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(54) Title: WIND TURBINE BLADE WITH DEVICE FOR CHANGING THE AERODYNAMIC SURFACE OR SHAPE

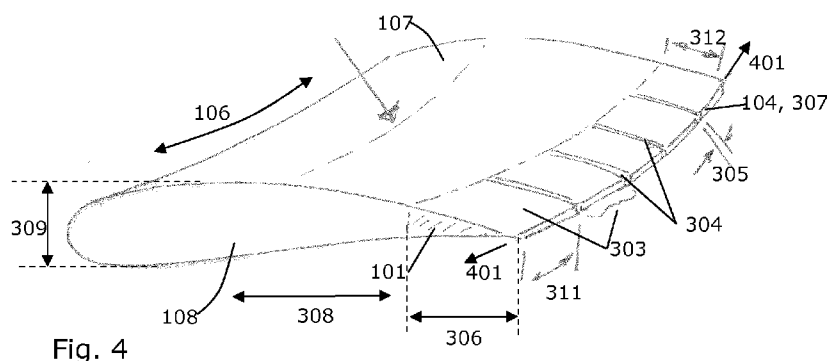


Fig. 4

(57) Abstract: The invention relates to a wind turbine blade (100) comprising a device (101) for modifying the aerodynamic surface or shape of the blade in an area of the trailing edge (104), and activation mechanisms for controlling the position and/or movement of the device. The device is at least partly divided into a number of sections (303) by interstices or connecting portions (304) having a higher elasticity. Hereby the overall longitudinal bending flexibility of the device is increased which in turn increases the operability of the aerodynamic device and reduces the wear of the system. The interstices (304) may be open, comprise a filler material, or optionally be covered by an elastic film.



## INTERNATIONAL SEARCH REPORT

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**A. CLASSIFICATION OF SUBJECT MATTER**

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ADD.

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

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

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

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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. |
|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| X         | WO 2007/045940 A1 (VESTAS WIND SYS AS [DK]; GODSK KRISTIAN BALSCHMIDT [DK]; NIELSEN THOMA) 26 April 2007 (2007-04-26)<br>page 7, line 6 - line 16<br>page 13, line 23 - page 15, line 20<br>page 29, line 5 - line 13; figures 7,9a<br>----- | 1-5,8-14              |
| X         | WO 2008/003330 A1 (DANMARKS TEKNISKE UNI TECHNICA [DK]; MADSEN HELGE AAGAARD [DK]; RASMUS) 10 January 2008 (2008-01-10)<br>page 8, line 8 - page 9, line 31; figures 1,3<br>-----                                                            | 1-3,<br>8-11,14       |
| X         | EP 1 375 911 A1 (HITACHI SHIPBUILDING ENG CO [JP]) 2 January 2004 (2004-01-02)<br>paragraphs [0038], [0039], [0045] - [0049]; figures 11-15<br>-----                                                                                         | 1-3,8,<br>10,11,14    |



Further documents are listed in the continuation of Box C.



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**INTERNATIONAL SEARCH REPORT**

Information on patent family members

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| Patent document<br>cited in search report | Publication<br>date | Patent family<br>member(s)                                           | Publication<br>date                                  |
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| WO 2008003330 A1                          | 10-01-2008          | EP 2044324 A1<br>US 2009290982 A1                                    | 08-04-2009<br>26-11-2009                             |
| EP 1375911 A1                             | 02-01-2004          | NONE                                                                 |                                                      |