

Title (en)

Calender and process for treating a web of material

Title (de)

Kalender und Verfahren zum Behandeln einer Materialbahn

Title (fr)

Calandre et procédé pour le traitement d' une bande de matériau

Publication

**EP 1394322 A1 20040303 (DE)**

Application

**EP 03017245 A 20030730**

Priority

DE 10239154 A 20020827

Abstract (en)

Each sensor (28, 28') has a measurement face on which an air cushion can be produced. The sensor (28) casing (44) and carrier (45) enclose a pressurized space (47), with adjustable connection. On the sensor carrier, nozzles (48) feed air into the space between carrier and the surface being monitored. They are connected to a blowing chamber (49). The sensor is flexibly suspended. The air cushion is formed on a curved surface, causing self-adjustment. The sensor works without contact. It is optical, with a light source (51) and receiver (58) for the reflected light (55). The sensor can be moved parallel to the pressing direction (33). There are two of them, on each side of the roller stack. The web path departing from a nip (10-16) passes over a guide roller circumference, against which the sensor is positioned. The sensor can be adjusted perpendicular to the pressing direction. It is located against the circumferential surface of a roller (4). The roller may not be covered by the web, in the sensor location. The sensor can be moved transversely with respect to web travel. It is mounted on a carriage to move parallel to the pressing direction. It has a linear drive perpendicular to this direction. The sensor is connected to evaluation instrumentation with memory for measurements at various locations, taken at various instants. A vibration sensor for a roller is connected to the instrument which includes a noise filter. The sensor is coupled through instrumentation to a processing actuator. The sensor is connected to sensing equipment clocked a frequency exceeding the barring (producing stripes across web) frequency. Measurement locations are provided on the web and on a roller surface. Measurements from different locations are compared. A base curve is established for later comparisons. Measurement positions are determined from the comparisons. Measurements from different instants are compared. Movement and/or force parameters are quantified for at least one roller. An Independent claim is included for the corresponding method.

Abstract (de)

Es werden ein Kalender (1) und ein Verfahren zum Behandeln einer Materialbahn (17) angegeben, bei denen die Materialbahn (17) durch einen Walzenstapel mit mehreren Walzen (2-9) geleitet und mit Druck in einer Pressenrichtung (33) beaufschlagt wird. Es ist ein Sensor (28) vorgesehen, der vorbestimmte Meßwerte erfaßt. Man möchte die Überwachungsmöglichkeiten im Kalender auf einfache Weise erweitern können. Hierzu ist der Sensor (28) parallel zur Pressenrichtung (33) bewegbar. <IMAGE>

IPC 1-7

**D21G 1/00**; **D21G 9/00**

IPC 8 full level

**D21G 1/00** (2006.01); **D21G 9/00** (2006.01)

CPC (source: EP)

**D21G 1/0073** (2013.01); **D21G 9/0009** (2013.01)

Citation (search report)

- [A] WO 0220901 A1 20020314 - METSO PAPER INC [FI]
- [A] US 5163365 A 19921117 - TAYLOR BRUCE S [US]

Cited by

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**EP 1394322 A1 20040303**; **EP 1394322 B1 20070314**; DE 10239154 A1 20040318; DE 10239154 B4 20060406; DE 50306786 D1 20070426

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