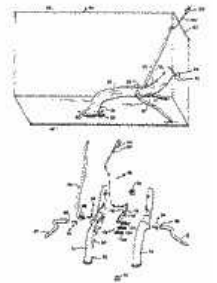
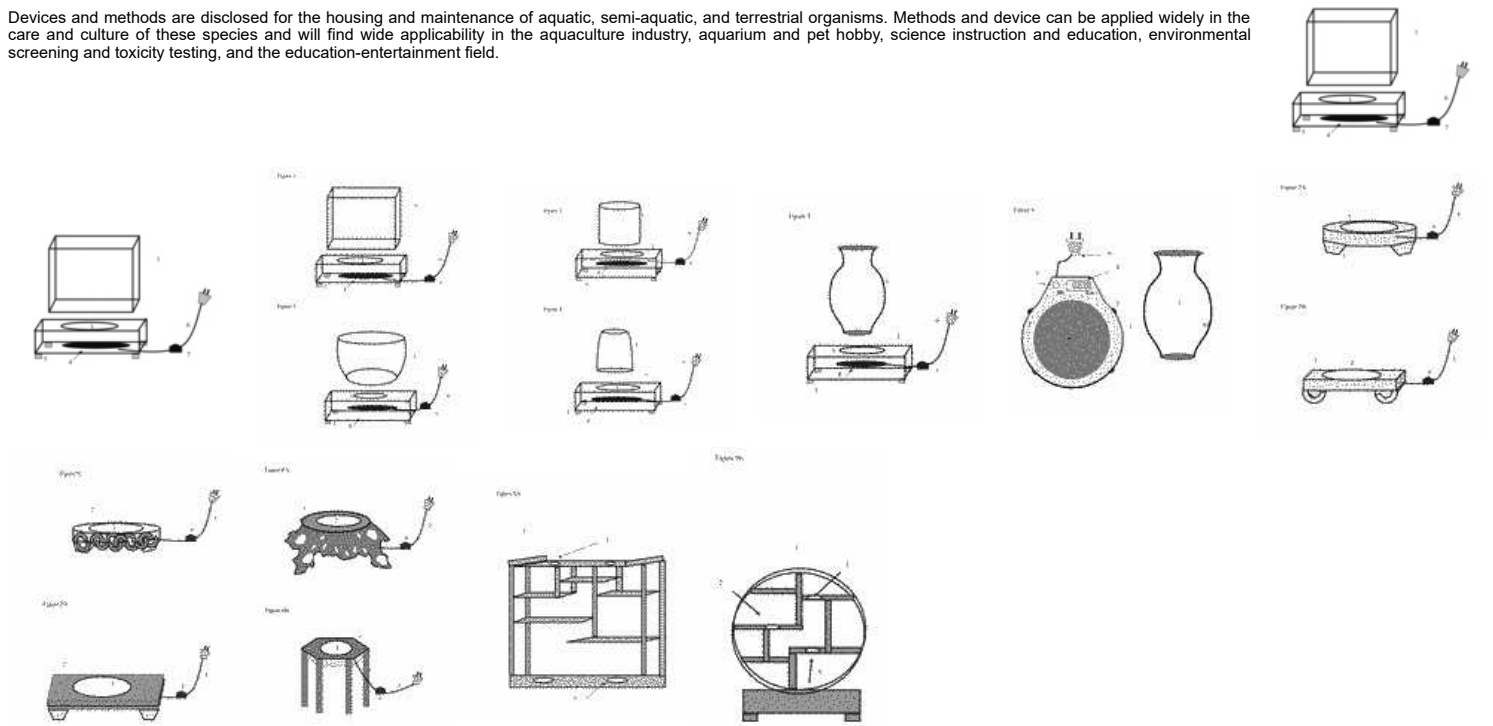


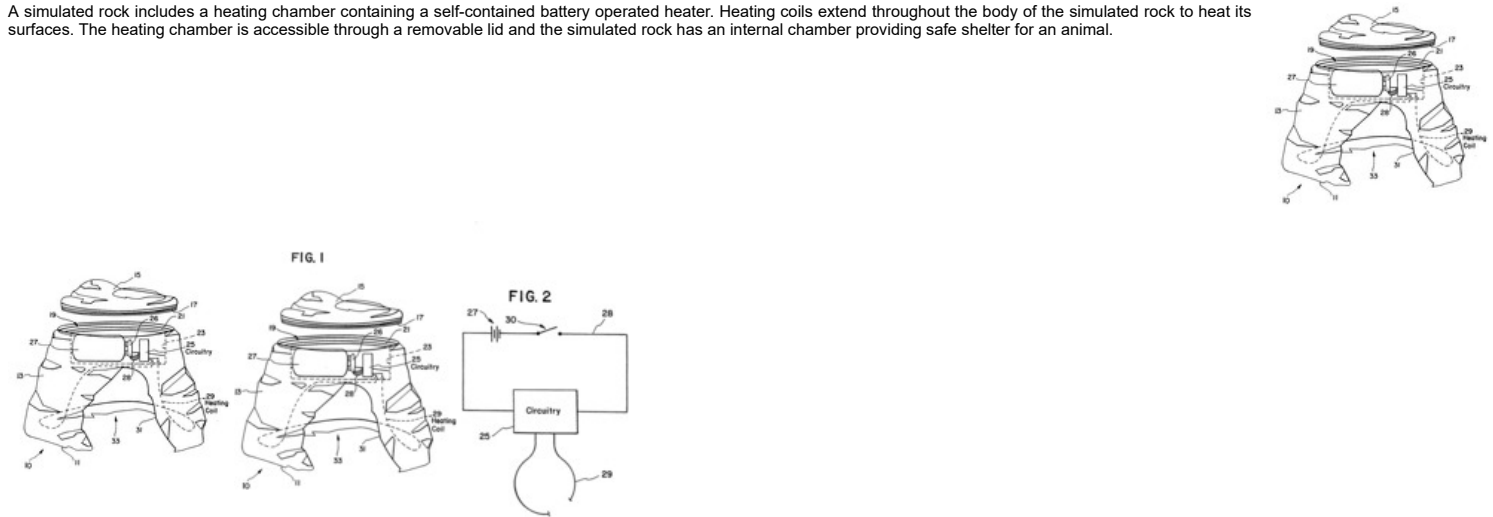
This exploded perspective view shows the main body (10) positioned above the base (20). The probe assembly (30) is shown to the right, with its handle (31) and probe tip (32) aligned towards the base. Various components are labeled with reference numerals, including the top cover (11), side cover (12), and internal components like the display (13) and control buttons (14, 15, 16, 17, 18, 19, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32).



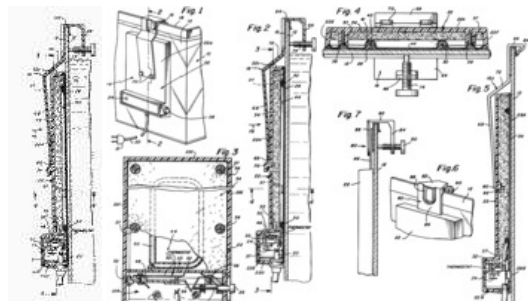
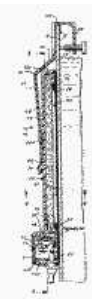
Devices and methods are disclosed for the housing and maintenance of aquatic, semi-aquatic, and terrestrial organisms. Methods and device can be applied widely in the care and culture of these species and will find wide applicability in the aquaculture industry, aquarium and pet hobby, science instruction and education, environmental screening and toxicity testing, and the education-entertainment field.



A simulated rock includes a heating chamber containing a self-contained battery operated heater. Heating coils extend throughout the body of the simulated rock to heat its surfaces. The heating chamber is accessible through a removable lid and the simulated rock has an internal chamber providing safe shelter for an animal.



An aquarium heater that is disposed on an outside surface of the aquarium tank for maintaining the water in the tank at a selectable temperature. The heater is preferably supported by a hanger or holder from a top edge of the tank and has a heat transfer plate disposed in intimate contact with a side or back wall of the tank. The heater includes, in addition to the heat transfer plate, a plastic or phenolic housing, a heating element, insulation and a settable thermostat contained in a temperature-sensing section of the housing. When the tank water is below a threshold temperature the thermostat closes coupling power to the heating element, which is preferably a rope-type resistance heater covered by a metal foil blanket, and when the temperature of the water reaches the threshold the thermostat temporarily opens to uncouple power to the heating element. In addition to the temperature sensing section of the housing there is also provided a heating section in which the heating element resides. The thermostat in the temperature sensing section is isolated from the heating section. Furthermore, the thermostat is in direct heat exchange relationship to the portion of the heat transfer plate overlying the heat sensing section of the housing.



6. Heater for reptile breeding

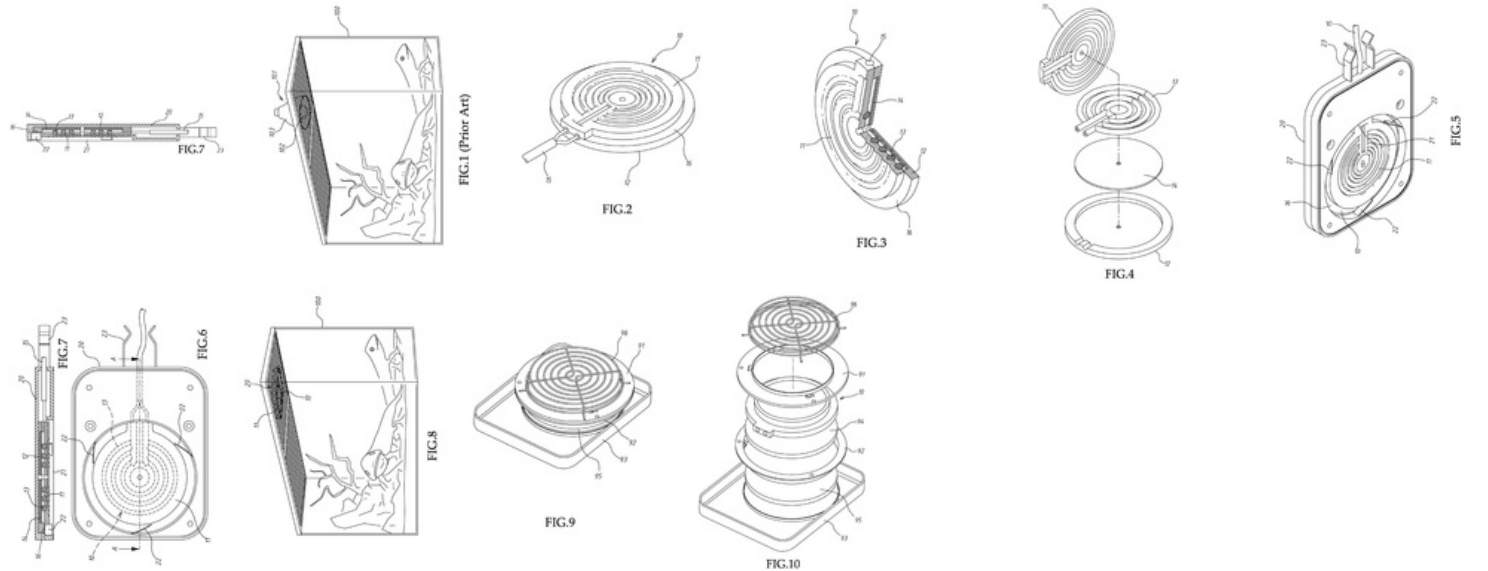
EP2683214

2012-07-02

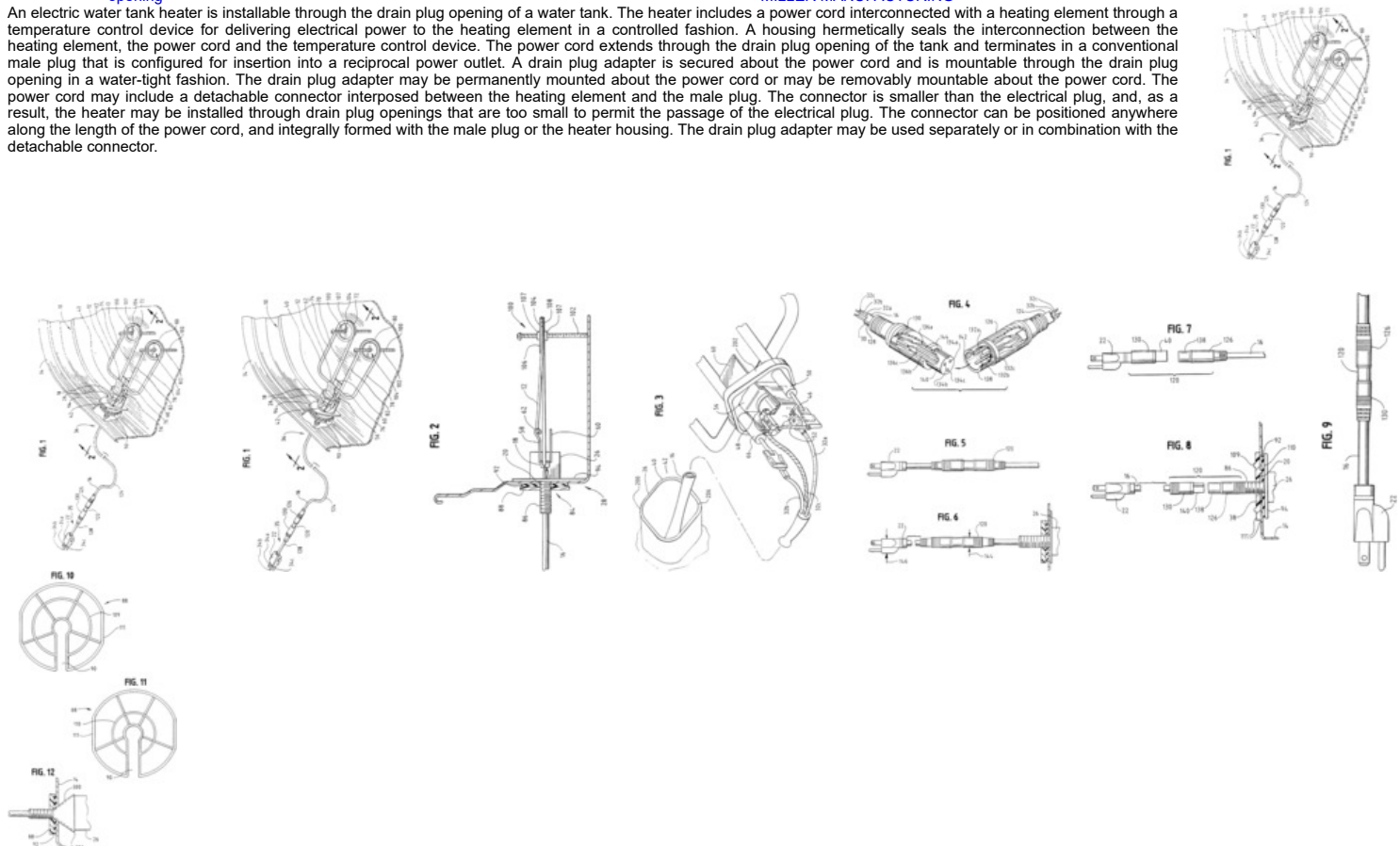
EIKO ELECTRIC PRODUCTS*

2014-01-08 2014-01-08

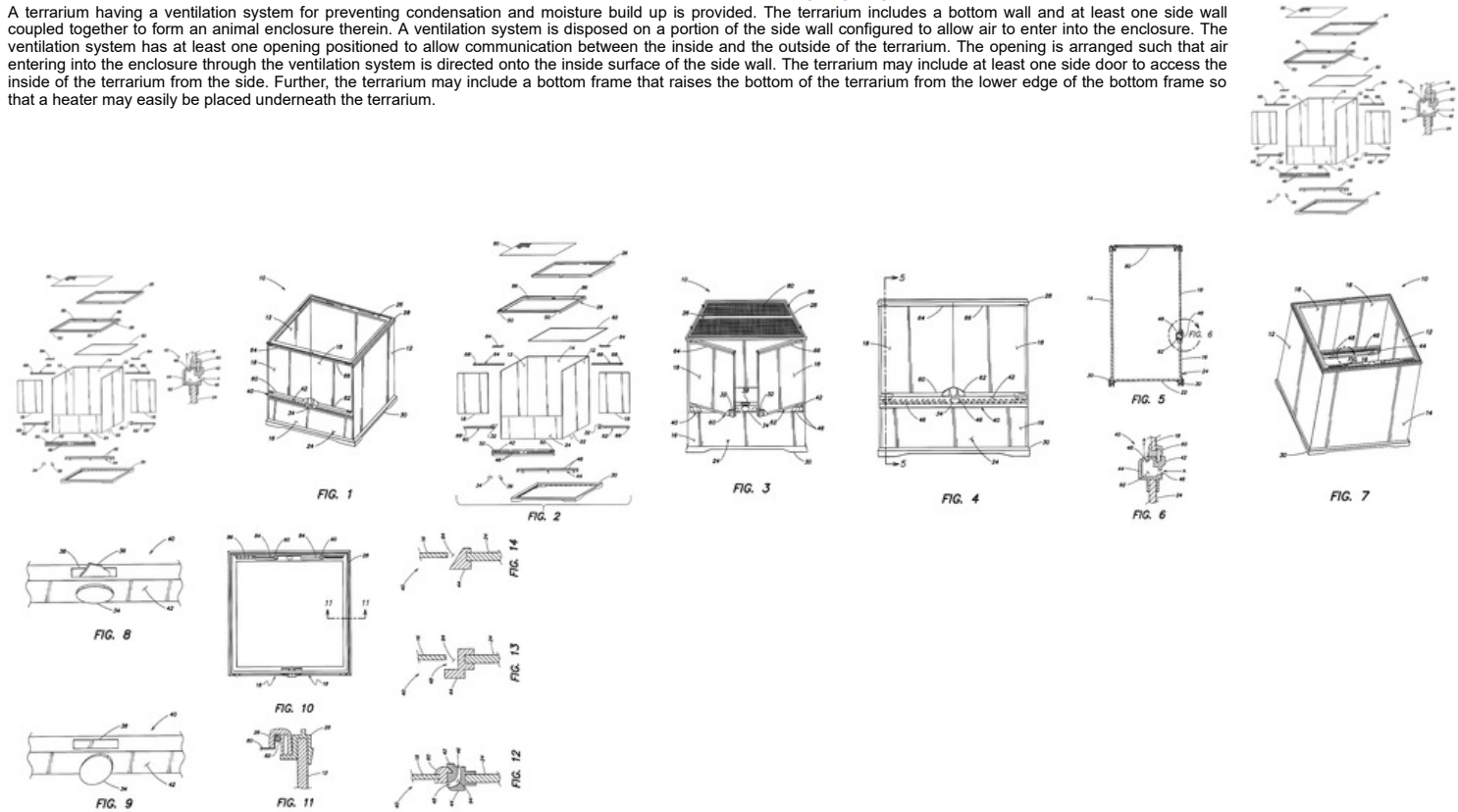
A heater for use in a reptile breeding cage (100) is disclosed to include a flat heater body (10) including a front heat-radiating face (11), a flat back cover (12) covered on a back side of the front heat-radiating face (11), a heating layer (13) set in between the front heat-radiating face (11) and the flat back cover (12) and a thermal insulation layer (14) sandwiched between the heating layer (13) and the flat back cover (12), and a flat protective shell (20) accommodating the flat heater body (10) and providing an opening (21) through which the front heat-radiating face (11) of the flat heater body (10) is exposed to the outside.



7.	Apparatus for mounting an electrical heater through a water tank drain plug opening	CA2291988	1999-01-29	ALLIED PRECISION INDUSTRIES AMERICAN CHARTERED BANK* MILLER MANUFACTURING*	2000-07-29 2000-07-29
An electric water tank heater is installable through the drain plug opening of a water tank. The heater includes a power cord interconnected with a heating element through a temperature control device for delivering electrical power to the heating element in a controlled fashion. A housing hermetically seals the interconnection between the heating element, the power cord and the temperature control device. The power cord extends through the drain plug opening of the tank and terminates in a conventional male plug that is configured for insertion into a reciprocal power outlet. A drain plug adapter is secured about the power cord and is mountable through the drain plug opening in a water-tight fashion. The drain plug adapter may be permanently mounted about the power cord or may be removably mountable about the power cord. The power cord may include a detachable connector interposed between the heating element and the male plug. The connector is smaller than the electrical plug, and, as a result, the heater may be installed through drain plug openings that are too small to permit the passage of the electrical plug. The connector can be positioned anywhere along the length of the power cord, and integrally formed with the male plug or the heater housing. The drain plug adapter may be used separately or in combination with the detachable connector.					



8.	Ventilated terrarium	US20060118057	2005-08-15	INDUSTRIES HAGEN ROLF C HAGEN*	2006-06-08 2006-06-08
A terrarium having a ventilation system for preventing condensation and moisture build up is provided. The terrarium includes a bottom wall and at least one side wall coupled together to form an animal enclosure therein. A ventilation system is disposed on a portion of the side wall configured to allow air to enter into the enclosure. The ventilation system has at least one opening positioned to allow communication between the inside and the outside of the terrarium. The opening is arranged such that air entering into the enclosure through the ventilation system is directed onto the inside surface of the side wall. The terrarium may include at least one side door to access the inside of the terrarium from the side. Further, the terrarium may include a bottom frame that raises the bottom of the terrarium from the lower edge of the bottom frame so that a heater may easily be placed underneath the terrarium.					



9. **Aquarium heater**

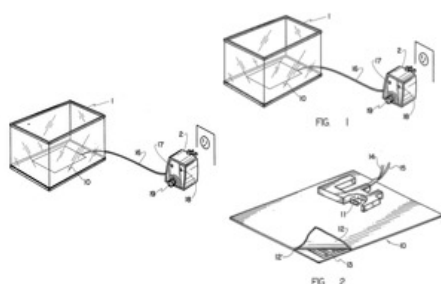
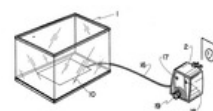
US4889973

1988-10-12

FARINACCI MICHAEL F; ROWELL
WILLIAM A

1989-12-26 1989-12-26

An aquarium heater which consists of a heater pad attached to the outside bottom surface of the aquarium. The heater pad uses an etched-foil heating element laminated between layers of insulating material. Normally, the heat is attached to the bottom of the tank using a pressure sensitive adhesive. The aquarium water temperature is maintained using a current limiting electronic controller and a thermistor for sensing temperature. The thermistor is located in the heater pad between the two layers of insulation.

10. **Detachable metallic safety guard for portable electric immersion heater**

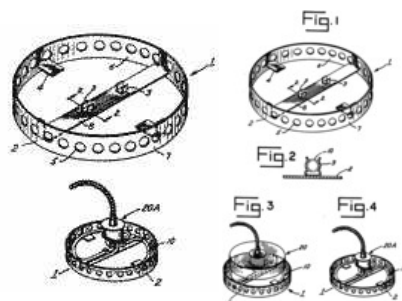
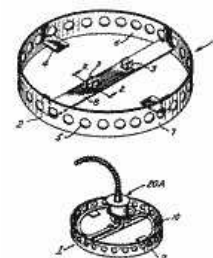
US5235161

1988-06-30

AMERICAN CHARTERED BANK*

1993-08-10 1993-08-10

A detachable metallic safety guard for use with a portable electric immersion heater is formed as an endless metallic band defining an open central area for receiving the heating element of the heater with the inner periphery of the band in spaced surrounding relationship to the heating element. The vertical height of the band is greater than the height of the heating element and the band is provided with openings allowing fluid to circulate therethrough. The guard is adapted to be directly attached to the heating element by a pair of clips carried by a diametric crossbar secured at its ends to the band. The band includes at least two tabs extending radially inwardly for providing peripheral support for the heating element. The heater may be a portable floating heater.

11. **Aquarium-tank heating control**

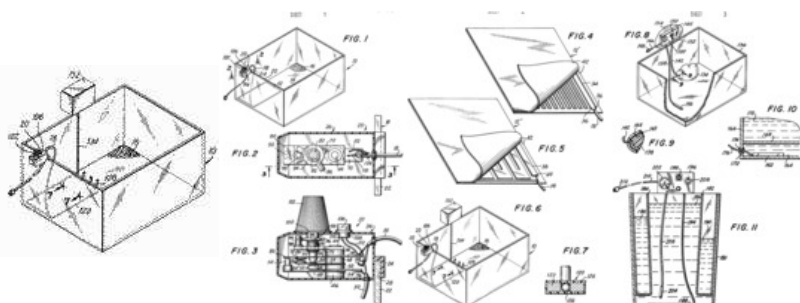
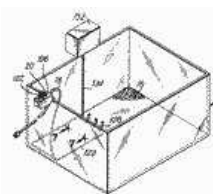
US3890486

1974-09-18

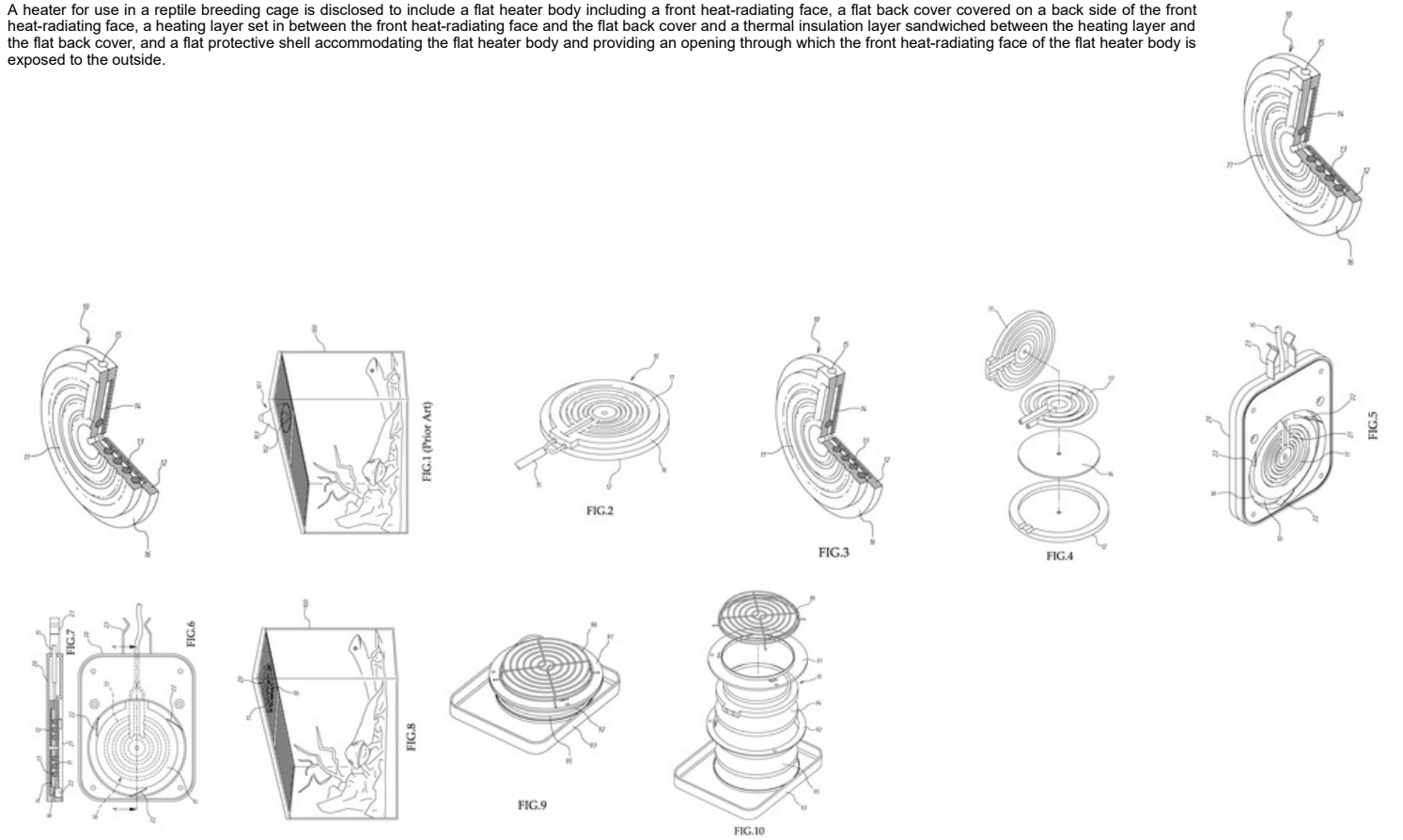
EQUIPMENT DEVELOPMENT*

1975-06-17 1975-06-17

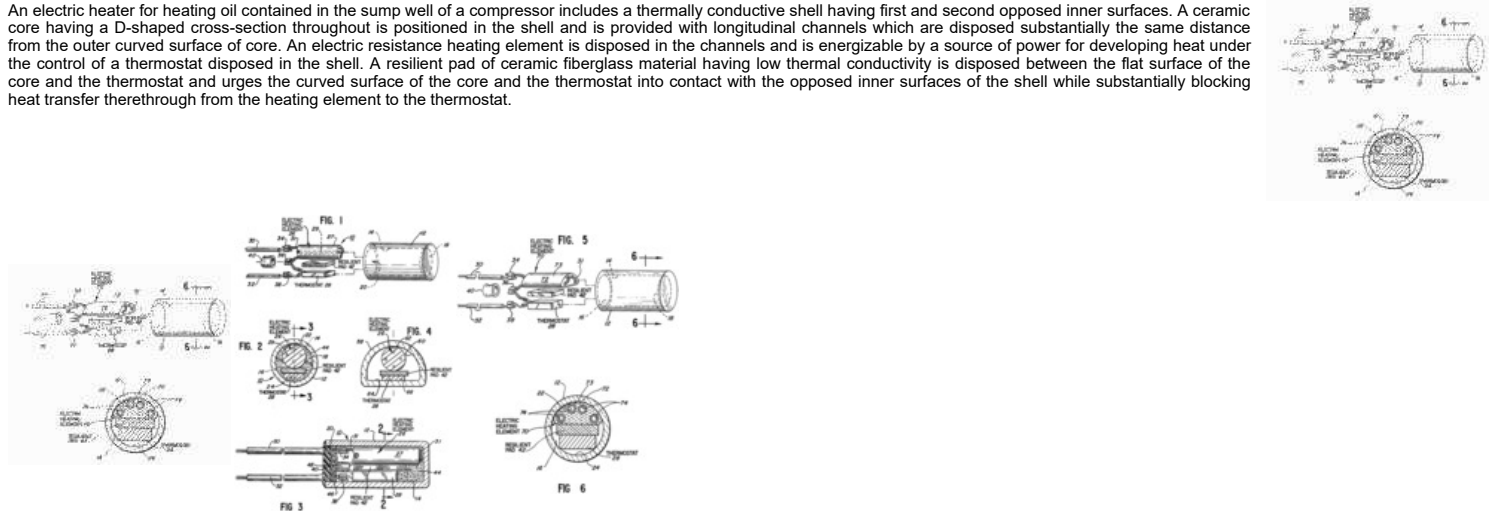
Heating devices are provided having a resistive heating element for heating a first region and a temperature control electrically coupled to the resistive heating element and positioned in a second region spaced from the first region. The temperature control is adapted to respond to the ambient temperature at the second region and the amount of current applied to the resistive heating element to maintain the temperature at the first region. The resistive heating element may consist of a length of resistive electrical conductor distributed over an area and encapsulated in a flexible waterproof material so as to define a sheet.

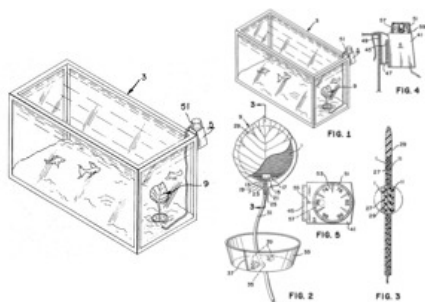


A heater for use in a reptile breeding cage is disclosed to include a flat heater body including a front heat-radiating face, a flat back cover covered on a back side of the front heat-radiating face, a heating layer set in between the front heat-radiating face and the flat back cover and a thermal insulation layer sandwiched between the heating layer and the flat back cover, and a flat protective shell accommodating the flat heater body and providing an opening through which the front heat-radiating face of the flat heater body is exposed to the outside.

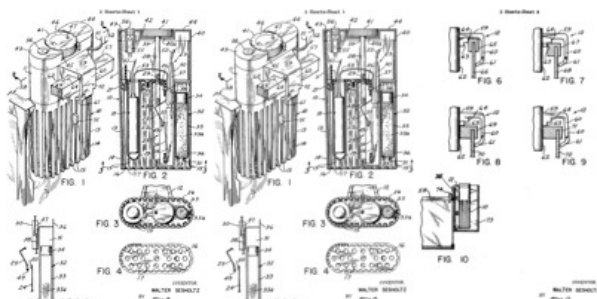


An electric heater for heating oil contained in the sump well of a compressor includes a thermally conductive shell having first and second opposed inner surfaces. A ceramic core having a D-shaped cross-section throughout is positioned in the shell and is provided with longitudinal channels which are disposed substantially the same distance from the outer curved surface of core. An electric resistance heating element is disposed in the channels and is energizable by a source of power for developing heat under the control of a thermostat disposed in the shell. A resilient pad of ceramic fiberglass material having low thermal conductivity is disposed between the flat surface of the core and the thermostat and urges the curved surface of the core and the thermostat into contact with the opposed inner surfaces of the shell while substantially blocking heat transfer therethrough from the heating element to the thermostat.

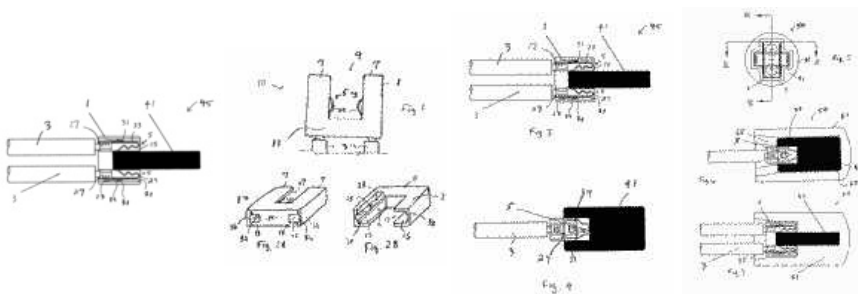




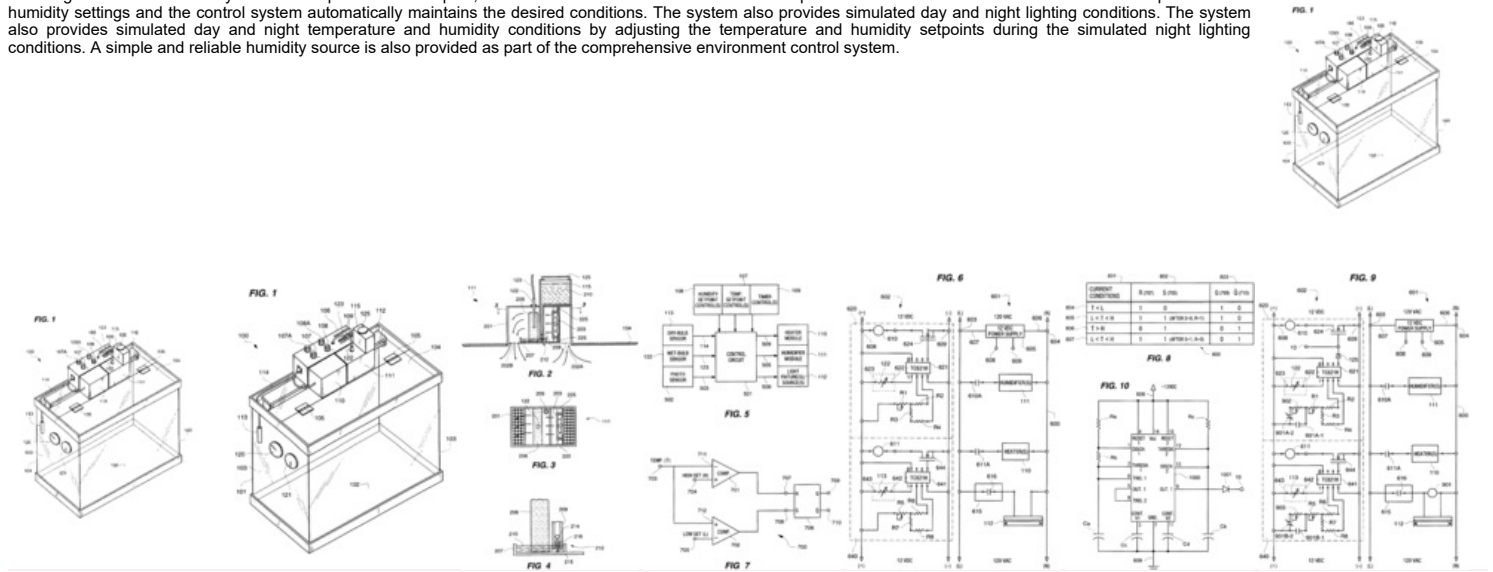
1970-11-19 1970-11-19



2005-04-07 2005-04-07

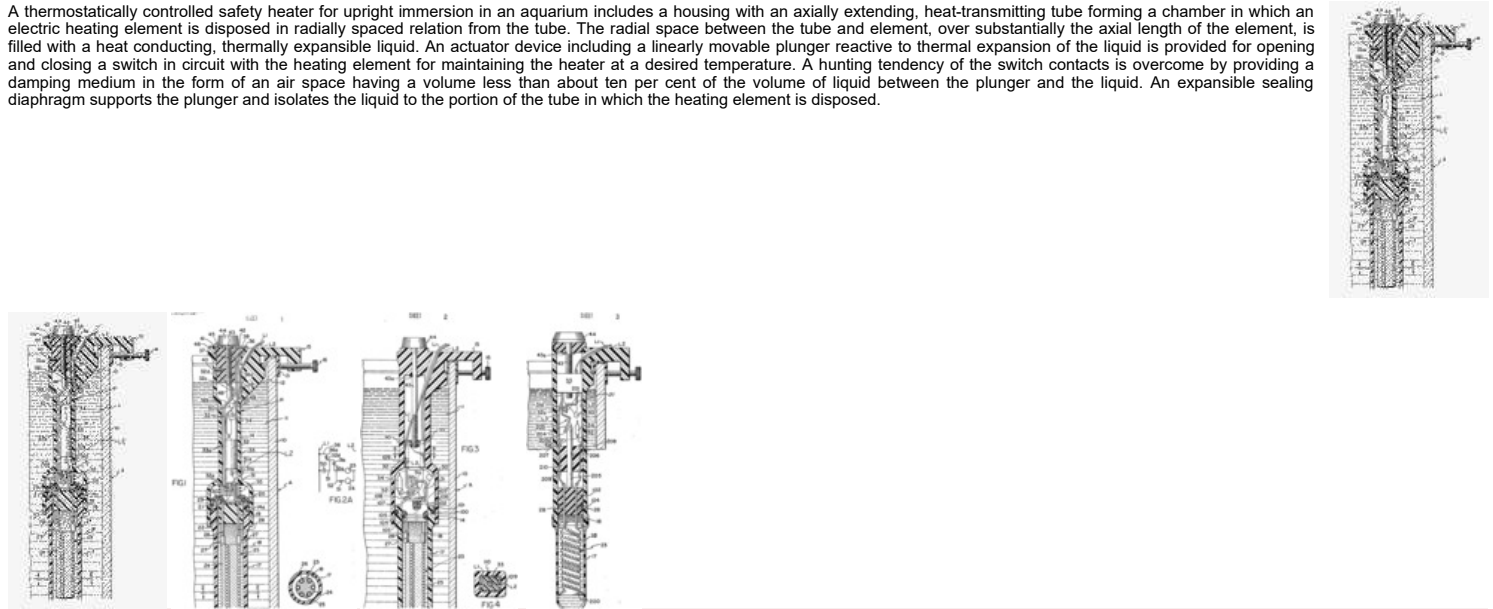


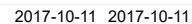
A comprehensive reptilian environment control system is provided that maintains a reptile enclosure within desired temperature and humidity ranges. The control system including the heat and humidity sources are provided in compact, convenient and safe modules which rest atop the enclosure. The user dials in the desired temperature and humidity settings and the control system automatically maintains the desired conditions. The system also provides simulated day and night lighting conditions. The system also provides simulated day and night temperature and humidity conditions by adjusting the temperature and humidity setpoints during the simulated night lighting conditions. A simple and reliable humidity source is also provided as part of the comprehensive environment control system.



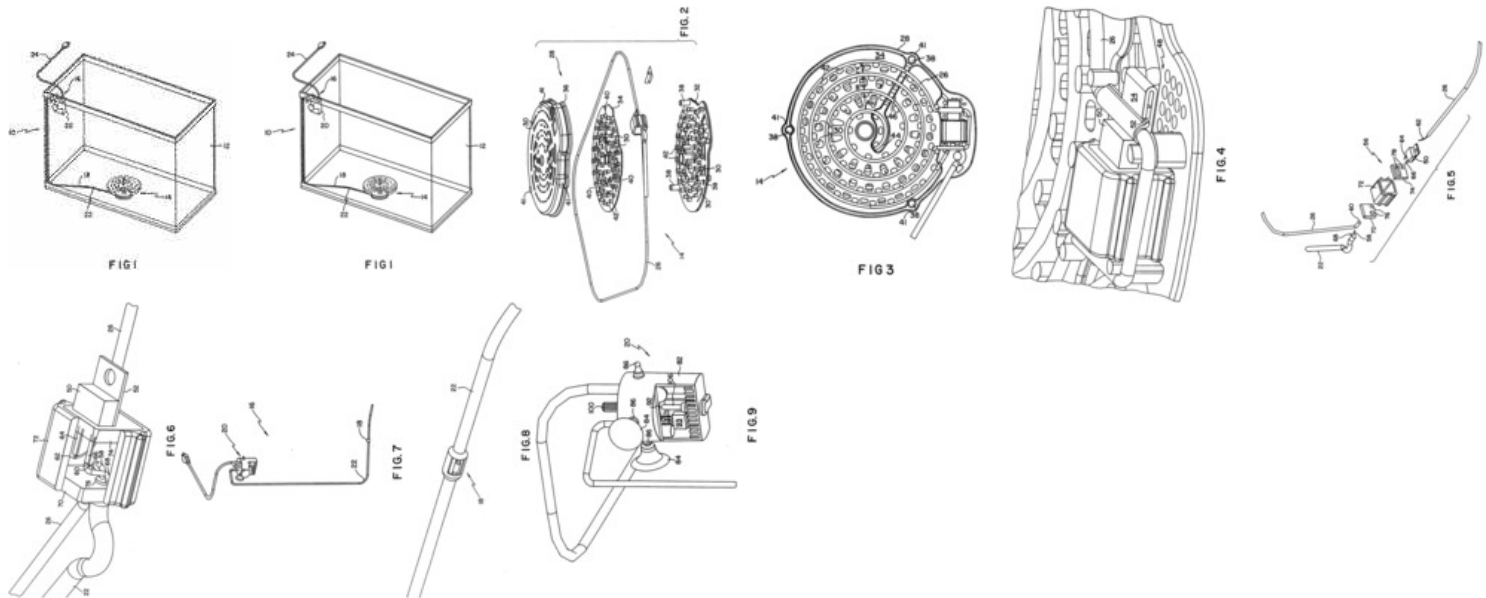
18. Immersion heater for aquariumsUS38952171974-01-14ODELL MANUFACTURING*1975-07-151975-07-15

A thermostatically controlled safety heater for upright immersion in an aquarium includes a housing with an axially extending, heat-transmitting tube forming a chamber in which an electric heating element is disposed in radially spaced relation from the tube. The radial space between the tube and element, over substantially the axial length of the element, is filled with a heat conducting, thermally expansible liquid. An actuator device including a linearly movable plunger reactive to thermal expansion of the liquid is provided for opening and closing a switch in circuit with the heating element for maintaining the heater at a desired temperature. A hunting tendency of the switch contacts is overcome by providing a damping medium in the form of an air space having a volume less than about ten per cent of the volume of liquid between the plunger and the liquid. An expansible sealing diaphragm supports the plunger and isolates the liquid to the portion of the tube in which the heating element is disposed.





An improved heater and control apparatus (10) suitable for maintaining a proper temperature in a liquid environment such as an aquarium (12) is provided. The apparatus (10) includes a heater element (26) housed within a protective casing (28) to reduce the likelihood of heater element (26) breakage. A number of openings (30) are provided in casing (28) to permit direct contact between the heater element (26) and water in the aquarium (12). The control assembly (16) includes a novel active light display (99). Additional novel features and corresponding advantages of the apparatus (10) are disclosed.



22.

Heater assembly

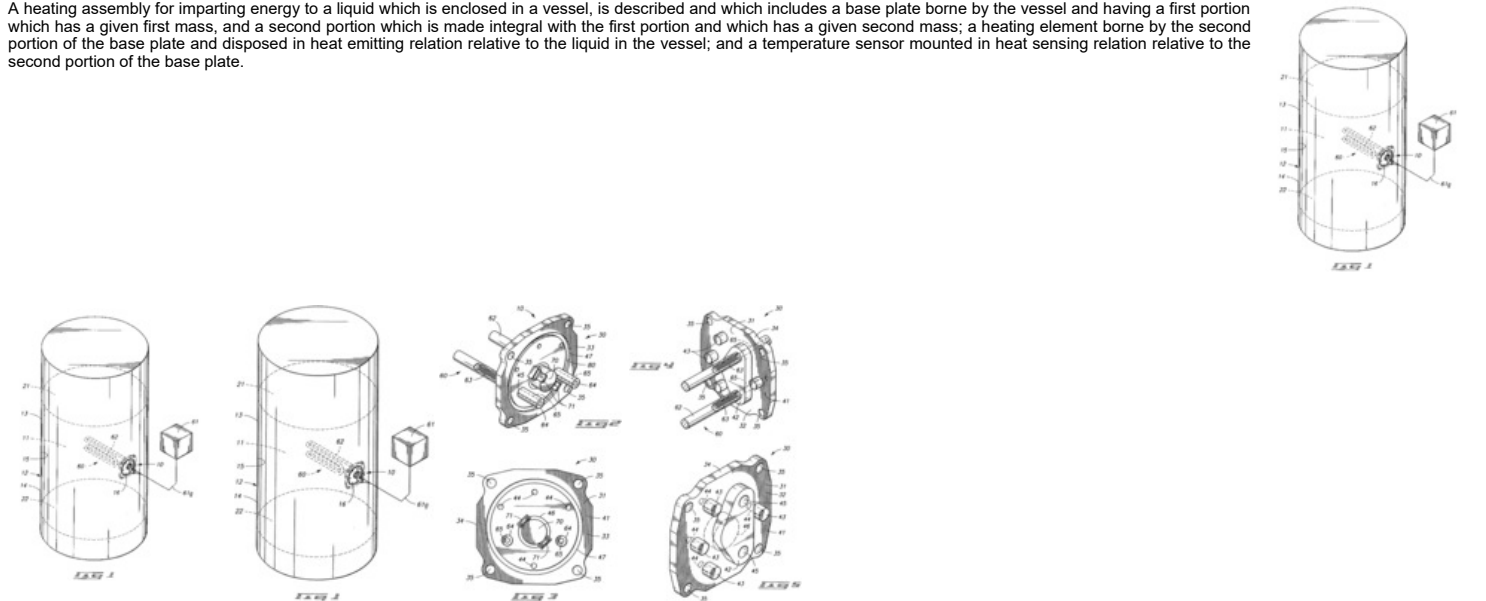
US6028294

1997-05-15

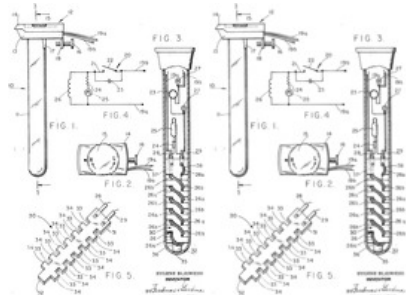
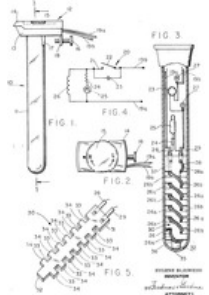
KIM HOTSTART MANUFACTURING*

2000-02-22 2000-02-22

A heating assembly for imparting energy to a liquid which is enclosed in a vessel, is described and which includes a base plate borne by the vessel and having a first portion which has a given first mass, and a second portion which is made integral with the first portion and which has a given second mass; a heating element borne by the second portion of the base plate and disposed in heat emitting relation relative to the liquid in the vessel; and a temperature sensor mounted in heat sensing relation relative to the second portion of the base plate.



A heating coil in an aquarium heater housing which comprises an electrically insulative support member, being helically enwrapped the support member helically with an electric heating element, the helically enwrapped support member being disposed in an aquarium heater housing, and the entire helically arranged heating element being maintained in spaced relation with the interior of the aquarium heater housing. The support member is provided with a plurality of longitudinally spaced transverse limbs which act to define a plurality of longitudinally spaced slots. The heating element is helically seated entirely within the slots so that it and the heater housing are maintained in spaced relation by the transverse limbs contacting the interior of the housing. The support member is also provided with a longitudinally extending limb engaging a closed end of the housing for maintaining the heating element and the housing in longitudinally spaced relation.



24. Portable humidification device

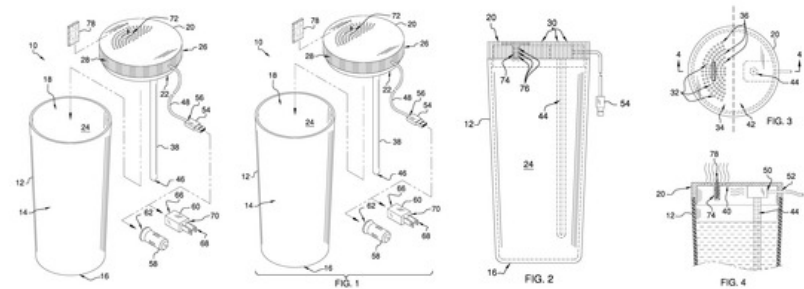
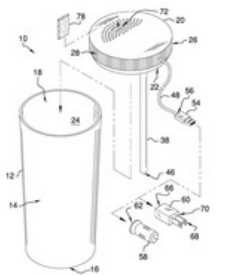
US20170167739

2015-12-09

WILLIAMS MICHAEL

2017-06-15 2017-06-15

A portable humidification device for portable humidification purposes includes a housing that comprises a wall extending upwardly from a bottom of the housing defining an open top. The device includes a lid that is both complimentary to and couplable to the open top. A plurality of holes is positioned through the lid. A vaporizer is coupled to a lower surface of the lid. The open top is configured to add water to the housing, wherein the lid is positionable into the open top. The vaporizer is positioned to vaporize the water, wherein the water vapor is emitted from the housing through the plurality of holes.



25. Lighting assembly for aquariums, terrariums, display cases and the like

ITUB20154225

2015-10-08

BRAMA*

2017-04-08 2017-04-08

A lighting assembly (1) for aquariums (A), terrariums, display cases and the like that comprises a supporting plate (2) for accommodating at least one light source (3) which is electrically connected to a respective control and management unit (4).The assembly (1) comprises at least one supporting plate (2) provided with at least one channel system (5) for conveying a liquid that arrives from a hydraulic circuit (6) controlled by a pump (7) and by a heat exchanger (8). The circulation of the liquid in the channel system (5) produces the removal of heat from the supporting plate (2) by the liquid, which is subsequently cooled in the heat exchanger (8).

