

Title (en)

COORDINATED END EFFECTOR ATTACHMENT OF FASTENERS TO AIRCRAFT STRUCTURE

Title (de)

KOORDINIERTES SETZEN VON BEFESTIGUNGSELEMENTEN AN EINER FLUGZEUGSTRUKTUR MITTELS EINES ENDEFFEKTORS

Title (fr)

POSE COORDONNÉE D'ÉLÉMENTS DE FIXATION SUR LA STRUCTURE D'UN AÉRONEF À L'AIDE D'UN D'EFFECTEUR TERMINAL

Publication

EP 4000760 A1 20220525 (EN)

Application

EP 21207361 A 20211110

Priority

- NL 2027388 A 20210126
- US 202063115030 P 20201118

Abstract (en)

Systems and methods are provided for applying fasteners to a structure. One embodiment is a method that includes disposing a first set of end effectors along a fixed inner track that follows an Inner Mold Line (IML) of a structure, disposing a second set of end effectors along a fixed outer track that follows an Outer Mold Line (OML) of the structure, aligning a first end effector at the fixed inner track with a second end effector at the fixed outer track, clamping the structure between the first end effector and the second end effector, by pressing the first end effector and the second end effector into the structure, and applying a fastener to the structure.

IPC 8 full level

B21J 15/14 (2006.01)

CPC (source: EP)

B21J 15/142 (2013.01)

Citation (applicant)

- EP 0956915 A2 19991117 - TORRES MARTINEZ M [ES]
- US 4967947 A 19901106 - SARH BRANKO [US]
- JP 2001079637 A 20010327 - MITSUBISHI HEAVY IND LTD
- US 2010122444 A1 20100520 - REID ERIC M [US], et al

Citation (search report)

- [XY] JP 2001079637 A 20010327 - MITSUBISHI HEAVY IND LTD
- [Y] US 2010122444 A1 20100520 - REID ERIC M [US], et al
- [A] EP 0956915 A2 19991117 - TORRES MARTINEZ M [ES]
- [A] US 4967947 A 19901106 - SARH BRANKO [US]

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

DOCDB simple family (publication)

EP 4000760 A1 20220525; EP 4000760 B1 20240918

DOCDB simple family (application)

EP 21207361 A 20211110