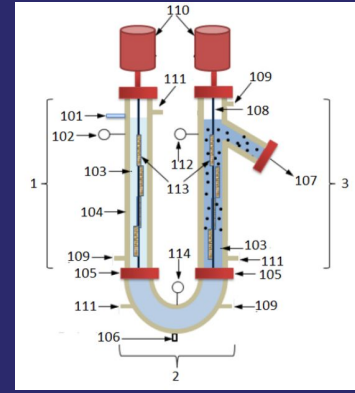


Granted IN461479

A process and an apparatus for continuous freeze crystallization



NEED

Existing freeze crystallization systems lack integration and efficiency, with limitations in heat transfer and operation under batch mode.

SOLUTION

The invention introduces a continuous freeze crystallization process and apparatus within a U-shaped tube, enhancing integration and efficiency.

INNOVATION

Development of a U-shaped tube apparatus for continuous freeze crystallization, enabling sequential cooling, chilling, and freezing of water in a single unit.

MARKET ANALYSIS

Market: Industrial processes for water treatment, desalination, and concentration of substances dissolved in water

CAGR: Estimated to be around 8-10%.

Potential Indian Clients: Industries involved in water treatment, desalination plants, food processing companies, dairy industries, and mining companies in India.

WHY INVEST?

- Freeze crystallization
- Continuous process
- Waste water treatment
- Mineral recovery

AT A GLANCE

- Current TRL NA
- Funded by NA
- IPC B01D, B01J, C02F, F25C, F26B
- Domain
Water purification and concentration



For more information, reach out to (contact person), (designation), (organization) at (email ID) and (phone number)



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