

Title (en)

Process and device for purification of noxious exhaust gases by chemical conversion

Title (de)

Verfahren und Einrichtung zur Reinigung von schadstoffhaltigen Abgasen durch chemische Umsetzung

Title (fr)

Procédé et dispositif pour la purification des effluents gazeux nocifs par conversion chimique

Publication

EP 0735320 B1 20001011 (DE)

Application

EP 96102121 A 19960214

Priority

DE 19511643 A 19950330

Abstract (en)

[origin: EP0735320A2] The method cleans waste gases with toxic substances esp. from CVD and plasma processes. The cleaning is carried out in a combustion chamber with a burner to generate a combustion gas flame. the flame serves to heat and/or chemically convert the toxic substance. The surfaces of the chamber and/or surfaces brought into the chamber are covered with a porous layer of silicon. The waste gas with the toxic substance is heated in the chamber and is guided along the surfaces in question. The porous silicon dioxide layer is cut away by thermal oxidation of silane or another silicon gas following purification phases in the chamber. The secondary, fluid toxic substance e.g. silicon fluoride, formed from the chemical reaction of the fluoride toxic substance with the hot silicon dioxide is hydrolysed using absorption and may also be neutralised.

IPC 1-7

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IPC 8 full level

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CPC (source: EP)

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