





GRANTED (IN387689)

A formulation for reduction of fluoride and total dissolved solids in water and process for reduction thereof



#### **NEED**

Safe drinking water remains a global challenge. In areas with high fluoride and dissolved solids, conventional filtration methods often fail. An alternative, effective, and affordable water purification technology is urgently needed.

# TECHNOLOGY OVERVIEW

This patent introduces an innovative formulation for purifying water by utilizing starch, ceramic powder, and clay. The process removes harmful fluorides and total dissolved solids (TDS). The formulation is easy to prepare, cost-effective, and offers an eco-friendly solution for improving water quality.

## **TECHNOLOGY KEY FEATURES**

Comprises starch (20-28 wt%), ceramic powder (24-28 wt%), and clay (32-45 wt%) for efficient water purification. Effectively removes fluoride and TDS from water, using a simple drying process.

## **MARKET ANALYSIS**

The global water treatment market is projected to grow at a CAGR of 8.6%, reaching \$76.9B by 2033 (source: Markets and Markets). This growth is driven by increasing demand for clean water and new, efficient technologies.

## **Target Industries**

1) Water treatment companies, 2) Environmental service providers, 3) Manufacturers of water purification products and technologies.

### AT A GLANCE

 SDG 6 (Clean Water and Sanitation), SDG 12 (Responsible Consumption and Production), SDG 13 (Climate Action)

#### Read more here

Technology is available for licensing/ co-development.

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