

Title (en)
PROCESS FOR MICROBIAL DECOMPOSITION OF HARMFUL SUBSTANCES IN MEDIA CHARGED WITH HARMFUL SUBSTANCES, AND MICRO-ORGANISMS SUITABLE FOR THIS PURPOSE

Title (de)
VERFAHREN ZUM MIKROBIELLEN ABBAU VON SCHADSTOFFEN IN SCHADSTOFFBEFRACHTETEN MEDIEN UND DAZU GEEIGNETE MIKROORGANISMEN

Title (fr)
PROCEDE DE DECOMPOSITION MICROBIENNE DE SUBSTANCES NUISIBLES CONTENUES DANS DES MILIEUX, ET MICRO-ORGANISMES APPROPRIES A CE PROCEDE

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EP 97906145 A 19970228

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Abstract (en)
[origin: WO9731682A1] The invention relates to a process for microbial decomposition of harmful substances in media charged with harmful substances during cleaning of air, sewage and soil. It also relates to a device for performing said process, micro-organisms suitable for performing said process and the use thereof. The object of the invention is to improve said process in such a manner that micro-organism cultures used to break down harmful substances are established on a long-term basis, and at the same time to achieve high rates of decomposition. To attain said object, the invention proposes a process in which there is continuous decomposition fermentation in a decomposition fermenter using micro-organisms, available in the medium charged with harmful substances, and/ or a micro-organism culture added to the medium. During decomposition fermentation the concentration of harmful substances in the decomposition fermenter is controlled to make it toxin-static or toxin-dynamic using a control circuit, as a function of the vitality of the biomass. To decompose formaldehyde, the invention proposes the use of particular micro-organisms which decompose formaldehyde. To decompose phenols, the invention proposes the use of particular micro-organisms which decompose phenol.

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