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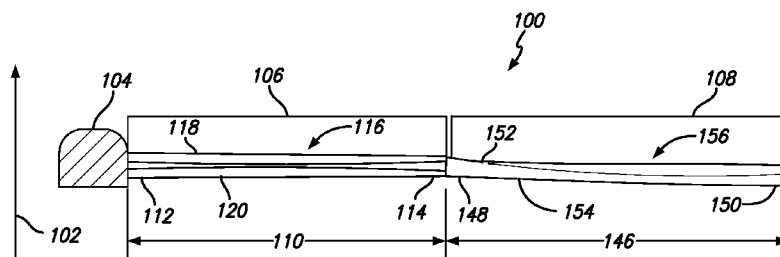


FIG. 10

(57) Abstract: An airfoil having an inboard blade section (106) and an outboard blade section (108). The inboard blade section (106) has a mid-blade end (114), and the inboard blade section (106) includes a biplane wing (116). The multiplane wing (116) has a first blade (118) and a second blade (120). The first blade (118) has a first airfoil cross-section (122), and the second blade (120) has a second airfoil cross-section (132). The first blade (118) is generally parallel to the second blade (120). The outboard blade section (108) has a mid-blade end (148), and the outboard blade section (108) includes a monoplane wing (156) with a third airfoil cross-section (158). The mid-blade end (148) of the outboard blade section (108) is joined to the mid-blade end (114) of the inboard blade section (106).

A. CLASSIFICATION OF SUBJECT MATTER***F03D 11/00(2006.01)i, F03D 1/06(2006.01)i***

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

F03D 11/00; F03D 1/06; B63H 1/26; F01D 5/14; F03D 1/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) & Keywords: airfoil, blade, wing, root, propeller, rotor, wind, turbine

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2009-0232656 A1 (PETER GRABAU) 17 September 2009 See the abstract, paragraphs 0027,0030 and figure 3A.	1-31
A	US 2009-0068018 A1 (GUSTAVE PAUL CORTEN) 12 March 2009 See the abstract, paragraph 0059 and figures 9-10.	1-31
A	US 05161952A A (EGGERS, JR.; ALFRED J.) 10 November 1992 See the abstract, column 3 and figure 1.	1-31
A	WO 2007-105174 A1 (TECSIS TECNOLOGIA E SISTEMAS AVAN ADOS LTDA et al.) 20 September 2007 See the abstract, paragraph 45 and figure 3.	1-31



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:

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"&" document member of the same patent family

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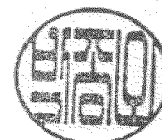
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INTERNATIONAL SEARCH REPORT

Information on patent family members

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