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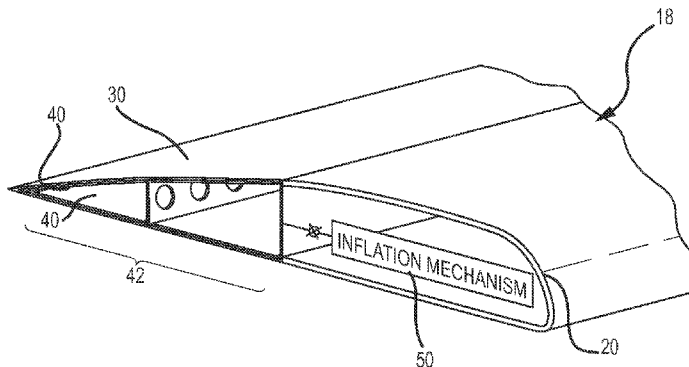


FIG. 2a

(57) Abstract: A reinforced inflatable wing improves the tolerance of the OML and reinforces the wing in at least the high load areas. This approach provides fitment constrained air vehicles with wings having increased surface area to improve flight endurance or aerodynamic control. A wing box (20,108, 208, 308, 400) forms a first portion of the wing. A skin having a plurality of rigid plates (40,122, 222, 322, 406) affixed thereto is inflated to form a second portion of the wing to either increase the chord length or lengthen the wing span. The skin is suitably inflated with foam to form a solid wing.

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C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 3 633 846 A (BIGGS LAWRENCE M JR) 11 January 1972 (1972-01-11) * abstract; figures column 1, line 46 - column 2, line 16 -----	1, 15, 18, 20
A	DE 39 16 690 C1 (BODENSEEWERK GERAETETECH [DE]) 1 October 1998 (1998-10-01) * abstract; figures 3,4 column 3, line 64 - column 4, line 23 -----	1, 15, 18, 20
A	FR 2 613 474 A1 (THOMSON BRANDT ARMEMENTS [FR]) 7 October 1988 (1988-10-07) * abstract; figures 1,5,10 page 3, line 18 - page 4, line 14 page 10, line 20 - page 11, last line ----- -/--	1, 15, 18, 20
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C.		<input checked="" type="checkbox"/> See patent family annex.
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A	US 2 616 509 A (WILFRED THOMAS) 4 November 1952 (1952-11-04) figure 15 column 7, line 32 - line 45 -----	1, 15, 18, 20

INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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