Title (en)

METHOD FOR VENTILATING A BUILDING AND/OR EXTRACTING SMOKE FROM A BUILDING, AND FAN ATTACHMENT FOR OPTIMISING THE MIXTURE VENTILATION

Title (de)

VÉRFAHREN ZUM BELÜFTEN UND/ODER ENTRAUCHEN EINES GEBÄUDES UND LÜFTERAUFSATZ ZUR OPTIMIERUNG DER MISCHUNGSVENTILATION

Title (fr

PROCÉDÉ POUR LA VENTILATION ET/OU LE DÉSENFUMAGE D'UN BÂTIMENT ET EMBOUT DE VENTILATEUR POUR L'OPTIMISATION DE LA VENTILATION PAR MÉLANGE

Publication

EP 3803222 A1 20210414 (DE)

Application

EP 19731895 A 20190611

Priority

- DE 102018004605 A 20180611
- DE 102018004606 A 20180611
- EP 2019065114 W 20190611

Abstract (en

[origin: WO2019238624A1] The present invention relates to a method for ventilating a building and/or extracting smoke from a building using at least one supply air opening (1) and at least one exhaust air opening (2), wherein a free ventilation channel (3) is located between the supply air opening and the exhaust air opening so that an air flow can be formed between the supply air opening and the exhaust air opening. The invention is characterised in that: at least one first fan (L1), which is positioned inside the building at a distance a of at most 4 metres from the supply air opening and the fan jet of which forms an angle α of between 30° and 60° with respect to the base surface of the building, conveys fresh air entering from the outside through the supply air opening under the roof structure; at least one second fan (L2), which is positioned inside the building at a distance b of 2 to 6 metres from the exhaust air opening and the fan jet of which forms an angle β of not more than 30° with respect to the base surface of the building, conveys air and/or smoke out of the building through the exhaust air opening to the outside; and at least one third fan (L3), which is positioned inside the building between the first fan (L1) and the second fan (L2) at a distance c of 2 to 6 metres from the second fan (L2) and the fan jet of which forms an angle γ of not more than 30° with respect to the base surface of the building, conveys air and/or smoke from the building to the second fan. The present invention also relates to an attachment for a fan comprising a circular cylindrical slip-on body (4) having a diameter d and a width e, and comprising a circular conical air body (5) connected to the slip-on body and having a diameter f and a surface line g, wherein the air body (5) is closed on the side facing away from the slip-on body (4) by a circular outlet surface having a diameter f, and wherein the outlet surface has a plurality of circular openings having a diameter h.

IPC 8 full level

F04D 19/00 (2006.01); F04D 29/52 (2006.01); F24F 7/06 (2006.01); F24F 11/33 (2018.01)

CPC (source: EP

F04D 19/002 (2013.01); F04D 29/522 (2013.01); F04D 29/547 (2013.01); F24F 7/06 (2013.01); F24F 11/33 (2017.12); F05D 2250/52 (2013.01)

Citation (search report)

See references of WO 2019238624A1

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)

BA ME

DOCDB simple family (publication)

WO 2019238624 A1 20191219; EP 3803222 A1 20210414

DOCDB simple family (application)

EP 2019065114 W 20190611; EP 19731895 A 20190611