

Title (en)

Module, device and method for providing a fluid curtain

Title (de)

Modul, Vorrichtung und Verfahren zur Bereitstellung eines Flüssigkeitsvorhangs

Title (fr)

Module, dispositif et procédé pour fournir un rideau de fluide

Publication

EP 2668875 B1 20180418 (EN)

Application

EP 13169365 A 20130527

Priority

FI 20125567 A 20120528

Abstract (en)

[origin: EP2668875A1] A module (100) with a flow channel (102) for providing a fluid curtain (101), such as an air curtain, between different environments, comprises an inlet (103) for introducing a fluid flow through said flow channel (102) of the module and an outlet (104) for introducing said fluid curtain. In addition the module comprises a honeycomb structure (105) with plurality of parallel conduits (106) before the outlet (104) in order to laminarize the flow for the fluid curtain, and guiding the flow and suppressing instabilities in the flow downstream of it. Furthermore the module comprises a mechanical structure (105, 107) before the outlet (104). The mechanical structure is configured to change the velocity profile of the flow before (107) the honeycomb structure or during (105) the honeycomb structure so that the velocity profile of the flow after the honeycomb structure (105) or outlet (104) is a smooth skewed parabolic velocity profile with a peak (108) shifted from the centre line (109) of the symmetrical parabolic velocity profile.

IPC 8 full level

A47F 3/04 (2006.01); **F24F 9/00** (2006.01)

CPC (source: EP FI US)

A47F 3/0447 (2013.01 - EP FI US); **F24F 9/00** (2013.01 - FI US)

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DOCDB simple family (publication)

EP 2668875 A1 20131204; **EP 2668875 B1 20180418**; **EP 2668875 B8 20180606**; DK 2668875 T3 20180723; FI 125239 B 20150731; FI 20125567 A 20131129; LT 2668875 T 20180725; PL 2668875 T3 20180928; RU 2013125360 A 20141210; TR 201809561 T4 20180723; US 2013316635 A1 20131128

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