Title (en)

Process and device for applying coating material in manufacturing of coated or impregnated sheet-like product

Title (de)

Verfahren und Vorrichtung zum Auftragen von Beschichtungsmaterial beim Herstellen beschichteter und/oder imprägnierter Flächengebilde

Title (fr)

Procédé et dispositif pour appliquer un revêtement lors de la fabrication de produits plats revêtus ou impregnés

Publication

EP 1000668 A1 20000517 (DE)

Application

EP 98121479 A 19981112

Priority

EP 98121479 A 19981112

Abstract (en)

The assembly to apply a coating mass (8) to a web surface (2), in the production of coated and/or impregnated webs, has two leading rollers (11a,11b) to define a measurement gap (10) between them. A system takes off surplus coating material (14a,14b) and returns it by two rollers (16a,16b) back to the web (2) surface. The surplus removal system has a scraper (15a,15b) to carry surplus coating (14a,14b) back to rollers (16a,16b) which rotate against the direction of web (2) travel. The rollers (11a,11b), forming the measurement gap (10) between them, rotate against the direction of web (2) travel. A carrier system to return surplus coating (14a,14b) is at each of the calibrating rollers (11a,11b) at a gap from the web (2), and the rollers (16a,16b) which take the returned surplus coating are in contact with the web (2) to spread the surplus coating back on to the web surface. The scraper (15a,15b) detaches surplus coating material from the calibrating rollers (11a,11b). A control (19) sets the amount of coating mass (8) to be applied to the web (2), and it measures the volume of surplus coating (14a,14b) as a value to be stored in the control. The control measures a breach of a threshold value in the returned surplus coating (14a,14b). An ultrasonic unit (22) transmits ultrasonic waves to the coated/impregnated web (2), after it leave the calibration gap (10). The calibration gap (10) is adjustable, between the rollers (11a,11b). An Independent claim is included for a web coating/impregnation process, where the web (2) passes through a calibration gap (10) between two rollers (11a,11b) and any surplus coating material (8) is returned to preceding rollers (16a,16b) to be spread over the web. Preferred Features: The surplus coating material (14a,14b) is removed by the calibrating rollers (11a,11b) from both sides of the web (2). A sensor (18) registers the amount of surplus coating material (14a,14b) in front of the calibration gap (10). The sensor measurements are used to control the application of the coating mass (8) at the web (2).

Abstract (de)

Die Vorrichtung zum Auftragen von Beschichtungsmaterial (8) auf ein Flächengebilde (2) weist zwei erste Walzen (11a, 11b) auf, die einen Bemessungs-Spalt (10) definieren. Ausserdem ist ein Transportelement (13a, 13b) vorgesehen, mit welchem überschüssiges Beschichtungsmaterial (14a, 14b) aus dem Bereichen (12a, 12b) mittels zweiten Walzen (16a, 16b) auf das Trägermaterial (2) zurücktransportiert wird. <IMAGE>

IPC 1-7

B05C 11/02; B05C 1/08; D21H 25/12

IPC 8 full level

B05C 1/08 (2006.01); **B05C 11/02** (2006.01); **D21H 25/12** (2006.01)

CPC (source: EP)

B05C 1/0826 (2013.01); **B05C 1/0856** (2013.01); **B05C 11/025** (2013.01); **D21H 25/12** (2013.01)

Citation (applicant)

GB 2171934 A 19860910 - WAERTSILAE OY AB

Citation (search report)

- [A] CH 660563 A5 19870515 - YTONG AG
- [A] DE 2930097 A1 19810212 - DYFORM ENG LTD
- [A] PATENT ABSTRACTS OF JAPAN vol. 008, no. 052 (C - 213) 9 March 1984 (1984-03-09)

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