

(12) **UK Patent Application** (19) **GB** (11) **2615459** (13) **A**

(43) Date of Reproduction by UK Office **09.08.2023**

(21) Application No: **2306291.2**
 (22) Date of Filing: **18.10.2021**
 Date Lodged: **28.04.2023**

(30) Priority Data:
 (31) **63092902** (32) **16.10.2020** (33) **US**
 (31) **17501097** (32) **14.10.2021** (33) **US**

(86) International Application Data:
PCT/US2021/055407 En 18.10.2021

(87) International Publication Data:
WO2022/082099 En 21.04.2022

(51) INT CL:
B64D 13/06 (2006.01) **A61L 2/08** (2006.01)
A61L 2/10 (2006.01) **B01D 46/00** (2022.01)
B01D 50/00 (2022.01) **B60H 1/24** (2006.01)
B61D 27/00 (2006.01)

(56) Documents Cited:
US 4804392 A **US 20170028820 A1**
US 20090311951 A1 **US 20080099606 A1**
US 20040261324 A1

(58) Field of Search:
 INT CL **A61L, B01D, B60H, B61D, B64D**
 Other: **Minesoft PatBase, Google Patents, Google.**

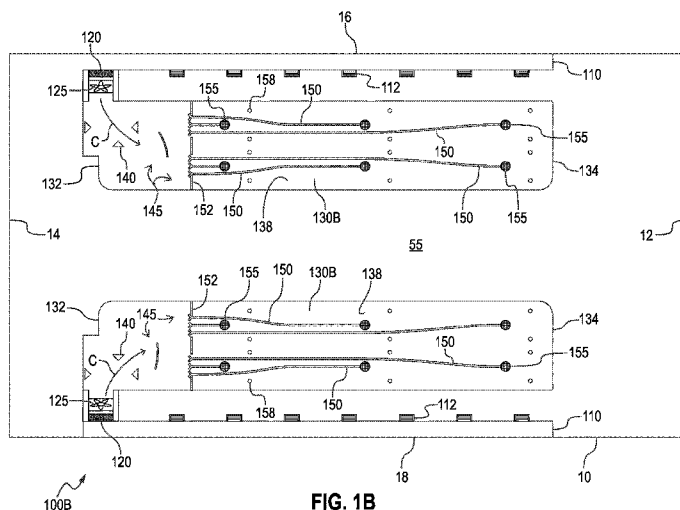
(71) Applicant(s):
Adam R Skelton
2211 Joseph Court, Murfreesboro 37128, Tennessee,
United States of America

(72) Inventor(s):
Adam R Skelton

(74) Agent and/or Address for Service:
Hindles Limited
Clarence House, 131-135 George Street,
Edinburgh EH2 4JS, Lothian, United Kingdom

(54) Title of the Invention: **Air purification system for passenger transport cabin**
 Abstract Title: **Air purification system for passenger transport cabin**

(57) An air purification system for a passenger cabin of a transport vessel. The air purification system comprises an elongated air compartment having a panel, with a plurality of openings along the panel. Air filters reside within the various openings to receive air from inside the cabin. The system also includes a plurality of air tubes. Air moves through the air tubes, aided by a source of compressed air to motive flow valves. The motive flow valves create suction to draw air into the air compartment from the passenger cabin. The system also includes at least one UV-C light source. The UV-C light resides within the air compartment, and disinfects the air moving through the air compartment. A plurality of air outlets are also placed along the lower panel, with each outlet configured to release air at selected points to provide a continuous distribution of filtered and disinfected air into the passenger cabin.



GB 2615459 A