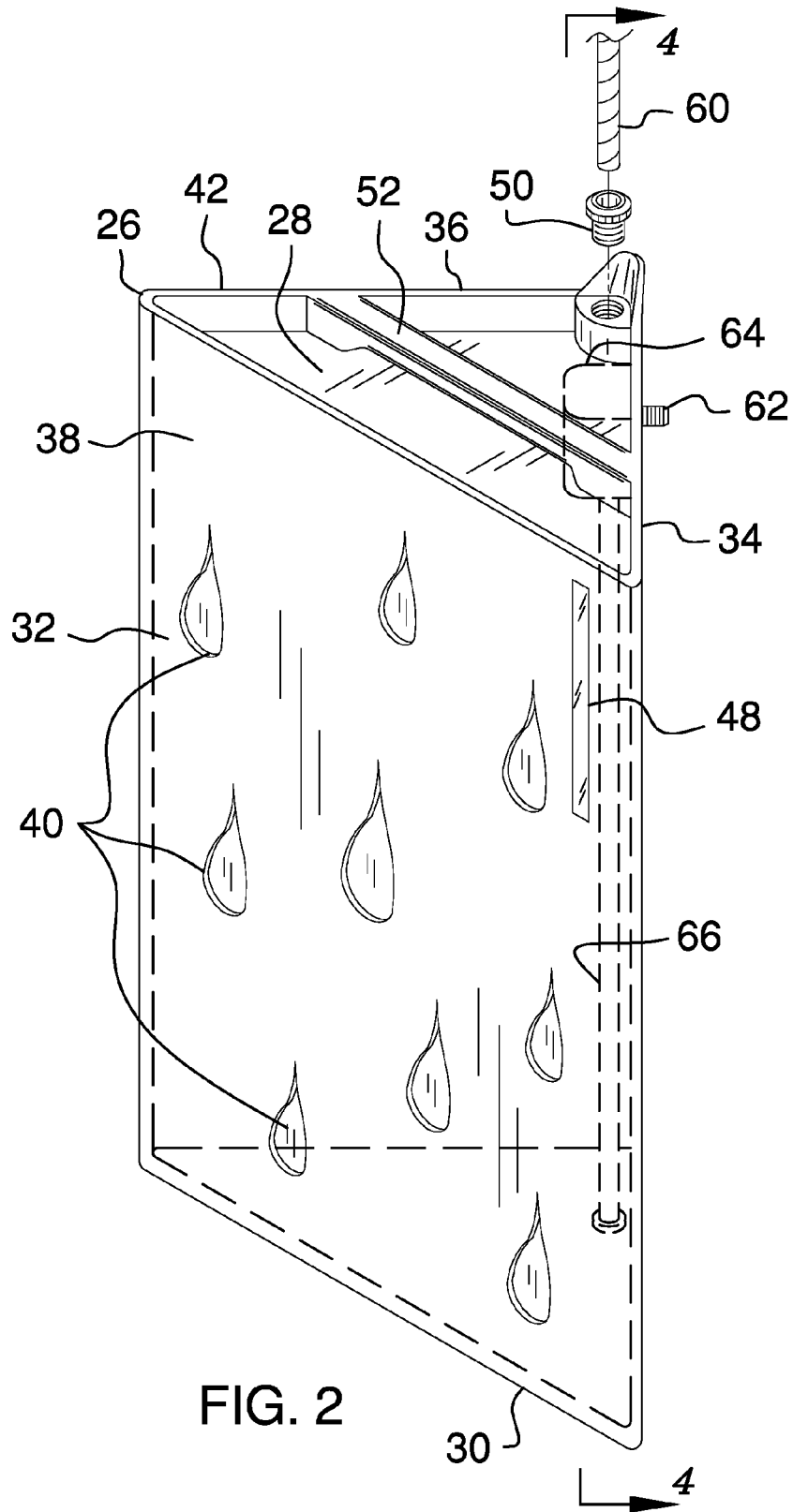
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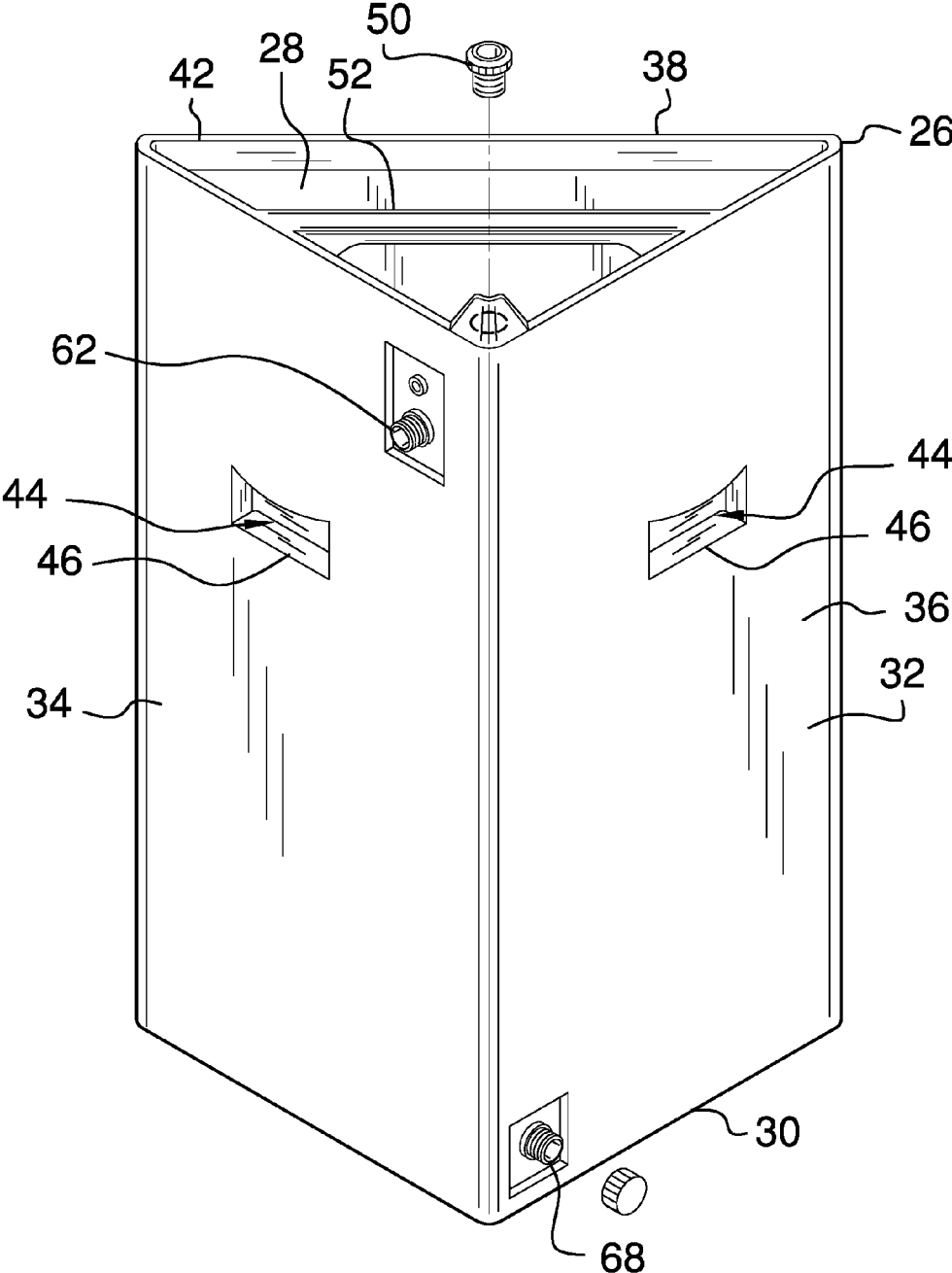


FIG. 3

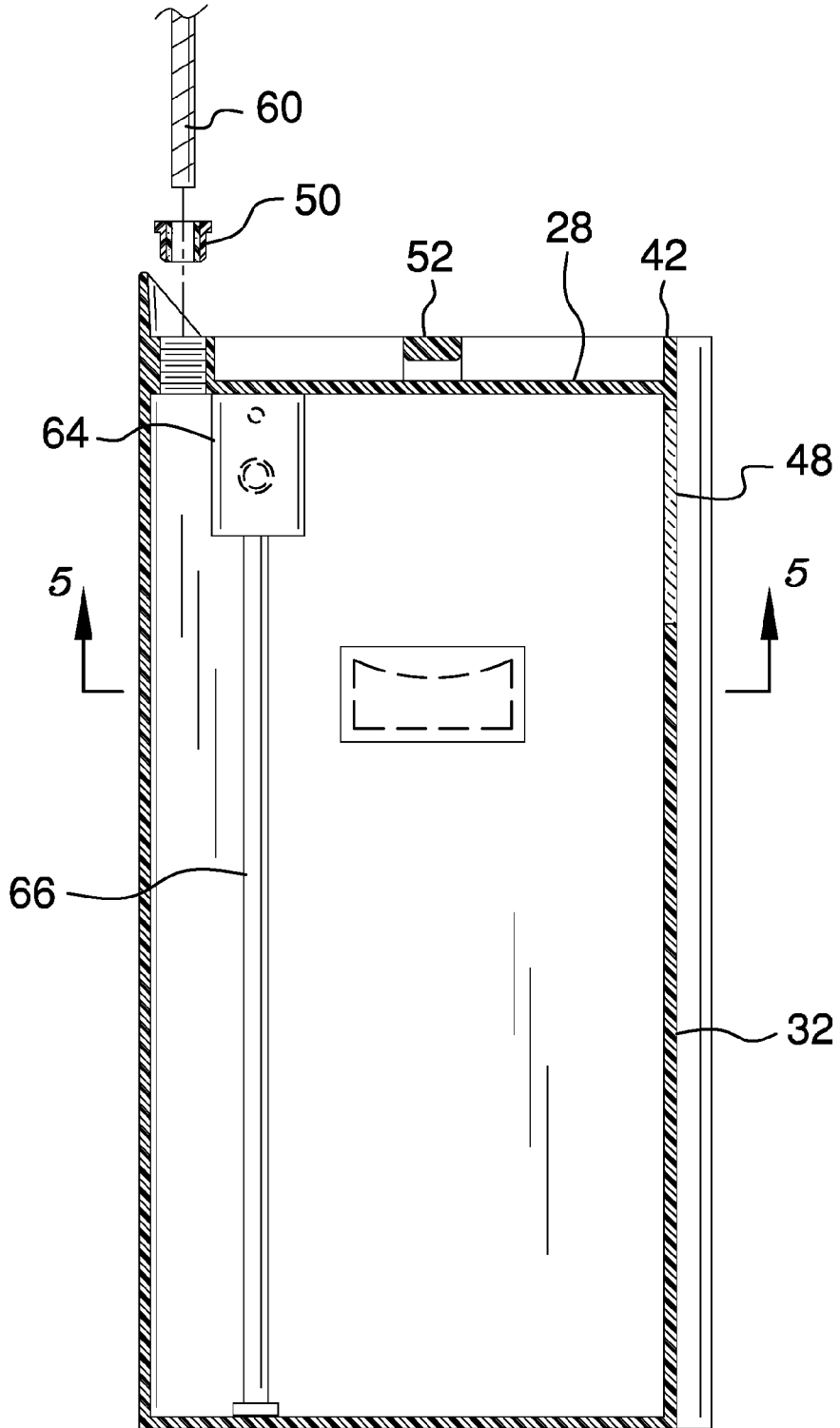


FIG. 4 30

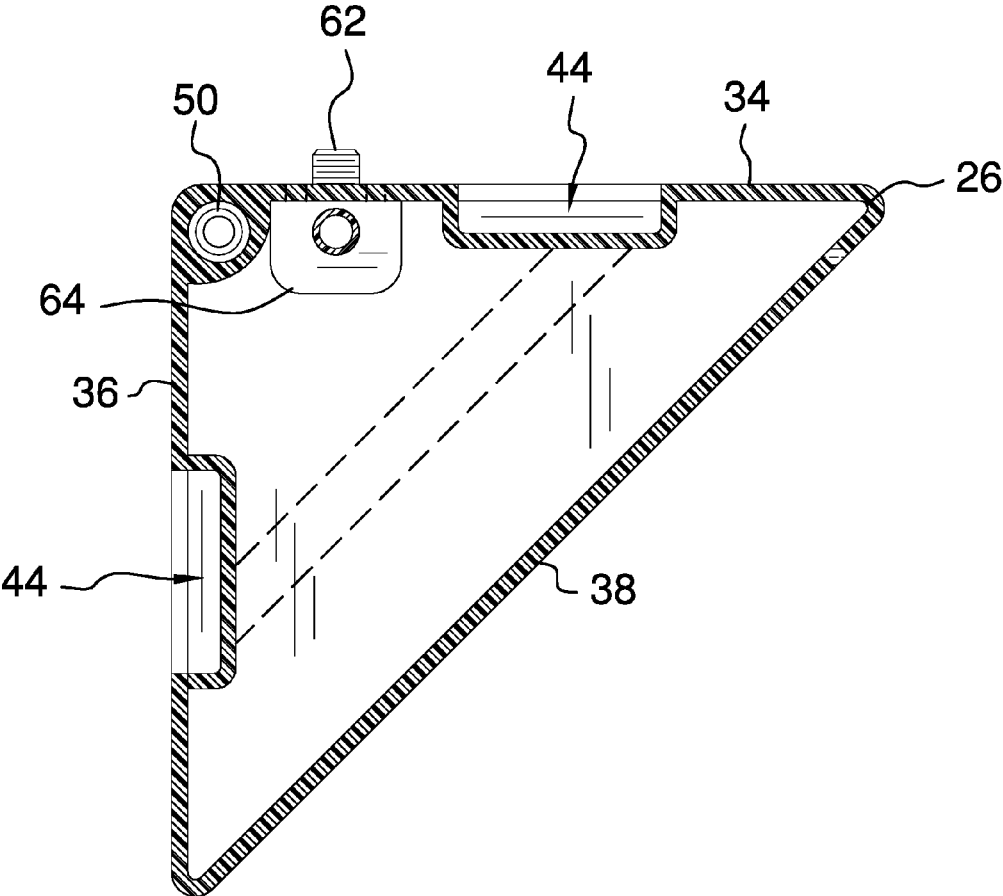


FIG. 5

WATER CONSERVATION SYSTEM

BACKGROUND OF THE DISCLOSURE

Field of the Disclosure

[0001] The disclosure relates to conservation devices and more particularly pertains to a new conservation device for storing cold water released from a shower while hot water travels to the shower.

SUMMARY OF THE DISCLOSURE

[0002] An embodiment of the disclosure meets the needs presented above by generally comprising a shower that may deliver a fluid. The shower has a pair of intersecting walls, a shower head and a drain. The shower head may be fluidly coupled to a fluid source thereby facilitating the shower head to deliver the fluid. A storage unit is positioned in the shower and the storage unit is fluid communication with the shower head. The storage unit is positioned in an open position when the shower is initially turned on. Thus, the storage unit stores cold fluid until heated fluid travels to the shower head thereby inhibiting the cold fluid from passing through the drain. The storage unit retains the cold fluid to be used at a later time.

[0003] There has thus been outlined, rather broadly, the more important features of the disclosure in order that the detailed description thereof that follows may be better understood, and in order that the present contribution to the art may be better appreciated. There are additional features of the disclosure that will be described hereinafter and which will form the subject matter of the claims appended hereto.

[0004] The objects of the disclosure, along with the various features of novelty which characterize the disclosure, are pointed out with particularity in the claims annexed to and forming a part of this disclosure.

BRIEF DESCRIPTION OF THE DRAWINGS

[0005] The disclosure will be better understood and objects other than those set forth above will become apparent when consideration is given to the following detailed description thereof. Such description makes reference to the annexed drawings wherein:

[0006] FIG. 1 is a perspective in-use view of a water conservation system according to an embodiment of the disclosure.

[0007] FIG. 2 is a front perspective view of an embodiment of the disclosure.

[0008] FIG. 3 is a back perspective view of an embodiment of the disclosure.

[0009] FIG. 4 is a cross sectional view taken along line 4-4 of FIG. 2 of an embodiment of the disclosure.

[0010] FIG. 5 is a cross sectional view taken along line 5-5 of FIG. 4 of an embodiment of the disclosure.

DESCRIPTION OF THE PREFERRED EMBODIMENT

[0011] With reference now to the drawings, and in particular to FIGS. 1 through 5 thereof, a new conservation device embodying the principles and concepts of an embodiment of the disclosure and generally designated by the reference numeral 10 will be described.

[0012] As best illustrated in FIGS. 1 through 5, the water conservation system 10 generally comprises a shower 12

that may deliver a fluid 14 for the purposes of bathing. The shower 12 has a pair of intersecting walls 16, a shower head 18 and a drain 20. The shower head 18 may be fluidly coupled to a fluid source 22 thereby facilitating the shower head 18 to deliver the fluid 14. The fluid source 22 may comprise a plumbing system in a building or the like. The fluid 14 may comprise water and the shower 12 may be a shower of any conventional design.

[0013] A storage unit 24 is provided and the storage unit 24 is selectively positioned in the shower 12. Moreover, the storage unit 24 is fluid communication with the shower head 18. The storage unit 24 is selectively positioned in a closed position and an open position. The storage unit 24 is positioned in the open position when the shower head 18 is initially turned on. Thus, the storage unit 24 stores cold fluid until heated fluid travels to the shower head 18 thereby inhibiting the cold fluid from passing through the drain 20. Moreover, the storage unit 24 stores the cold fluid to be used at a later point in time. The heated fluid may be heated by a hot water heater or the like.

[0014] The storage unit 24 comprises a tank 26 that has a top wall 28, a bottom wall 30 and an outer wall 32 extending therebetween. The outer wall 32 has a first side 34, a second side 36 and a third side 38. Thus, the tank 26 has a triangular cross section taken along a line extending through the top wall 28 and the bottom wall 30. The tank 26 may have a capacity ranging between approximately five gallons and ten gallons. The third side 38 may have a plurality of tear drop shaped features 40 intrinsically molded into the third side 38.

[0015] The outer wall 32 extends upwardly beyond the top wall 28 to define a lip 42 extending around the top wall 28. Each of the first side 34 and the second side 36 has a recess 44 extending inwardly therein to define a grip 46 in each of the first side 34 and the second side 36. The tank 26 is selectively positioned in the shower 12 having each of the first side 34 and the second side 36 abutting an associated one of the intersecting walls 16 of the shower 12. A sight glass 48 is coupled to the third side 38 to facilitate a level of the fluid 14 in the tank 26 to be visible.

[0016] An inlet 50 is coupled to the top wall 28. The inlet 50 is in fluid communication with an interior of the tank 26. A handle 52 is coupled to the tank 26 and the handle 52 may be gripped. The handle 52 is coupled to the lip 42 and the handle 52 is spaced from the top wall 28.

[0017] A valve 54 is fluidly coupled to the shower head 18. The valve 54 has a lever 56 thereon and the lever 56 may be manipulated. The valve 54 has an output 58. The valve 56 is positioned in an open position to direct the fluid 14 outwardly from the output 58. The valve 56 is positioned in a closed position to direct the fluid 14 outwardly from the shower head 18. The valve 56 may be a fluid valve or the like.

[0018] A hose 60 is fluidly coupled between the output 58 on the valve 54 and the inlet 50 on the tank 26. Thus, the hose 60 may direct the fluid 14 into the tank 26 when the valve 54 is positioned in the open position. A first outlet 62 is coupled to the first side 34 of the tank 26 and the first outlet 62 is in fluid communication with the interior of the tank 26. The first outlet 62 is positioned closer to the top wall 28 than the bottom wall 30.

[0019] A pump 64 is coupled to the tank 26 and the pump 64 is positioned within the tank 26. Thus, the pump 64 may selectively pump the fluid 14 in the tank 26. The pump 64

is fluidly coupled to the first outlet 62. Thus, the pump 64 may urge the fluid 14 in the tank 26 outwardly from the first outlet 62. The pump 64 may comprise an electrical fluid pump or the like.

[0020] An intake 66 is fluidly coupled to the pump 64. The intake 66 extends downwardly toward the bottom wall 30 to draw the fluid 14 into the pump 64. A second outlet 68 is coupled to the second side 36 and the second outlet 68 is in fluid communication with the interior of the tank 26. The second outlet 68 is positioned closer to the bottom wall 30 and the top wall 28. The second outlet 68 may be manipulated thereby facilitating the second outlet 68 to drain the fluid 14 from the tank 26.

[0021] A thermometer 70 is provided and the thermometer 70 is in fluid communication with the storage unit 24. Thus, the thermometer 70 may detect a temperature of the fluid 14. The storage unit 24 may be positioned in the closed position when the heated fluid travels to the shower head 18. The thermometer 70 is fluidly coupled to the hose 60. The thermometer 70 may comprise a digital thermometer or the like.

[0022] In use, the valve 54 is manipulated into the open position the shower 12 is turned on. Thus, the fluid 14 is delivered into the tank 26. The thermometer 70 is observed and the valve 54 is manipulated into the closed position when the thermometer 70 indicates the fluid 14 has reached a desired temperature. Thus, the fluid 14 is delivered to the shower head 18. The fluid 14 stored in the tank 26 is used for any purpose at any time.

[0023] The hose 60 is uncoupled from the tank 26 and the tank 26 is removed from the shower 12 when the fluid 14 in that tank 26 is to be released. The pump 64 may be electrically coupled to a power source and the pump 64 may pump the fluid 14 outwardly from the first outlet 62. The fluid 14 may be drained outwardly from tank through the second outlet 68. The tank 26 is replaced in the shower 12 when the fluid 14 has been drained from the tank 26.

[0024] With respect to the above description then, it is to be realized that the optimum dimensional relationships for the parts of an embodiment enabled by the disclosure, to include variations in size, materials, shape, form, function and manner of operation, system and use, are deemed readily apparent and obvious to one skilled in the art, and all equivalent relationships to those illustrated in the drawings and described in the specification are intended to be encompassed by an embodiment of the disclosure.

[0025] Therefore, the foregoing is considered as illustrative only of the principles of the disclosure. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the disclosure to the exact construction and operation shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the disclosure. In this patent document, the word "comprising" is used in its non-limiting sense to mean that items following the word are included, but items not specifically mentioned are not excluded. A reference to an element by the indefinite article "a" does not exclude the possibility that more than one of the element is present, unless the context clearly requires that there be only one of the elements.

I claim:

1. A water conservation system comprising:

a shower being configured to deliver a fluid, said shower having a pair of intersecting walls, a shower head and

a drain, said shower head being configured to be fluidly coupled to a fluid source thereby facilitating said shower head to deliver the fluid;

- a storage unit being positioned in said shower, said storage unit being fluid communication with said shower head, said storage unit being selectively positioned in a closed position and an open position, said storage unit being positioned in said open position when said shower is initially turned on wherein said storage unit is configured to store cold fluid until heated fluid travels to said shower head thereby inhibiting the cold fluid from passing through said drain, wherein said storage unit retains the cold fluid to be used at a later point in time; and
- a thermometer being in fluid communication with said storage unit wherein said thermometer is configured to detect a temperature of the fluid thereby facilitating said storage unit to be positioned in said closed position when the heated fluid travels to said shower head.

2. The system according to claim 1, wherein said storage unit comprises a tank having a top wall, a bottom wall and an outer wall extending between said top wall and said bottom wall, said outer wall having a first side, a second side and a third side such that said tank has a triangular cross section taken along a line extending through said top wall and said bottom wall, said outer wall extending upwardly beyond said top wall to define a lip extending around said top wall.

3. The system according to claim 2, wherein each of said first side and said second side has a recess extending inwardly therein to define a grip in each of said first side and said second side, said tank being selectively positioned in said shower having each of said first side and said second side abutting an associated one of said intersecting walls of said shower, said third side having a sight glass being coupled thereto wherein said sight glass is configured to facilitate a level of the fluid in said tank to be visible.

4. The system according to claim 2, further comprising an inlet being coupled to said top wall, said inlet being in fluid communication with an interior of said tank.

5. The system according to claim 2, further comprising a handle being coupled to said tank wherein said handle is configured to be gripped, said handle being coupled to said lip such that said handle is spaced from said top wall.

6. The system according to claim 1, further comprising a valve being fluidly coupled to said shower head, said valve having a lever thereon wherein said lever is configured to be manipulated, said valve having an output, said valve being positioned in an open position wherein said valve is configured to direct the fluid outwardly from said output, said valve being positioned in a closed position wherein said valve is configured to direct to the fluid outwardly from said shower head.

- 7. The system according to claim 6, further comprising: said tank having an inlet, and
- a hose being fluidly coupled between said output on said valve and said inlet on said tank wherein said hose is configured to direct the fluid into said tank when said valve is positioned in said open position.

8. The system according to claim 2, further comprising a first outlet being coupled to said first side of said tank such that said first outlet is in fluid communication with said interior of said tank, said first outlet being positioned closer to said top wall than said bottom wall.

9. The system according to claim 8, further comprising:
 a pump being coupled to said tank such that said pump is positioned within said tank wherein said pump is configured to selectively pump the fluid in said tank, said pump being fluidly coupled to said first outlet wherein said pump is configured to urge the fluid in said tank outwardly from said outlet; and
 an intake being fluidly coupled to said pump, said intake extending downwardly toward said bottom wall wherein said intake is configured to draw the fluid into said pump.

10. The system according to claim 2, further comprising a second outlet being coupled to said second side such that said second outlet is in fluid communication with said interior of said tank, said second outlet being positioned closer to said bottom wall and said top wall, said second outlet being configured to be manipulated thereby facilitating said second outlet to drain the fluid from said tank.

11. A water conservation system comprising:

a shower being configured to deliver a fluid, said shower having a pair of intersecting walls, a shower head and a drain, said shower head being configured to be fluidly coupled to a fluid source thereby facilitating said shower head to deliver the fluid;

a storage unit being positioned in said shower, said storage unit being fluid communication with said shower head, said storage unit being selectively positioned in a closed position and an open position, said storage unit being positioned in said open position when said shower is initially turned on wherein said storage unit is configured to store cold fluid until heated fluid travels to said shower head thereby inhibiting the cold fluid from passing through said drain, wherein said storage unit retains the cold fluid to be used at a later point in time, said storage unit comprising:

a tank having a top wall, a bottom wall and an outer wall extending between said top wall and said bottom wall, said outer wall having a first side, a second side and a third side such that said tank has a triangular cross section taken along a line extending through said top wall and said bottom wall, said outer wall extending upwardly beyond said top wall to define a lip extending around said top wall, each of said first side and said second side having a recess extending inwardly therein to define a grip in each of said first side and said second side, said tank being selectively positioned in said shower having each of said first side and said second side abutting an associated one of said intersecting walls of said shower, said third side having a sight glass being

coupled thereto wherein said sight glass is configured to facilitate a level of the fluid in said tank to be visible,

an inlet being coupled to said top wall, said inlet being in fluid communication with an interior of said tank, a handle being coupled to said tank wherein said handle is configured to be gripped, said handle being coupled to said lip such that said handle is spaced from said top wall,

a valve being fluidly coupled to said shower head, said valve having a lever thereon wherein said lever is configured to be manipulated, said valve having an output, said valve being positioned in an open position wherein said valve is configured to direct the fluid outwardly from said output, said valve being positioned in a closed position wherein said valve is configured to direct the fluid outwardly from said shower head,

a hose being fluidly coupled between said output on said valve and said inlet on said tank wherein said hose is configured to direct the fluid into said tank when said valve is positioned in said open position, a first outlet being coupled to said first side of said tank such that said first outlet is in fluid communication with said interior of said tank, said first outlet being positioned closer to said top wall than said bottom wall,

a pump being coupled to said tank such that said pump is positioned within said tank wherein said pump is configured to selectively pump the fluid in said tank, said pump being fluidly coupled to said first outlet wherein said pump is configured to urge the fluid in said tank outwardly from said outlet,

an intake being fluidly coupled to said pump, said intake extending downwardly toward said bottom wall wherein said intake is configured to draw the fluid into said pump,

a second outlet being coupled to said second side such that said second outlet is in fluid communication with said interior of said tank, said second outlet being positioned closer to said bottom wall and said top wall, said second outlet being configured to be manipulated thereby facilitating said second outlet to drain the fluid from said tank; and

a thermometer being in fluid communication with said storage unit wherein said thermometer is configured to detect a temperature of the fluid thereby facilitating said storage unit to be positioned in said closed position when the heated fluid travels to said shower head, said thermometer being fluidly coupled to said hose.

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