Title (en)

RAM AIR PARACHUTE WITH IMPROVED CANOPY DESIGN

Title (de

STAULUFT-FALLSCHIRM MIT VERBESSERTER FALLSCHIRMKAPPENAUSFÜHRUNG

Title (fr)

PARACHUTE PLANANT A VOILURE AMELIOREE

Publication

EP 1461245 A4 20081119 (EN)

Application

EP 02797268 A 20021209

Priority

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- US 34105501 P 20011207
- US 34099301 P 20011207

Abstract (en)

[origin: WO03053779A2] The ram air parachute has a number of novel features which limit distortions to the canopy and improve performance. Restrictions on the inlets to the cells operate reduce drag during flight and to reduce opening forces. The restrictions include triangular sections blocking portions of the inlets. The triangular sections may be positioned at loaded and non-loaded ribs. Furthermore, the triangular sections are dimensioned to tension the top skin between the loaded ribs and non-loaded ribs to preserve an aerodynamic shape during flight without cross-bracing. The loaded ribs may be shortened to create a zig-zag pattern at the front edge of the bottom skin for improved deployment with reduce drag during flight. The top skin may be shaped to increase tension in certain areas for improved stability. Additionally, flexible stiffeners may be attached to the ribs of the canopy at the nose to maintain its shape. Finally, the ribs may have different heights to adjust tensioning of the bottom skin and non-loaded ribs, to help reduce distortion on the top skin.

IPC 1-7

B64D 1/00

IPC 8 full level

B64C 31/036 (2006.01); B64D 17/02 (2006.01)

CPC (source: FP)

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Citation (search report)

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- [XA] GB 1585099 A 19810225 JONES A W, et al
- [A] US 5431506 A 19950711 MASUNAGA SATORU [JP]
- See references of WO 03053779A2

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