

Title (en)
Modular ventilation system

Title (de)
Modulares Lüftungssystem

Title (fr)
Système modulaire de ventilation

Publication
EP 2840325 A1 20150225 (EN)

Application
EP 14460050 A 20140818

Priority
PL 40512013 A 20130823

Abstract (en)

The invention relates to a modular ventilation system designed for mechanical ventilation of single-family houses, office buildings, public buildings, commercial buildings, industrial buildings, hospitals and the like, and to modules that enable assembling any supply and exhaust ventilation system with heat recovery. In the system according to the invention the runs of flexible ventilation ducts consisting of sections of flexible tubes (R) include basic modules (1) which constitute plenum boxes, and segment modules (1.1) connected to the basic modules (1), wherein the assembly of the basic module (1) with at least one segment module (1-1) forms a multichannel module constituting an air manifold. Modules (1) and (1.1) are in the form of rectangular boxes the shorter side walls of which are provided with openings (2) for supply and exhaust connector pipes (3), whereas on the longer sides of the boxes (1) and (1.1) , near their upper and lower edges, bolts (4) are located near one of the edges. Gaps (5) for receiving the bolts of adjacent module and/or of capping cover (6) are located near the opposite edges. Openings (2) for receiving connector pipes (3) in both the shorter side walls of the boxes (1) and (1.1) , as well as in the capping covers (6) are dephased to enable bayonet mounting of the connector pipes (3) in the openings (2) by rotating them by half a turn. Each of the openings (2) may also be blanked with a cap (7) mounted in the same manner as the connector pipe (3) by rotating it by half a turn. One of the wider walls of the basic module (1) is provided with a dephased opening (8) for connecting thereto a supply connector pipe (9) of larger diameter. Optionally, air guide vanes (k) are installed inside modules (1) and (1.1) , said guide vanes having the form of a flexible rectangular membrane.

IPC 8 full level
F24F 7/06 (2006.01); **F24F 13/02** (2006.01)

CPC (source: EP US)
F24F 7/06 (2013.01 - EP); **F24F 13/0209** (2013.01 - EP US); **F24F 13/0236** (2013.01 - EP); **F24F 13/0245** (2013.01 - EP);
F24F 13/0272 (2013.01 - EP); **F24F 2007/002** (2013.01 - EP US)

Citation (applicant)

- PL 382250 A1 20081027 - POLITECHNIKA BIALOSTOCKA [PL]
- PL 389227 A1 20110411 - AWENTA E W A CHOMKA SPÓŁKA JAWNA [PL]
- PL 174218 B1 19980630 - BETONBAU GMBH [DE]

Citation (search report)

- [Y] US 2006199595 A1 20060907 - HALONEN HARRI [FI]
- [Y] US 6231704 B1 20010515 - CARPINETTI DAVID J [US]
- [Y] US 5957506 A 19990928 - STEPP MICHAEL D [US]
- [Y] EP 1959208 A2 20080820 - MAICO ELEKTROAPP FABRIK GMBH [DE]
- [Y] DE 102007009766 A1 20080828 - SCHULTZ GMBH AURORA [DE]
- [Y] US 5201550 A 19930413 - BURKIT JOHN W [US]
- [Y] DE 102010056448 B3 20120112 - MCAVEN OSCAR [DE]
- [Y] EP 1701084 A1 20060913 - ALDES AERAULIQUE [FR]

Cited by

IT201800009400A1; FR3126150A1; ES2663218A1; NL2014563A; CN110697016A; EP3503051A1; FR3129461A1; EP3995748A1; CN108679768A; EP3995749A1; WO2023016805A1

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)

EP 2840325 A1 20150225; PL 224106 B1 20161130; PL 405120 A1 20150302

DOCDB simple family (application)

EP 14460050 A 20140818; PL 40512013 A 20130823