

ABSTRACT**METHOD FOR DECONTAMINATING A GASEOUS MEDIUM CONTAMINATED WITH
CONTAMINATING SPECIES IN SUSPENSION**

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The invention relates to a method for decontaminating a volume of a gaseous medium contaminated with contaminating species in suspension, said volume of gaseous medium being in contact with at least one surface of a solid substrate, said method comprising the following successive steps: a) the interior of the volume of gaseous medium is sprayed with fine droplets of an inorganic gel, thereby forming a mist, said gel consisting of a colloidal solution, comprising an inorganic viscosity-enhancing agent, and a solvent; b) the contaminating species in suspension are captured by the droplets of the inorganic gel; c) the droplets of the inorganic gel containing the captured contaminating species in suspension are deposited on the surface of the solid substrate; d) the gel is maintained on the surface of the solid substrate at least for a sufficient amount of time for the gel to dry and form a dry solid residue containing the captured contaminating species in suspension; e) the dry solid residue containing the captured contaminating species is recovered.

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Fig 1

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