Title (en)

Method for producing bag paper, bag paper and paper bag

Title (de)

Verfahren zur Herstellung von Sackpapier, Sackpapier und Papiersack

Title (fr)

Procédé de fabrication de papier pour sachet, papier pour sachet et sachet en papier

Publication

EP 2186939 A3 20111228 (DE)

Application

EP 09169216 A 20090902

Priority

DE 102008043727 A 20081113

Abstract (en)

[origin: EP2186939A2] The method comprises producing a bag paper web (2) in a paper machine (3), which comprises a headbox on a sieve, a drainage in a press and a dryer in a drying section, and then winding the bag paper web using a coil (8). The bag paper web is treated in an extended nip calender at the end or after the paper machine, and is treated before winding in the extended nip calender. The bag paper web compresses around 5% in the running direction with a dry content of 40-80%. The extended nip calender impinges with a flexible cover over a shoe roller or a flexible rotating belt (14) impinges the web. The method comprises producing a bag paper web (2) in a paper machine (3), which comprises a headbox on a sieve, a drainage in a press and a dryer in a drying section, and then winding the bag paper web using a coil (8). The bag paper web is treated in an extended nip calender at the end or after the paper machine, and is treated before winding in the extended nip calender. The bag paper web compresses around 5% in the running direction with a dry content of 40-80%. The extended nip calender impinges with a flexible cover over a shoe roller or a flexible rotating belt (14) impinges the web with a pressing pressure. A first web side lying on a smoothed and heated roller with the extended nip calender is smoothed to a pulse-per-second (PPS) value of below 7 mu m. The first web side lying on a smoothed and heated roller with the extended nip calender is smoothed to a pulse-per-second (PPS) value ratio of over 1.4 from in running direction before the extended nip calender to in running direction of the web behind the extended nip calender. The web with the extended nip calender is compressed to maximum 15% from in running direction before the extended nip calender to in running direction of the web behind the extended nip calender. The extended nip calender impinges the uncompressed bag paper with a maximum pressing pressure of 5-20 MPa over a flexible counter pressure element and the compressed bag paper with a pressing pressure of 2-5 MPa. The pressing pressure of the extended nip calender is adjusted, so that Gurley-porosity of the compressed bag paper remains to a value below 7 seconds and Gurley-porosity of the uncompressed bag paper remains to a value below 30 seconds. The extended nip calender is operated, so that the value of the Gurley-porosity of the web in the extended nip calender increases to maximum 50%. The surface of the heated roller has a temperature of 180-220[deg] C. The amplitude of the heating is reversely adapted to the web width. The web before the extended nip calender is moistened to uniform valve of 5-12% over the web width. The web is dried in the extended nip calender with the drying capacity, which brings a drying cylinder of same building type in the drying section at same position as the extended nip calender. Independent claims are included for: (1) compressed and uncompressed bag paper; and (2) a paper bag.

IPC 8 full level

B31B 19/00 (2006.01); **B31F 1/16** (2006.01); **B65D 30/02** (2006.01); **D21F 11/00** (2006.01); **D21G 1/00** (2006.01); **D21H 27/10** (2006.01)

CPC (source: EP)

D21F 11/00 (2013.01); **D21G 1/006** (2013.01); **D21H 27/10** (2013.01); B31B 70/88 (2017.07)

Citation (search report)

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Designated contracting state (EPC)

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Designated extension state (EPC)

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DOCDB simple family (application)

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