

Title (en)
DEVICE FOR FLANGING INFLATABLE WING WITH LOAD TRANSFER

Title (de)
VORRICHTUNG ZUM ANFLANSCHEN VON AUFBLASBAREM FLÜGEL MIT LASTUMSCHALTUNG

Title (fr)
DISPOSITIF DE BRIDAGE D'AILE GONFLABLE A TRANSFERT DE CHARGE

Publication
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Application
EP 05796005 A 20050805

Priority

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- FR 0502738 A 20050321

Abstract (en)
[origin: WO2006021671A2] The invention concerns a device for flanging a self supported curved wing with inflatable structure, comprising a pair of front points for fastening (5) traction lines, and a pair of rear points for fastening (6) control lines. A pair of load transfer lines (15), continuously support the major part of the tensile load, and are arranged on either side of a median symmetry plane (PS), by being connected to the wing in a pair of connecting zones (Z) delimited, on the outside by the 5/10° central parts of the span, on the inside by the 2/10° central parts of the span, towards the front through the leading edge (2), and towards the rear through the equilibrium axis (X). Each load transfer line (15) co-operates through its lower end, with a junction point (13, 12), connected to a respective front fastening point (5) of the wing via a secondary traction line (8), the whole assembly being configured to distribute the tensile load among the load transfer lines (15) and the secondary traction lines (8). Such a control system allows sufficient reduction of the tensile force to maintain controlled piloting in all circumstances, in particular during sudden gusts of wind.

IPC 8 full level
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Citation (opposition)
Opponent :

- US 6514115 B2 20030204 - HARICH ARMIN [DE]
- US 5417390 A 19950523 - SOUTHWICK JEFFREY M [US]
- US 5000401 A 19910319 - BARONE SALVATORE [US]
- US 4018407 A 19770419 - ABER ARTHUR B
- US 4846424 A 19890711 - PROUTY JONATHAN J [US]

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