OTHER INDUSTRIAL TECHNOLOGIES,PROTECTING MAN AND ENVIRONMENT Technology Offer

# Biological Air Treatment System

(08 FR 38m9 27HE)


## Abstract

**A French company specialised in urban water treatment has developed a patented biological odour treatment system, which has been designed to treat odours coming from wastewater treatment plants. The company is looking for technical cooperations and potential commercial agreements including technical assistance.**


## Description

This patented biological odour treatment system has been designed to treat odours coming from wastewater treatment plants, which means air with high content of hydrogen sulphide or mercaptans. Although it is not designed for it, this system can treat ammoniacal odours, depending on the composition of the polluted air. As it is a biological treatment, it is not adapted where drastic changes of quality of air are observed. The air is treated in two layers of different materials: marble and pouzzolane (volcanic material). A specific biomass is developed on these materials and treats the odours.

## Innovations and advantages of the offer

The innovation consists in the use of a material (pouzzolane) that is often used in wastewater treatment but that had not been used until now for air treatment. The main advantage of that process is its low consumption:

- Almost no reagent (some nutrients can be used depending on the specific conditions but an aspersion of treated water is generally sufficient to bring nitrogen)
- Few electrical consumption (compared with chemical treatment) since there is no recirculation system.

This treatment is perfectly adapted where reduction of costs and environmental impact are required.

## Current and Potential Domain of Application

Any wastewater treatment plant where sulphur compounds are generated and no treatment can generate high level of ammonia (such as lime treatment of sludge).
Any other plant where a mostly sulphuric odour is generated and needs to be treated.


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