

Title (en)  
AIR EXTRACTION FAN WITH VARIABLE FLOW CROSS-SECTION IN CASE OF FIRE

Title (de)  
ENTLÜFTER MIT DURCHLASS, DER IM BRANDFALL VARIERT WERDEN KANN

Title (fr)  
VENTILATEUR D'EXTRACTION D'AIR À SECTION DE PASSAGE VARIABLE EN CAS D'INCENDIE

Publication  
**EP 3239620 A1 20171101 (FR)**

Application  
**EP 17168460 A 20170427**

Priority  
FR 1653786 A 20160428

Abstract (en)  
[origin: RU2734377C2] FIELD: ventilation and air conditioning.SUBSTANCE: present invention relates to an exhaust fan intended for air exchange in a building, in particular for habitation or non-production building. Exhaust air fan to be arranged on the building at the outlet of the ventilation circuit, having a normal air outlet to the outside, at that, comprises deformable part closing passage outside and made with possibility of temperature deformation during fire under action of hot gases flow in fan, so as to form an outlet passage additional to the normal exhaust passage with increase in the total passage cross-section to the outside.EFFECT: advantage consists in the fact that in case of fire in a building passage of air or flue gases with a higher temperature in said fan is accompanied by heating of the deformable part, which, by deforming, automatically increases the flow section for exhaust of flue gases to the outside and reduces the flow pressure loss, which improves the flow rate; it is possible, in particular, to compensate for pressure loss, caused by the exhaust turbine shutdown, in case the plant contains the latter; wherein natural release of hot gases in room outside is facilitated.9 cl, 6 dwg

Abstract (fr)  
Ventilateur d'extraction d'air prévu pour être disposé sur un bâtiment en sortie d'un circuit de ventilation, présentant un passage normal pour la sortie de l'air vers l'extérieur, ce ventilateur étant caractérisé en ce qu'il comporte une partie déformable (30) fermant un passage vers l'extérieur, qui se déforme en température sous l'effet d'un débit de gaz chauds dans le ventilateur lors d'un incendie, de manière à former un passage additionnel de sortie s'ajoutant au passage normal de sortie pour augmenter la section totale de passage vers l'extérieur.

IPC 8 full level  
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**F04D 27/002** (2013.01 - EP); **F24F 7/02** (2013.01 - RU); **F24F 7/025** (2013.01 - EP); **F24F 11/00** (2013.01 - RU); **F24F 11/30** (2017.12 - EP);  
**F24F 11/34** (2017.12 - EP)

Citation (search report)  
• [XI] FR 3021099 A1 20151120 - SOLER & PALAU RES SL [ES]  
• [XI] EP 0055665 A1 19820707 - JEUMONT SCHNEIDER [FR]  
• [A] US 2014199938 A1 20140717 - BADENHORST SEAN MICHAEL JOHL [AU], et al  
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Cited by  
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Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
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DOCDB simple family (publication)  
**EP 3239620 A1 20171101; EP 3239620 B1 20200902; FR 3050808 A1 20171103; FR 3050808 B1 20180601; HU E051621 T2 20210301;**  
RU 2017115058 A 20181029; RU 2017115058 A3 20200605; RU 2734377 C2 20201015

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