

Title (en)

DEVICE FOR ALIGNING A PIECE GOOD PART LIFTED BY MEANS OF A WINCH OF AN AIRCRAFT

Title (de)

VORRICHTUNG ZUR AUSRICHTUNG EINES MIT EINEM ÜBER EINE SEILWINDE EINES FLUGGERÄTS AUFGENOMMENEN STÜCKGUTTEILS

Title (fr)

DISPOSITIF SERVANT À ALIGNER UNE PARTIE FORMANT ARTICLE ISOLÉ SOULEVÉE AU MOYEN D'UN TREUIL D'UN AÉRONEF

Publication

EP 4232361 A1 20230830 (DE)

Application

EP 21806989 A 20211025

Priority

- DE 102020127986 A 20201023
- EP 2021079499 W 20211025

Abstract (en)

[origin: WO2022084553A1] The invention relates to an alignment device (1) and an aircraft arrangement for aligning a piece good part (4), which is lifted by means of a winch (2) of an aircraft (3), about a rotational axis (16) which is parallel to a yaw axis (12) of the aircraft (3). The alignment device (1) has an alignment element (8) which can be fastened to an underside (9) of the aircraft (3) and an alignment mating piece (6) which can be fixed to a piece good part (4). When the alignment device (1) is used as intended, the alignment mating piece (6) has an alignment tab (15) pointing in a direction of the aircraft (3). The alignment element (8) has a guide track (10) with a sliding surface (11) oriented in the direction of the alignment mating part (6). When the alignment mating piece (6) is displaced in the direction of the aircraft, the alignment tab (15) of the alignment mating piece (6) is brought into contact with the sliding surface (11) through retraction of the winch (2). In the event of a further axial displacement of the alignment mating piece in the direction of the aircraft (3) along the rotational axis (16) through further retraction of the winch, the alignment tab (15) slides along on the sliding surface (11). As a result, the alignment mating piece rotates about the rotational axis (16), and therefore the piece good part (4) can be aligned relative to the aircraft (3).

IPC 8 full level

B64D 1/22 (2006.01); **B64C 1/22** (2006.01); **B66D 1/38** (2006.01)

CPC (source: EP IL KR US)

B64C 1/22 (2013.01 - IL US); **B64D 1/22** (2013.01 - EP IL KR US); **B66D 1/38** (2013.01 - EP IL KR US); **B64C 1/22** (2013.01 - EP KR)

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

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

WO 2022084553 A1 20220428; AU 2021363652 A1 20230615; CA 3201321 A1 20220428; CN 116888044 A 20231013;
DE 102020127986 A1 20220428; EP 4232361 A1 20230830; IL 302331 A 20230601; JP 2023546490 A 20231102; KR 2023091162 A 20230622;
US 2023391450 A1 20231207

DOCDB simple family (application)

EP 2021079499 W 20211025; AU 2021363652 A 20211025; CA 3201321 A 20211025; CN 202180078766 A 20211025;
DE 102020127986 A 20201023; EP 21806989 A 20211025; IL 30233123 A 20230423; JP 2023524843 A 20211025;
KR 20237017537 A 20211025; US 202118033272 A 20211025