

Title (en)
A METHOD AND AN APPARATUS FOR CREATING AN OUTDOOR STILL-AIR ENVIRONMENT, OR AN ENVIRONMENT WITH CONTROLLED WIND

Title (de)
VERFAHREN UND VORRICHTUNG ZUR ERZEUGUNG EINER WINDSTILLEN AUSSENUMGEBUNG ODER UMGEBUNG MIT KONTROLLIERTEM WIND

Title (fr)
PROCÉDÉ ET APPAREIL POUR CRÉER UN ENVIRONNEMENT D'AIR IMMOBILE EXTÉRIEUR, OU UN ENVIRONNEMENT AVEC VENT CONTRÔLÉ

Publication
EP 2788690 A1 20141015 (EN)

Application
EP 12815807 A 20121206

Priority
• IT PI20110138 A 20111206
• IB 2012057046 W 20121206

Abstract (en)
[origin: WO2013084192A1] A method for creating a downwind space (10) in a predetermined location with respect to the direction (11') of the wind (11), comprising a step of arranging a generation means (12), for generating an air curtain, in particular at least two air curtains (13', 13''), a step of detecting the direction (11') of the wind (11), as well as a step of orienting the air curtain(s) (13, 13'') against the wind (11), according to an emission angle (a) set between 40° and 90°, defined between the direction (11') of the wind (11) and the emission direction (14, 14'') of the air curtains (13', 13''). An apparatus for carrying out the method comprises, in addition to the air curtain generation means (12), a means for executing (41, 42) the above described steps of detection of direction and of orienting the air curtains. The wind (11) interacts with the air curtains (13', 13'') creating a resulting air flow (15', 15'') that shields from the wind a portion of space (10) behind the air curtain generation means (12) with respect to the direction (11'') of the wind (11), and the part that is shielded can be changed by changing the orientation of the air curtain generation means (12) that form the downwind space (10). In an exemplary embodiment, an auxiliary generation means (29) is provided for expanding the zone that is shielded from the resulting air flow (15', 15'') and, accordingly, the downwind space (10). In another exemplary embodiment, for closed spaces, a step/means is provided for creating an artificial wind in a room, in order to create in this room an upwind space where air is continuously changed and a downwind space.

IPC 8 full level
F24F 9/00 (2006.01); **F24F 11/02** (2006.01)

CPC (source: EP US)
F24F 9/00 (2013.01 - EP US); **F24F 11/89** (2017.12 - EP US); **B60J 9/04** (2013.01 - US); **F24F 2009/007** (2013.01 - EP US)

Citation (search report)
See references of WO 2013084192A1

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

DOCDB simple family (publication)
WO 2013084192 A1 20130613; CN 104040267 A 20140910; EP 2788690 A1 20141015; IT PI20110138 A1 20130607; US 2014342649 A1 20141120

DOCDB simple family (application)
IB 2012057046 W 20121206; CN 201280066496 A 20121206; EP 12815807 A 20121206; IT PI20110138 A 20111206; US 201214362295 A 20121206