

Multistage Photocatalyst Wastewater Treatment System

Background

One of the basic issues in wastewater recycling is the presence of carcinogenic organic compounds. This poses an enormous challenge to any wastewater treatment company due to a lack of an efficient and economical way to substantially reduce contaminants present to comply with regulations. Existing solutions involve the use of Chlorination, Ozonation, Reverse Osmosis, UVC Disinfection and addition of nanoparticles; all of which are either expensive or will result in adverse health effects.

In recent years, Photocatalysis has gained rapid recognition as the effective technology for wastewater treatment. However, efficiency issues pertaining to the use of photocatalysis have yet to be addressed.

Our Technology

Our technology is a Multistage Photocatalyst Wastewater Treatment System that is capable of exhibiting highly effective degradation of persistent toxic substances (like organic compounds) in industrial wastewater, through the use of a novel photocatalyst process. This system employs a unique method which utilizes nanoparticles for photocatalyst production, thereby ensuring that it will not be washed away and eliminating the need to recover nanoparticles from the treated water.

Benefits

- ✓ Cost Savings
- ✓ Non-toxic end product
- ✓ High degradation efficiencies
- ✓ Removes need for additional chemicals

Potential Application

- Treatment of wastewaters containing organics (generated by most industries)

Intellectual Property

- Patent-Pending

Commercialisation

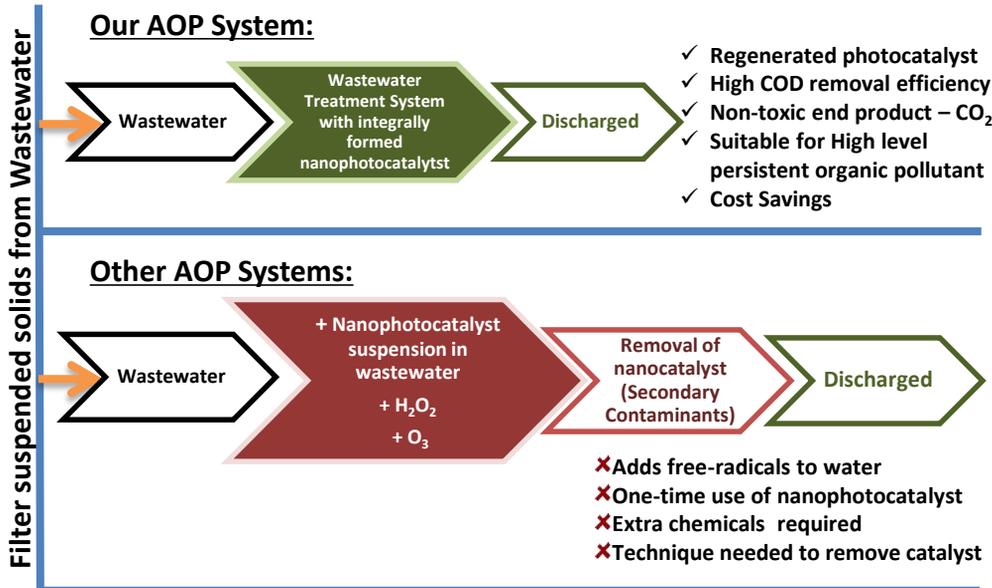
Opportunities

- ✓ Ready for commercialisation
- ✓ Available for licensing
- ✓ Accepting business plans from interested parties

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Market Trends & Opportunities

- BCC Research: Global Market for Wastewater Treatment is expected to increase from US\$57 billion in 2011 to US\$93 billion in 2016, at a CAGR of 10.4%.
- Frost & Sullivan: Trade value of the Water & Wastewater Treatment Equipment in Asia Pacific was \$24.02 billion in 2009.
- WHO: Global Turnover for the Wastewater Industry was €283 billion in 2010.

Disclaimer

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