

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
17 October 2024 (17.10.2024)



(10) International Publication Number
WO 2024/215193 A1

- (51) International Patent Classification:
B64F 1/36 (2024.01) *B64F 1/32* (2006.01)
- (21) International Application Number:
PCT/NL2024/050180
- (22) International Filing Date:
08 April 2024 (08.04.2024)
- (25) Filing Language: Dutch
- (26) Publication Language: English
- (30) Priority Data:
2034546 12 April 2023 (12.04.2023) NL
- (71) Applicant: **VANDERLANDE INDUSTRIES B.V.**
[NL/NL]; Vanderlandelaan 2, 5466 RB VEGHEL (NL).
- (72) Inventors: **HOEFKENS, Peter Eliza**; Vanderlandelaan 2, 5466 RB VEGHEL (NL). **VAN LOON, Pim Mathieu Theodorus**; Vanderlandelaan 2, 5466 RB VEGHEL (NL).
- (74) Agent: **ALGEMEEN OCTROOI- EN MERKENBUREAU B.V.**; P.O. Box 645, 5600 AP EINDHOVEN (NL).
- (81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CV, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, MG, MK, MN, MU, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH,

(54) Title: METHOD AND TRANSFER STATION FOR AUTOMATED LOADING OF A HOLDER WITH PIECES OF BAGGAGE POSITIONED ONE NEXT TO AND ONE ABOVE THE OTHER

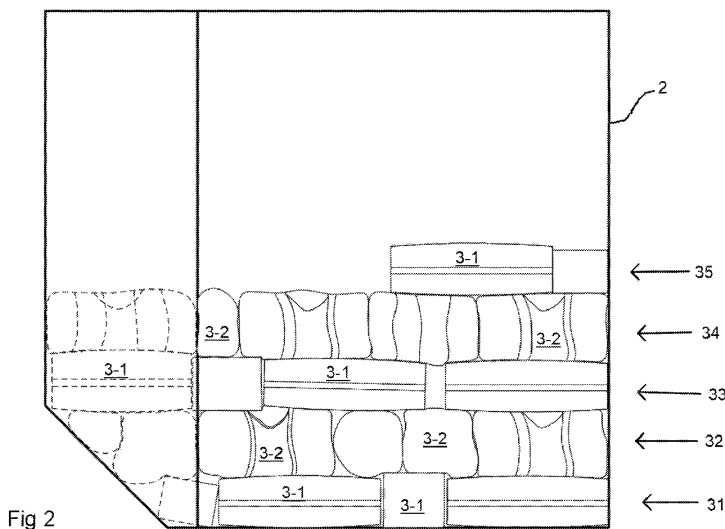


Fig 2

(57) Abstract: A method for automated loading of a holder with pieces of baggage positioned one next to and one above the other, comprising the steps of -placing pieces of baggage to be loaded in a first group of pieces of baggage with a surrounding wall that, at least to a large extent, is composed of relatively hard material, or in a second group of pieces of baggage with a surrounding wall that, at least to a large extent, is composed of relatively soft material, -supplying pieces of baggage to be loaded to the at least one transfer position belonging to a transfer station, and -with the aid of at least one manipulator belonging to the transfer station, moving pieces of baggage to be loaded from a transfer position of the at least one transfer position to a holder. In this case, a control unit of the transfer station, on the basis of the placements of the pieces of baggage to be loaded, controls the at least one manipulator in such a way that,

[Continued on next page]

TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS,
ZA, ZM, ZW.

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, CV, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SC, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, ME, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:

— *with international search report (Art. 21(3))*

in the holder, at least a bottom layer, a top layer and at least one intermediate layer situated between the bottom layer and the top layer are formed, wherein each layer consists of a number of pieces of baggage that have each been placed in the same group, and wherein an intermediate layer has both thereabove and therebelow a layer of which the pieces of baggage have been placed in the other group in relation to the pieces of baggage of the respective intermediate layer.