(11) EP 2 192 066 A3

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3: 10.11.2010 Bulletin 2010/45

(51) Int Cl.: **B65H 23/18** (2006.01)

(43) Date of publication A2: 02.06.2010 Bulletin 2010/22

(21) Application number: 09175640.3

(22) Date of filing: 11.11.2009

(84) Designated Contracting States:

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 SE SI SK SM TR
Designated Extension States:

Designated Extension Sta

AL BA RS

(30) Priority: 26.11.2008 FI 20086135

(71) Applicant: Metso Paper Inc. 00130 Helsinki (FI)

- (72) Inventors:
 - Pitkänen, Tatu
 04460, Nummenkylä (FI)
 - Kemppainen, Matti M. 05400, Jokela (FI)
 - Tiitta, Jari 04500, Kellokoski (FI)
 - Tiilikainen, Marko 04500, Kellokoski (FI)
- (74) Representative: TBK-Patent Bavariaring 4-6 80336 München (DE)

(54) Method and arrangement for controlling winder device operation

(57)In an arrangement according to the invention for controlling the operation of a winder device, there are measuring and data-processing means (208) to determine at least one quality indicator representing the properties of a machine reel being formed (204) during the winding process by means of a measurement applied to the machine reel. From the machine reel, it is possible to determine e.g. hardness, density and/or top-layer tangential tension. In the arrangement, there is a controller apparatus (212) which is arranged to provide a first control circuit for adjusting specifications of winding parameters based on a determined quality indicator and a second control circuit for controlling the winder device based on the specifications of the winding parameters. The arrangement according to the invention is able to adjust the quality properties of the machine reel being formed by closed control already during the winding process.

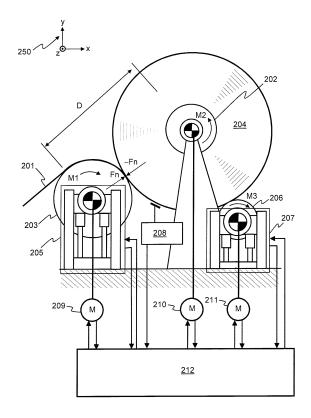


Figure 2.

EP 2 192 066 A3



EUROPEAN SEARCH REPORT

Application Number EP 09 17 5640

| Category | Citation of document with indication of relevant passages | on, where appropriate, | Relevant to claim | CLASSIFICATION OF THE APPLICATION (IPC) | |
|---|---|---|---|--|--|
| Х | US 6 047 275 A (JAREMKO 4 April 2000 (2000-04-0 * abstract; figures 1-3 * column 4, lines 1-17 * column 5, lines 34-64 * column 6, lines 42-58 * column 7, lines 13-20 * column 7, line 50 - c * the whole document * |)4) 3 * * 1 * 3 *) * | | INV. B65H23/18 | |
| X | US 2003/226928 A1 (MCNI AL) 11 December 2003 (2 * abstract; figures 1-6 * paragraph [0008] - pa * paragraph [0021] * * paragraph [0066] - pa * paragraph [0077] * * paragraph [0090] - pa | 2003-12-11) 5 * aragraph [0010] * aragraph [0074] * | 1-13 | TECHNICAL FIELDS SEARCHED (IPC) B65H G05B | |
| | The present search report has been of Place of search | Irawn up for all claims Date of completion of the search | | Examiner | |
| The Hague | | 29 September 2010 | 10 Piekarski, Adam | | |
| CATEGORY OF CITED DOCUMENTS X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category A: technological background O: non-written disclosure P: intermediate document | | E : earlier patent doo after the filing date D : document cited in L : document cited fo | T: theory or principle underlying the invention E: earlier patent document, but published on, or after the filing date D: document cited in the application L: document cited for other reasons &: member of the same patent family, corresponding | | |

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

EP 09 17 5640

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.

29-09-2010