

# Technology Transfer

**Area of Technology:** Mechanical/Chemical Engineering

**Title of the Innovation:** DISTILLATION BASED WATER PURIFICATION SYSTEM

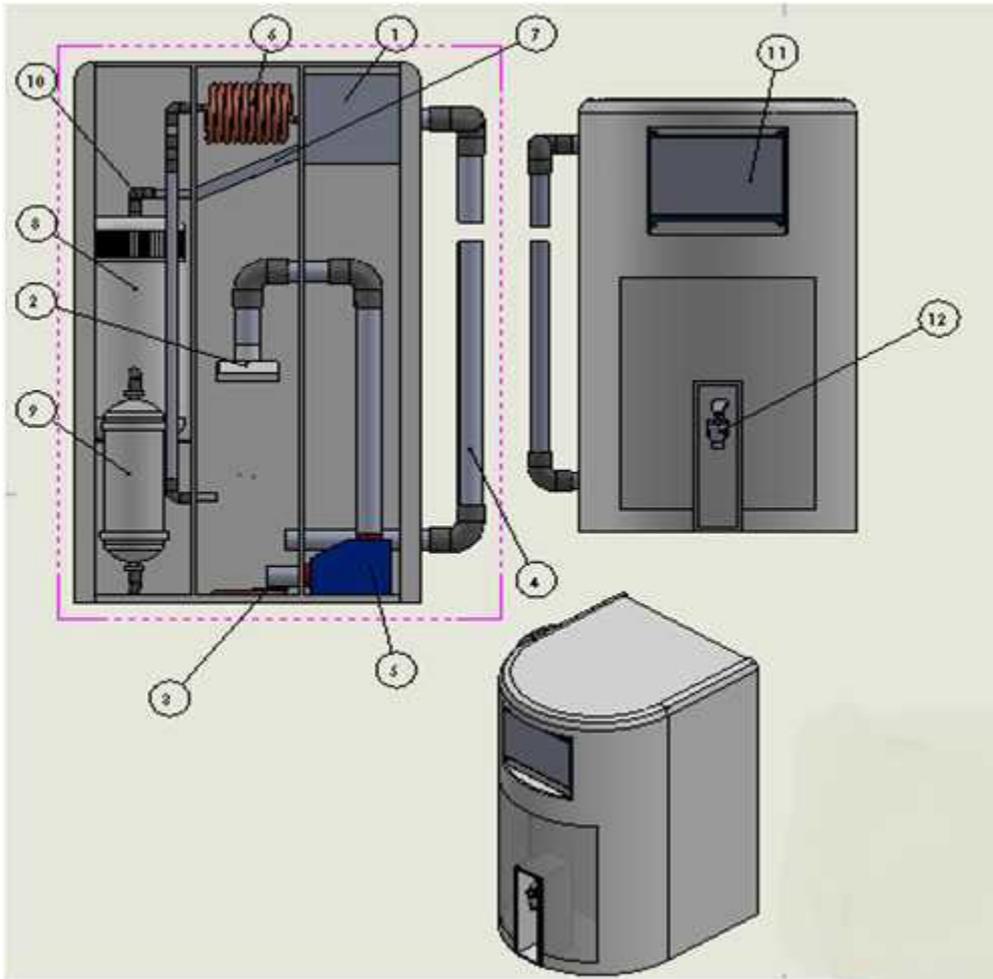
**Patent Grant Number:** 353518

## **Brief About Innovation**

In the present scenario, the problem of water is increasing day by day in India. According to Recent survey 21 cities in India will go out of groundwater by 2020. Various practices have become commonplace in searching for drinking water, including boiling the water prior to drinking, and dissolving iodine tablets into the water. Boiling water requires time and equipment, neither of which may be available when the water is required. In addition, the water tastes flat as a result of the boiling. The iodine tablets produce an undesirable taste and have traditionally been unpopular for that reason. The present invention provides pure drinking water 10 by using a process that does not waste water unlike current purification system present in the market. The available systems in the markets uses 75% of water to make 25% pure water rather fails in working efficiently at high TDS values but present system provides 90% pure water allowing only 10% (conditional) loss and would work efficiently even at high TDS values.

## **Salient Features:**

- The prime objective of the present invention is to provide a distillation based water purification system.
- Another objective of the present invention is to provide a distillation based water purification system that works on phase change of water.
- Another objective of the present invention is to provide 5 a distillation based water purification system that works efficiently at high Total Dissolved Solids (TDS) values.
- Yet another objective of the present invention is to provide a distillation based 10 water purification system that comprises of water storage tank, shower, spiral coil, pipe, water pump, condensing coil, collecting tray, ultrafiltration candles, mineral cartridge, connectors, control & monitor system and a tap.
- These and other objects of the present invention will be apparent from the drawings and descriptions herein. Every object of the invention is attained by at least one embodiment of the present invention.



**Fig.** Distillation based water purification system