DESCRIPTION

AIRFLOW ENVIRONMENT SYSTEM

TECHNICAL FIELD

[0001] The present disclosure relates to an airflow environment system that forms an airflow in an environmental space.

BACKGROUND ART

[0002] As an example of a conventional airflow environment system, a chair with an air purifier and an air curtain has been known (see, for example, PTL 1). A chair with an air purifier and an air curtain includes a chair having a backrest that can be seated, blow-out ports provided on each of an upper part and a rear surface of the backrest of the chair, a suctioning port provided in a lower part of the chair, and a filter, a damper, and a blower that are provided inside the chair. The chair with the air purifier and the air curtain purifies the air suctioned through the suctioning port, and discharge the air to an open space through the blow-out ports provided to the upper part and the rear surface of the backrest. The air discharged from the blow-out ports in the upper part forms an air curtain passing through the space above the chair and in front of the chair and returning to the suctioning port provided to the lower part. Furthermore, by adjusting the amount of air discharged from the blow-out port provided to the rear side of the backrest of the chair to the outside, a negative pressure is formed in a local space surrounded by the chair and the air curtain, and the air (e.g., cigarette smoke) in the local space is suppressed from flowing outside.

Citation List

Patent Literature

[0003] PTL 1: Unexamined Japanese Patent Publication No. H2-045013

SUMMARY

[0004] However, in such a conventional airflow environment system, there is a concern that, when the airflow forming the air curtain is affected by some external environmental factor (disturbance), the airflow may be disturbed and the air in the local space surrounded by the chair and the air curtain may flow outside.

[0005] An example of the present disclosure is to provide an airflow environment system

capable of improving the stability of an airflow in a local space, and of suppressing the air in the local space from flowing outside.

[0006] An airflow environment system according to an aspect of the present disclosure is an airflow environment system that generates an airflow in a specific space including a pair of seats that are provided facing each other, the specific space having an open surface that opens to an external space, on a lateral side of the pair of seats. An airflow environment system includes: a plurality of suction ports provided to the pair of seats and configured to suction air in the specific space; a plurality of purifiers provided to the pair of seats and configured to purify air suctioned through the plurality of suction ports; a plurality of discharge ports provided to the pair of seats and configured to discharge a part of the air purified by the plurality of purifiers to the external space; a plurality of release ports provided in the pair of seats and configured to release remaining part of the air purified by the plurality of purifiers to the specific space, as a plurality of airflows, each flowing in a specific direction along a backrest side of corresponding one of the pair of seats; and a reflector disposed facing the plurality of release ports in the specific direction, and to which each of the plurality of airflows flowing in the specific direction hits. The reflector is configured to cause the each of the plurality of airflows released from the plurality of discharge ports and having hit the reflector to collide with each other, to traverse between the pair of seats, and to return to a floor side of the pair of seats.

[0007] According to the present disclosure, it is possible to provide an airflow environment system capable of improving the stability of an airflow in a local space, and of suppressing the air in the local space from flowing outside.

BRIEF DESCRIPTION OF THE DRAWINGS

[0008] Fig. 1 is an external perspective view of an airflow environment system according to a first exemplary embodiment of the present disclosure.

Fig. 2 is an external perspective view illustrating airflows formed by the airflow environment system.

Fig. 3 is a front view illustrating the airflows formed by the airflow environment system.

Fig. 4 is a block diagram illustrating a configuration of a blower system in the airflow environment system.

Fig. 5 is a front view illustrating an airflow formed by the airflow environment