

Claims:

We claim

- 1) That flower plate design heat exchanger with a unique design of PHE which has maximum heat recovery.
- 2) Flower plate Heat Exchanger which is perforated is a conventional apparatus which enables greater surface area for condensation and also maximizes air flow inside and outside the Heat Exchanger (HE).
- 3) The apparatus as above which is a Flower plate HE is power saving application and environmentally safe.
- 4) The apparatus as above with the piping design in flower plate HE giving constant due point.

Dated this 7th day of September 2013


ANIT ASTHANA

21 OCT 2013

Field of Invention:

Plate Heat Exchangers are conventionally used for better transfer of heat from one object to another such Heat Exchangers have a variety of uses. The plate exchangers which is proposed to be patented is a unique design because of the larger surface area and perforation and the pipe flow design to get the optimum results in water generation.

Background to the Invention:

The currently available heat exchangers are used for a number of purposes. The present invention is an improvement over them in that the plates used are perforated and arranged in petal formation giving greater surface for better yield and provided with a unique pipe flow design for optimum results.

Summary of the Invention:

The Invention consists of perforated metal plate heat exchanger with the plates arranges in petal formation and having a unique flow pipe design.

Detailed Description of the Invention:

This invention is perforated plate heat exchanger working on refrigerated gas.

According to the invention, refrigerated gas will be pumped into the multiple flow lines of the PHE..Similarly the atmospheric air is is sucked in through the blower and the perforated top cover and blown / delivered on the surface of the perforated plate of the HE. The atmospheric air blown on the surface plate gets condensed because o f the changes in temperature in the plates. This condensation forms water drops and are collected in the lower compartment and the water tank which is a pure and potable water

2 1 OCT 2013

Brief Description of the Drawings:

Fig 1 is a view of the Atmospheric Water generator apparatus.

Fig 2 is the perforated plate heat exchanger

Description of the Embodiment of the invention:

Fig 1 is a view of Atmospheric water generator apparatus comprising of different parts as indicated in Fig 2 to 11.

Figure 2 shows the metal plates which are arranged in a petal formation.

The cycle is repeated during continuous operation of the apparatus

Abstract :

The Invention relates to a perforated plate heat exchanger with designs for better heat transfer. The design of the PHE provide for a greater surface area through which heat can be drawn. The design of the PHE ensure smooth flow of gas /Liquid thereby resulting in maximum efficiency in transferring heat from one medium to other . The PHE is fixed in the Atmospheric water generator to extract water from atmosphere.

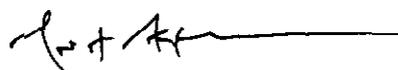
2 1 OCT 2019

Claims:

We claim

- 1) That flower plate design heat exchanger with a unique design of PHE which has maximum heat recovery.
- 2) Flower plate Heat Exchanger which is perforated is a conventional apparatus which enables greater surface area for condensation and also maximizes air flow inside and outside the Heat Exchanger (HE).
- 3) The apparatus as above which is a Flower plate HE is power saving application and environmentally safe.
- 4) The apparatus as above with the piping design in flower plate HE giving constant dew point.

Dated this 7th day of September 2013


ANIT ASTHANA

21 OCT 2013