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(54) **ADD-ON MULTI-HEAD BODY SPRAY SHOWER**

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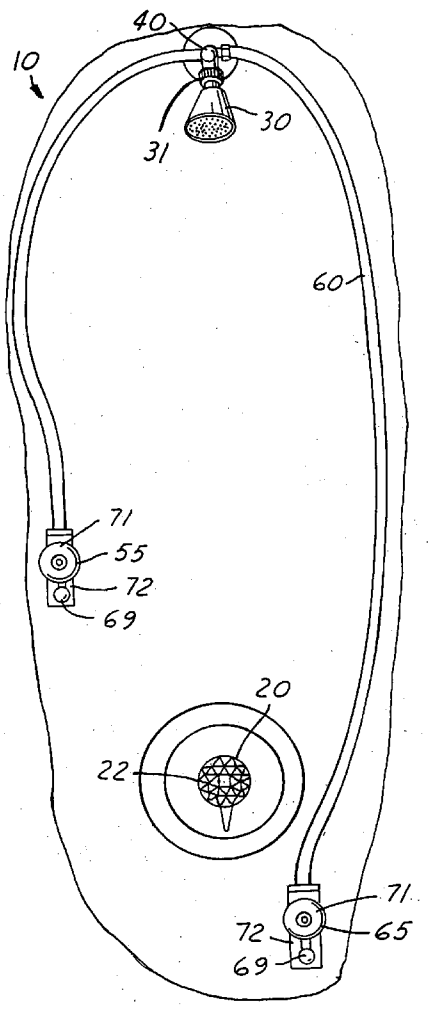
(57) **ABSTRACT**

A multiple head shower system particularly designed for retrofit installation on an existing shower system, and having a head member with a primary outlet and at least one secondary outlet, a primary shower head, at least one elongated water conduit, and at least one secondary on/off water valve member. The secondary valve members are secured to the shower enclosure with a bracket member and an adhesive. The header member is secured to the existing shower system with a threaded connection or a slip-fit connection. Preferably, a pair of secondary on/off water valve members and conduits are provided.



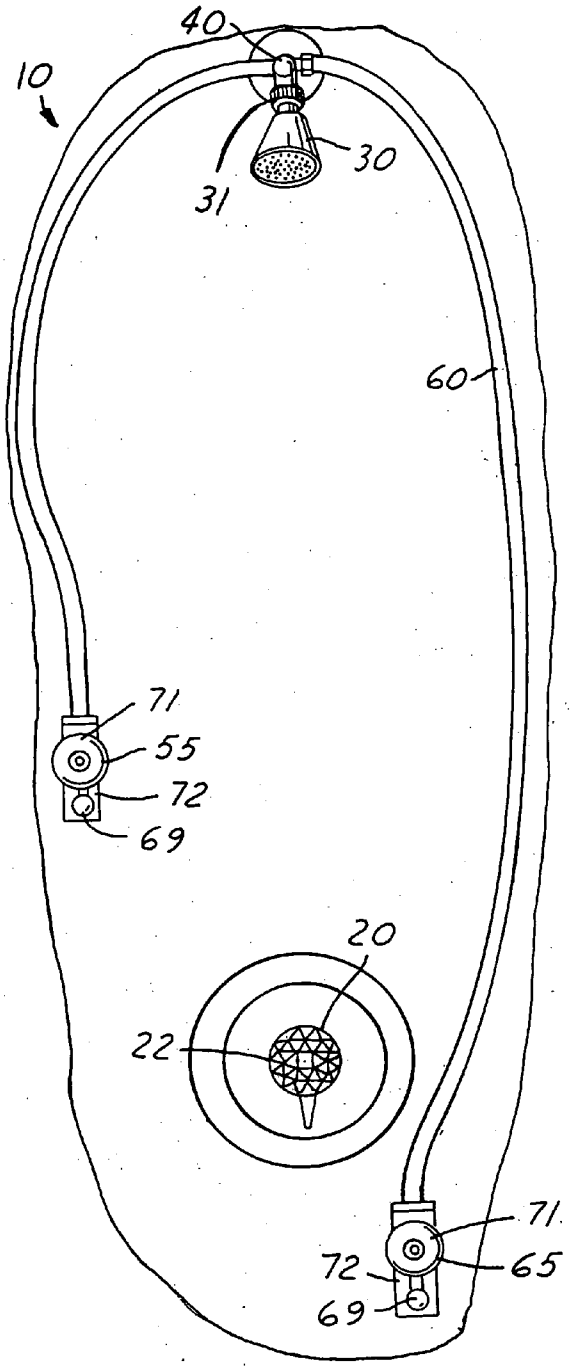

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FIG.1

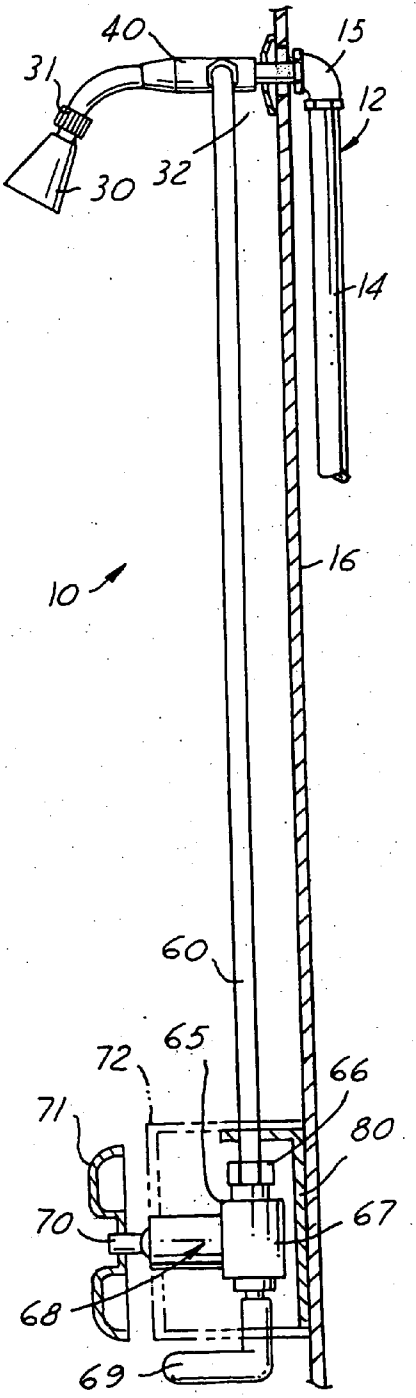
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FIG.2

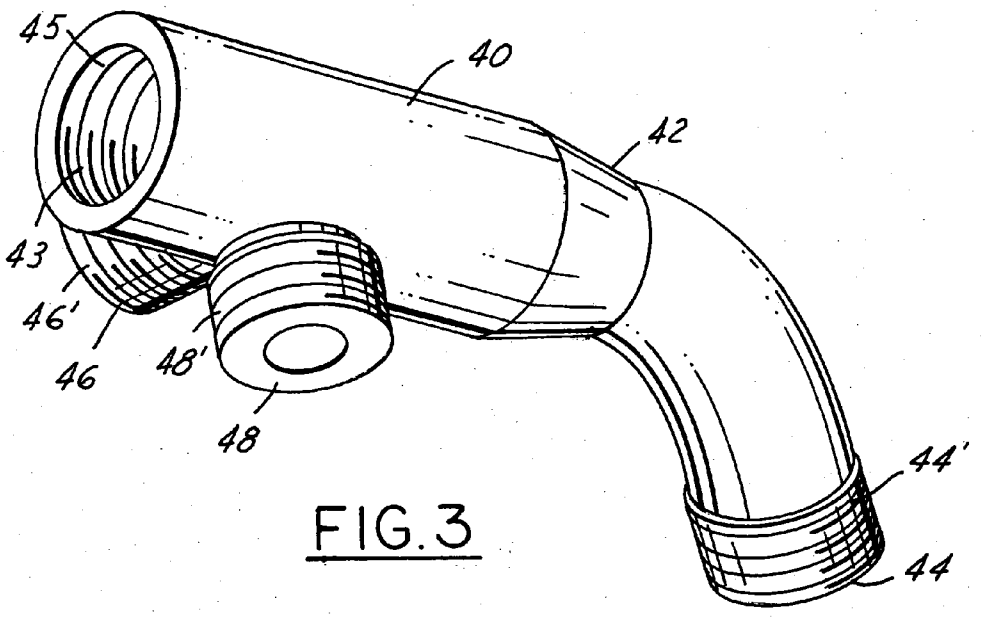

FIG. 3

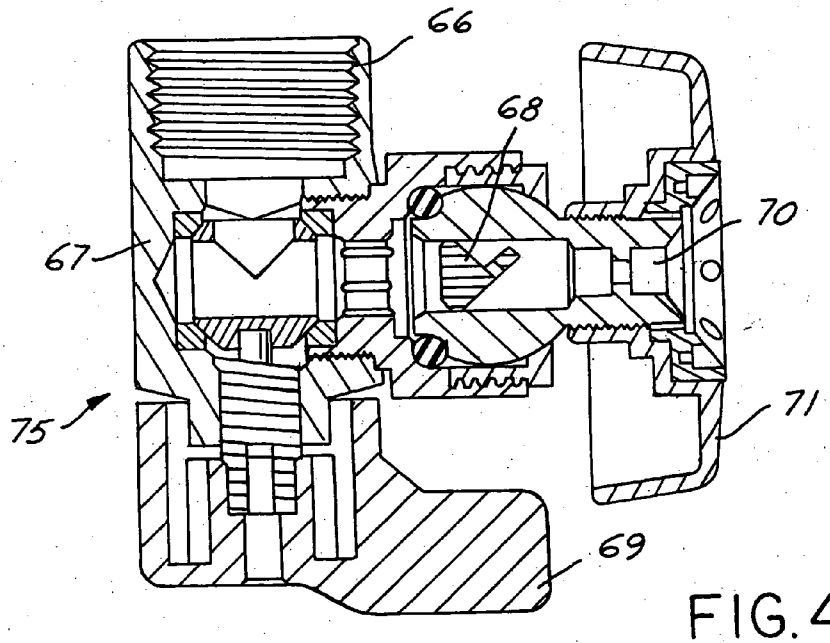

FIG. 4

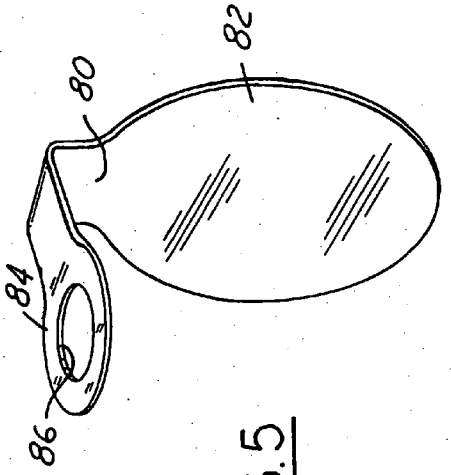

FIG. 5

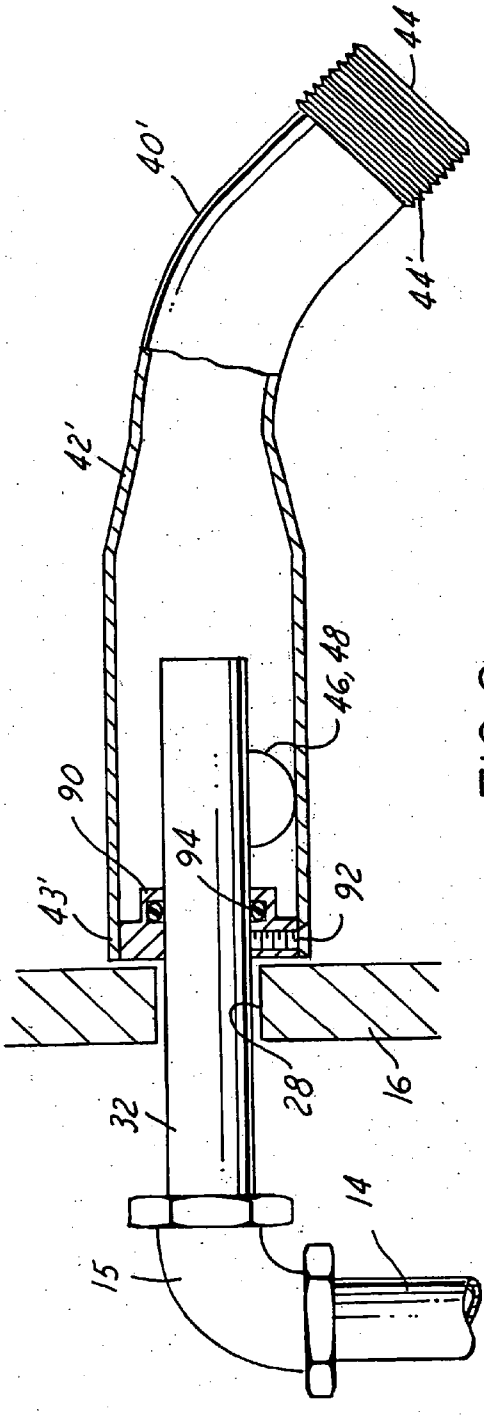

FIG. 6

ADD-ON MULTI-HEAD BODY SPRAY SHOWER

TECHNICAL FIELD

[0001] The present invention relates to shower systems with multiple shower heads.

BACKGROUND OF THE INVENTION

[0002] There are several shower systems known today which utilize multiple shower heads. Most of these systems, however, are either expensive or complicated to use and install. Also, most of them are installed as part of the original plumbing system.

[0003] There is a need for an inexpensive, easy-to-use, multiple shower head system which can be retrofitted on existing plumbing systems.

SUMMARY OF THE INVENTION

[0004] It is an object of the present invention to provide an improved shower system with multiple shower heads. It is also an object of the present invention to provide a multiple head shower system which can be retrofitted on existing plumbing systems.

[0005] It is a further object of the present invention to provide a multiple head shower system which is inexpensive and easy to install and use. It is a still further object of the present invention to provide a multiple head shower system which can be retrofitted on existing plumbing systems and which utilizes unique attachment and connector mechanisms, both for the primary shower head and the secondary spray valve mechanisms.

[0006] The present invention fulfills these objectives and provides a unique and beneficial multiple head shower system which is inexpensive, easy to install, and can be retrofitted on existing plumbing systems. In accordance with the present invention, the system utilizes a connector head mechanism for connecting the primary shower head with the existing plumbing system, a pair of conduit or pipes which direct the spray to two secondary locations, a pair of secondary valve mechanisms attached to the end of the conduits, and bracket mechanisms for attaching the secondary valve mechanisms to the wall of the shower enclosure. The main connector member includes a unique header member which can be screwed on or, in an alternative embodiment, slipped on an intervening connector pipe to the original plumbing system. The header member has a main outlet for attachment to the primary shower head, and two secondary outlets for attachment to the secondary conduits and spray valve mechanisms. The secondary conduits are preferably rigid metal tubing and are used to convey the water to the secondary valve mechanisms. Each of the secondary valve mechanisms are attached by a bracket member or the like to the wall of the shower enclosure using adhesive pads or the like. Each of the secondary valve mechanisms include individual shut-off mechanisms. Also, the secondary valve mechanisms have spray jets which can be rotated in order to direct the water spray as desired.

[0007] Further features and benefits of the present invention will become apparent from a review of the accompanying disclosure when viewed in accordance with the attached drawings and appended claims.

BRIEF DESCRIPTION OF THE DRAWINGS

[0008] **FIG. 1** is a schematic illustration of the present invention;

[0009] **FIG. 2** is a side view in partial cross-section illustrating installation of the present invention;

[0010] **FIG. 3** is a perspective view of a unique header member which can be utilized with the present invention;

[0011] **FIG. 4** is a cross-sectional view of a secondary valve mechanism;

[0012] **FIG. 5** is a perspective view of a bracket member for use with the present invention; and

[0013] **FIG. 6** illustrates an alternate embodiment of a header member for use with the present invention.

DESCRIPTION OF THE PREFERRED EMBODIMENT(S)

[0014] The shower system in accordance with the present invention is schematically illustrated in **FIGS. 1 and 2** and generally referred to by the reference numeral **10**. The unique system **10** is particularly adapted to be retrofitted upon an existing shower or plumbing system generally referred to by the reference numeral **12**.

[0015] As shown, the existing plumbing system **12** includes a main water conduit **14** which is typically positioned behind the wall of a shower enclosure **16**. As is typical with shower enclosures, the shower enclosure wall **16** can be made of a fiberglass preform material or covered with ceramic tile or the like (not shown). The primary shower plumbing system **12** also typically includes a primary on/off shut-off valve mechanism **20** (shown in **FIG. 1**). The mechanism **12** typically includes a knob mechanism **22** which is attached to a valve mechanism (not shown), which turns off and on the flow of water to the main water conduit **14** and in turn to the primary shower head member **30**.

[0016] The primary water conduit **14** also has an elbow member **15** which is positioned to be connected to the primary shower head **30** through an opening **28** in the wall of the shower enclosure **16**. An intervening connector pipe member **32** is typically utilized to connect the main conduit member **14** to the primary shower head member **30**.

[0017] In accordance with the system **10** of the present invention, a unique header member **40** is utilized. The system **10** also includes a pair of water conduit members **50** and **60**, together with secondary shower water valve mechanisms **55** and **65**.

[0018] The header member **40** is better shown in **FIG. 3**. The header member has an elongated body member **42** having water inlet port **43** at one end and a water outlet port **44** at the other end. The outlet **44** is adapted to be connected to the main shower head member **30**. The header member **40** also has a pair of secondary water outlet ports **46** and **48** which are adapted to be connected to the conduits **50** and **60** and in turn to the secondary shower head members **55** and **65**. As shown in **FIG. 3**, the main water inlet **43** has a plurality of internal threads **45** which are used to threadedly connect the header member **40** to the main water conduit **14** and/or connector pipe member **32**.

[0019] The three outlets **44**, **46** and **48** also have external threaded mechanisms **44'**, **46'**, and **48'** for being threadedly connected to the primary shower head **30** and the secondary conduit members **50** and **60**, respectively. The header member **40** can be made of any appropriate material, but preferably is made of a metal material and plated with a chrome material.

[0020] The main shower head member **30** is adapted to be connected to the header member **40** by a conventional threaded ball joint nut mechanism **31**. Also, a gasket or other sealing member is typically utilized to connect the primary shower head member **30** to the header member **40** in order to prevent water leakage.

[0021] The primary shower head member **30** can be of any conventional type, such as that shown in United States Design Pat. No. 435,889. The disclosure of which is hereby incorporated herein by reference.

[0022] The two secondary water conduits **50** and **60** are preferably of different lengths, as shown in **FIG. 1**. This allows positioning of the secondary shower head members **55** and **65** at different locations relative to the user's body. Preferably, the conduit members **50** and **60** are made of a metal pipe material plated with a chrome material. Of course, it is understood that the conduit members can be made of any other appropriate material conventionally used for shower systems today.

[0023] The secondary spray valve mechanisms **55** and **65** can be of any conventional type and are shown schematically in **FIGS. 1 and 2**. A preferred valve mechanism which can be used with the present invention is shown in **FIG. 4** and referred to by the reference numeral **75**.

[0024] As shown schematically in **FIGS. 1 and 2**, each of the secondary shower head mechanisms **55** and **65** include a connector member **66**, a main body member **67**, an internal valve mechanism **68**, a on/off handle or lever member **69**, a water outlet member **70**, and an outer cowling **71** positioned around the water outlet or spray jet member **70**. It is also possible to have an optional housing member **72** which is positioned around the valve members **55** and **65** in order to enclose it and make it more aesthetically attractive.

[0025] Preferably, the position of the jet spray of water exiting from the spray jet member **70** is adjustable. For example, the water spray can be rotated on the order of 40° in order to direct the spray as desired by the user. Spray nozzle mechanisms of this type which can be utilized for the present invention are preferably nozzles where the spray causes a tangential action in the water jet just prior to exiting from the spray orifice.

[0026] Each of the secondary shower head members **55** and **65** are attached to the wall of the shower enclosure **16** by a bracket member **80**. In this regard, a preferred bracket member **80** is shown schematically in **FIG. 5**. The bracket member **80** includes a main body portion **82** which is flat and adapted to be attached flush with the surface of the wall of the shower enclosure **16**. The bracket member **80** also includes a second portion **84** which is essentially positioned at right angles to the main body portion **82** and includes an opening **86** which is adapted to be positioned around the conduit members **50** and **60**.

[0027] The bracket member **80** is preferably made of a metal material, such as stainless steel and preferably attached to the wall of the shower enclosure **16** by an adhesive material, such as an adhesive pad or the like. The bracket can be highly polished or plated to provide a cosmetic appealing look.

[0028] An alternate header member **40'** is shown in **FIG. 6**. Header member **40'** is adapted to be slipped onto the existing shower plumbing installation and then secured in place. As indicated, the inlet end **43'** of the header member **40'** is positioned over the connector pipe member **32** which in turn is attached to the primary water conduit **14**. An insert member **90** is positioned at the inlet end **43'** of the header member **40'** and is adapted to be connected over the connector member **32**in a slip-fit relationship. A screw member **92** is positioned to securely attach the header member **40'** to the connector member **32** and in turn to the primary water conduit **14**. A sealing member, such as O-ring **94**, or the like is utilized to sealingly connect the header member **40'** to the primary plumbing installation and prevent water leakage.

[0029] Although the present invention is described above with reference to having a pair of secondary shower head mechanisms, it is understood that the present inventive multi-head shower system is not limited to that precise number of head members. For example, the shower system can utilize only a single secondary shower head member, or three or more shower head members. It would be within the ordinary skill of persons in the art in order to adapt the present inventive system as described above to systems having only one, or three or more secondary shower head mechanisms.

[0030] While particular embodiments of the invention have been shown and described, numerous variations and alternative embodiments will occur to those skilled in the art. Accordingly, it is intended that the invention be limited only in terms of the appended claims.

What is claimed is:

1. A multiple head shower system for a shower enclosure with a shower plumbing installation comprising:

a header member for connecting to the shower plumbing installation, said header member having a primary shower head outlet and at least a one secondary shower head outlets;

a primary shower head attached to said primary shower head outlet;

a water conduit attached to each of said secondary shower head outlets, each of said water conduits having a first end connected to said header member and a second distal end;

a secondary water spray valve member attached to the second distal end of each of said water conduits, each of said secondary water spray valve members having an individual water shut off member.

2. The multiple head shower system as described in claim 1 wherein two water conduits and two secondary water spray valve members are provided.

3. The multiple head shower system as described in claim 1 further comprising a bracket member attached to each of said secondary water spray valve members for attaching said secondary water spray valve members to the shower enclosure.

4. The multiple head shower system as described in claim 3 wherein said bracket member has a substantially L-shape.

5. The multiple head shower system as described in claim 3 wherein said bracket member is attached to the shower enclosure with an adhesive material.

6. The multiple head shower system as described in claim 1 wherein said header member is threadedly connected to the shower plumbing installation.

7. The multiple head shower system as described in claim 1 wherein said header member is connected to the shower plumbing installation with a slip-on mechanism.

8. The multiple head shower system as described in claim 1 wherein each of said secondary water spray valve members comprise adjustable water spray jet members.

9. The multiple head shower system as described in claim 1 further comprising a connector pipe member for connecting said header member to the shower plumbing installation.

10. A multiple head shower system for retrofit installation on an existing shower plumbing system in a shower enclosure, said existing shower plumbing system having a primary water conduit extending to the shower enclosure and a primary water on-off valve mechanism located in the shower enclosure for turning on and off the source of water to the primary water conduit, said multiple head shower system comprising:

a header member for connection to said primary water conduit, said header member having a primary shower head outlet and a pair of secondary shower head outlets;

a primary shower head attached to said primary shower head outlet on said header member;

an elongated water conduit attached to each of said pair of secondary shower head outlets; and

a secondary water spray valve mechanism attached to each of said elongated water conduits at a distance from said header member, each of said secondary water spray valve mechanisms having a separate on-off lever member.

11. The multiple head shower system as described in claim 10 further comprising a bracket member attached to each of said secondary valve members for attaching said secondary valve members to the shower enclosure.

12. The multiple head shower system as described in claim 11 wherein said bracket member has a substantially L-shape.

13. The multiple head shower system as described in claim 11 wherein said bracket member is attached to the shower enclosure with an adhesive material.

14. The multiple head shower system as described in claim 10 wherein said header member is threadedly connected to said primary water conduit.

15. The multiple head shower system as described in claim 14 further comprising an intervening pipe member positioned and threadedly secured between said header member and said primary water conduit.

16. The multiple head shower system as described in claim 10 wherein said header member is connected to said primary water conduit with a slip-on connection.

17. The multiple head shower system as described in claim 16 further comprising a seal member positioned between said header member and said primary water conduit.

18. The multiple head shower system as described in claim 16 further comprising an intervening pipe member positioned between said header member and said primary water conduit, said header member being positioned onto said pipe member through a slip-fit connection.

* * * * *