PROTECTING MAN AND ENVIRONMENT

Technology Offer

New more efficient water treatment technology for drinking water production as well as industrial water recycling without chemical aid

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Abstract

A German company developed an aerobic cyclic decarbonation process suitable for drinking water production from sea and groundwater as well as for industrial wastewater recycling (eg. paper, sugar, textile, brewery production). The patented process is characterised by efficient decarbonation without chemicals and low operational costs. End-users are sought for commercial agreements with technical assistance. Engineering and construction companies are sought for implementation of joint projects.

Description

The German company is active in water and wastewater treatment. Their product range covers the entire biotechnological field and comprises suspended anaerobic/aerobic systems, membranes, bioreactors and fluid/solid abscission. Modular solutions are tailored to any specification.

The company developed an aerobic cyclic decarbonation process for drinking water production from sea and groundwater and for industrial wastewater recycling.

The process gives the possibility to decarbonate water and process it aerobically so that it can be re-used. Compared to conventional technologies the process works more efficiently without chemical aids. The residual material is CaCO3. CO2 settled in CaCO3 will not leak into the atmosphere (as would CO2 dissolved in water), thus also contributing to relief concerning climate-relevant gases.

An integrated exhaust air purification system and entirely enclosed water transport make sure that there is neither odour nor noise disturbance. Therefore the system can also be installed in residential areas.

The process can be combined with other methods.

Combined with an anerobic treatment technique, also newly developed by the company, it represents an independent, profitable clarification device.

Innovations and advantages of the offer

- Efficient process without chemical aid
- Recycled water can be re-used
- Reduction of CO2 emissions
- Low operational costs
- No noise or odour make possible installations near residential areas
- Expert know-how in German company
- Close co-operation with a university guarantees access to latest research results
- Nominated for the “German Future Award 2007”
- Nominated for the “German Environmental Award 2008”

Current and Potential Domain of Application

Drinking water production from sea and groundwater. Drinking water decarbonation.
Industrial water recycling, e.g. in paper industry, textile industry, food and drink industry, waste water treatment and circuit water recycling.

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