

SYSTEM AND METHOD FOR HYDRATE BASED DESALINATION

Brief of the technology

The technology presents the system & method for desalination or treatment of saline/ polluted water for salt formation at specific temperature & pressure. The method is for the treatment of minimum to maximum salinity level in water. The system utilizes single pressurized tank to carry out different stages of the desalination processes like gas-hydrate formation, expulsion of highly concentrated saline water/polluted water from the hydrate, gas-hydrate washing & hydrate dissociation. A highly concentrated crystallized salt can be obtained from the desalination tank at a cost-effective solution.

USP

- Desalination & treatment of water
- Utilizing single tank for the different stages of the process.
- Hydrate formation & dissociation occur simultaneously in tanks.
- The system can store hydrate-former in gaseous, liquid or hydrate form.

Development status

- Prototype is yet to be developed.

Competitive Advantage

- Gas-hydrate formation from micro-bubbles.
- Desalination tanks in multiple configurations.
- Effectively maintains- controls the overall pressure & temperature.
- Cost-effective desalination system.

Intellectual Property status

- The technology holds granted patents in India and USA.

We are seeking commercialisation partners for out-licensing the technology

Contact us at: reema.fitt@gmail.com

***Innovation-Technology Transfer Office, a regional tech transfer office
established at FITT with support from NBM, BIRAC***

