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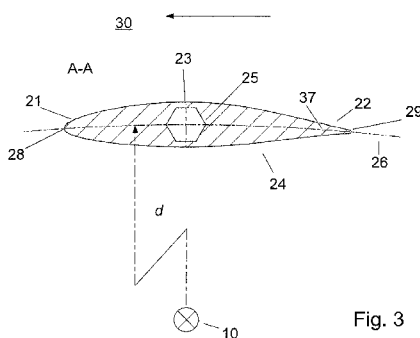


Fig. 3

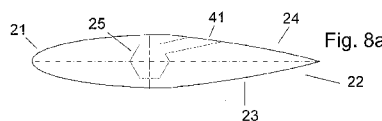


Fig. 8a

(57) Abstract: A flyer bow (1) including an elongate arcuate body (2) being configured to be rotated about an axis of rotation (10), the middle portion (3) includes an inner surface (24), an outer surface (23), a leading edge (21), and a trailing edge (22), the inner surface (24) and the outer surface (23) cooperate to form a cross section (30), and at least one centerline (26) of the cross section (30) includes a radius of curvature substantially equal to a distance (d) between the elongate arcuate body (2) at the location of the at least one centerline and the axis of rotation (10). Moreover, the middle portion includes an elongate void (25) along the longitudinal axis of the elongate arcuate body (2) for receiving wires to be processed and at least one slot (41) in fluid communication with the void (25) and the inner or outer surface (24, 23) or the leading or trailing edge (21, 22). The flyer bow (1) has reduced drag and enables removal of dust during a wire processing operation.



INTERNATIONAL SEARCH REPORT

International application No
PCT/US2015/041144

A. CLASSIFICATION OF SUBJECT MATTER
INV. D07B3/10
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)
D07B

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 practicable, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DE 965 478 C (GERT MEYER BUSCHE DIPL ING) 6 June 1957 (1957-06-06) page 3, lines 12,13; claim 1; figures 1-3 -----	1
A	JP S53 28743 A (TEIJIN SEIKI CO LTD) 17 March 1978 (1978-03-17) figures -----	1
A	JP H07 18592 A (HAMANA TEKKO) 20 January 1995 (1995-01-20) abstract; figures 1-4 -----	1
A	JP 2001 254285 A (LIGNYTE CO LTD) 21 September 2001 (2001-09-21) paragraph [0015] abstract; figures 1,8a,10a, 10b -----	1

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

10 December 2015

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08/03/2016

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2015/041144

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.
3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-8

Remark on Protest

- The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-8

A flyer bow with a leading and a trailing edge and wherein the centerline of a cross section has a certain run

2. claims: 9-19

A flyer bow with a leading and a trailing edge wherein the bow comprises a slot

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2015/041144

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
DE 965478	C	06-06-1957	NONE	

JP S5328743	A	17-03-1978	JP S5328743 A	17-03-1978
			JP S5921998 B2	23-05-1984

JP H0718592	A	20-01-1995	NONE	

JP 2001254285	A	21-09-2001	JP 3242387 B2	25-12-2001
			JP 2001254285 A	21-09-2001
