

## Title (en)

METHOD FOR COATING A SURFACE FILTER WITH FINELY DIVIDED SOLIDS, FILTER SO OBTAINED AND ITS USE

## Title (de)

VERFAHREN ZUM BESCHICHTEN EINES WANDFLUSSFILTERS MIT FEINTEILIGEN FESTSTOFFEN UND DAMIT ERHALTENES FILTER UND SEINE VERWENDUNG

## Title (fr)

PROCEDE DE REVETEMENT D'UN FILTRE A ECOULEMENT PAR PAROI AYANT DES MATIERES SOLIDES FINES, FILTRE AINSI OBTENU ET SON UTILISATION

## Publication

**EP 1789191 A1 20070530 (DE)**

## Application

**EP 05776563 A 20050813**

## Priority

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## Abstract (en)

[origin: WO2006021336A1] Coating of a surface filter with a catalytically active coating generally increases the exhaust gas backpressure of the filter. The increase in exhaust gas backpressure is substantially marked when a suspension of finely divided catalyst materials is used for coating. The increase in exhaust gas backpressure can be limited to a tolerable degree when the suspension is so finely ground before coating that almost the entire mass of the catalyst materials is introduced into the pores of the filter and deposited on the inner surfaces of the pores, which is the case when the  $d_{<90>}$  diameter of the particles in the suspension is reduced to a value below 5  $\mu\text{m}$  by grinding.

## IPC 8 full level

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## Citation (search report)

See references of WO 2006021336A1

## Citation (examination)

- WO 2005084806 A1 20050915 - JOHNSON MATTHEY PLC [GB], et al
- WO 2006021337 A1 20060302 - UMICORE AG & CO KG [DE], et al
- WO 2006021339 A1 20060302 - UMICORE AG & CO KG [DE], et al
- WO 2006021338 A1 20060302 - UMICORE AG & CO KG [DE], et al
- WO 2006042699 A1 20060427 - UMICORE AG & CO KG [DE], et al
- SRINIVAS S ET AL: "A scalable silicon microreactor for preferential CO oxidation: performance comparison with a tubular packed-bed microreactor", APPLIED CATALYSIS A: GENERAL, ELSEVIER SCIENCE, AMSTERDAM, NL, vol. 274, no. 1-2, 28 October 2004 (2004-10-28), pages 285 - 293, XP004558626, ISSN: 0926-860X, DOI: 10.1016/J.APCATA.2004.07.012

## Cited by

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## DOCDB simple family (application)

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