(11) **EP 2 436 633 A3**

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3: **27.06.2012 Bulletin 2012/26**

(51) Int Cl.: **B65H 63/04** (2006.01)

- (43) Date of publication A2: **04.04.2012 Bulletin 2012/14**
- (21) Application number: 11178069.8
- (22) Date of filing: 19.08.2011
- (84) Designated Contracting States:

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR Designated Extension States:

BA ME

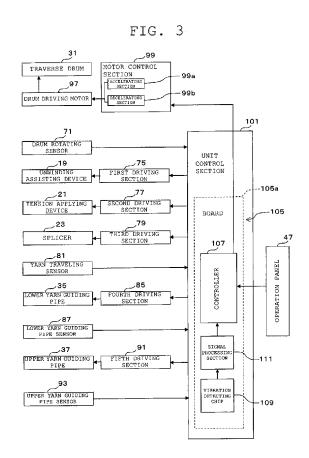
- (30) Priority: 01.10.2010 JP 2010223815
- (71) Applicant: Murata Machinery, Ltd. Minami-ku

Kyoto-shi Kyoto 601-8326 (JP)

- (72) Inventor: Masai, Tetsuji Kyoto, Kyoto 612-8686 (JP)
- (74) Representative: Beck, Alexander Hansmann & Vogeser Patent- und Rechtsanwälte Maximilianstrasse 4b 82319 Starnberg (DE)

(54) Circuit board for yarn winding device and yarn winding device

(57) To accurately detect an abnormal vibration of a winding section. A circuit board (105) for a yarn winding unit (1) includes a circuit board body (105a) and a vibration detecting chip (109) provided on the circuit board body (105a).



EP 2 436 633 A3



PARTIAL EUROPEAN SEARCH REPORT

Application Number

under Rule 62a and/or 63 of the European Patent Convention. This report shall be considered, for the purposes of subsequent proceedings, as the European search report

EP 11 17 8069

| | DOCUMENTS CONSID | ERED TO BE RI | ELEVANT | | |
|---|--|---------------|--|--|--|
| Category | Citation of document with ir of relevant passa | | oriate, | Relevant to claim | CLASSIFICATION OF THE APPLICATION (IPC) |
| Х | US 5 900 553 A (HAS 4 May 1999 (1999-05 * abstract; figures | 5-04) | [JP]) | 3-9 | INV. B65H63/04 |
| X | JP 63 203814 A (MUR 23 August 1988 (198 * abstract; figure | 8-08-23) | LTD) | 3-9 | TECHNICAL FIELDS SEARCHED (IPC) B65H D01H |
| The Search not complete Claims see Claims see Claims no Reason for | MPLETE SEARCH The Division considers that the present by with the EPC so that only a partial so arched completely: arched incompletely: It searched: The limitation of the search: Sheet C | | | do | |
| X : parti Y : parti | Place of search The Hague ATEGORY OF CITED DOCUMENTS icularly relevant if taken alone collarly relevant if combined with another collarly relevant if combined with a collar collarly relevant if combined with a collar collarly relevant if combined with a collar collar collarly relevant if combined with a collar colla | 15 May | : theory or principle : earlier patent doc after the filing date) : document cited in | underlying the in ument, but publis e the application | |
| document of the same category A : technological background O : non-written disclosure P : intermediate document | | | L : document cited for other reasons & : member of the same patent family, corresponding document | | |

2



INCOMPLETE SEARCH SHEET C

Application Number

EP 11 17 8069

| Claim(s) completely searchable: 3-9 |
|--|
| Claim(s) not searched: 1, 2 |
| Reason for the limitation of the search: |
| Rule 62a EPC. |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 11 17 8069

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

15-05-2012

| Patent document cited in search report | | Publication date | | Patent family member(s) | | Publication date |
|---|---|------------------|----------------------------------|--|--------------------|--|
| US 5900553 | A | 04-05-1999 | CN DE DE JP US WO | 1153504 19680400 19680400 8301523 5900553 9633939 | B4 T1 A A | 02-07-19 28-02-20 24-07-19 19-11-19 04-05-19 31-10-19 |
| JP 63203814 | Α | 23-08-1988 | JP JP | 2038689 63203814 | | 31-08-19 23-08-19 |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

FORM P0459

© For more details about this annex : see Official Journal of the European Patent Office, No. 12/82