

Title (en)

ENERGY-SAVING PROCESS FOR THE SORPTION OF ORGANIC COMPOUNDS FROM GASES

Title (de)

ENERGIESPARENDEN VERFAHREN ZUR SORPTION VON ORGANISCHEN VERBINDUNGEN AUS GASEN

Title (fr)

PROCEDE SOBRE EN ENERGIE DE SORPTION DE COMPOSES ORGANIQUES PROVENANT DE GAZ

Publication

**EP 0730488 A1 19960911 (DE)**

Application

**EP 95900738 A 19941115**

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Abstract (en)

[origin: US5759236A] PCT No. PCT/EP94/03780 Sec. 371 Date May 17, 1996 Sec. 102(e) Date May 17, 1996 PCT Filed Nov. 15, 1994 PCT Pub. No. WO95/14523 PCT Pub. Date Jun. 1, 1995A process for separating organic compounds, such as solvents, from gases, e.g. waste gases of paint shops. The gases to be treated are conducted in an adsorber over a sorbent which is composed of particulate activated carbon in an oxidic carrier. The charged sorbent is regenerated by passing therethrough, preferably according to the countercurrent principle, a heated regeneration gas, the regeneration gas charged with desorbate is cooled so that organic compounds condense and can then be separated, whereupon the regeneration gas is reheated and reused for the desorption of the charged sorbent. Heating of the regeneration gas as well as cooling of the regeneration gas charged with desorbate are, at least partially, effected by a heat pump. It will be expedient to provide at least two adsorbers which are charged and regenerated alternately. An apparatus for carrying out the process is additionally described.

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