Title (en)

PACKAGING PAPER AND METHOD FOR THE PRODUCTION THEREOF

Title (de)

VERPACKUNGSPAPIER SOWIE VERFAHREN ZUR HERSTELLUNG DESSELBEN

Title (fr)

PAPIER D'EMBALLAGE, AINSI QUE SON PROCÉDÉ DE FABRICATION

Publication

**EP 4101980 A1 20221214 (DE)**

Application

**EP 21191115 A 20210812**

Priority

EP 21178865 A 20210610

Abstract (en)

[origin: CN115467187A] The invention relates to a packaging paper comprising an unbleached kraft paper as base paper, the Kappa value of which is between 38 and 60, preferably between 40 and 58, according to ISO 302: 2015, optionally coated on at least one side, in which the kraft paper is at least 90% made from a raw pulp, having a basis weight of between 60 g/m2 and 150 g/m2 according to ISO 536: 2019, and an air resistance of between 5 and 30 seconds according to ISO 5636-5: 2013 (Gurley), characterized in that the Kappa value of the kraft paper is between 38 and 60, preferably between 40 and 58, preferably between 40 and 58. The base paper has an elongation at break in the machine direction according to ISO 1924-3: 2005 of between 2.5% and 8.5%, and a Bendtsen roughness according to ISO 8791-2: 2013 of between 70 ml/min and 600 ml/min, preferably between 150 ml/min and 550 ml/min, in particular between 200 ml/min and 500 ml/min, and wherein the base paper has an elongation at break in the machine direction according to ISO 1924-3: 2005 and a Bendtsen roughness in the machine direction according to ISO 8791-2: 2013 of between 70 ml/min and 600 ml/min, preferably between 150 ml/min and 550 ml/min. The invention further relates to a method for preparing the packaging paper.

Abstract (de)

Verpackungspapier bestehend aus einem ungebleichten Kraftpapier mit einem Kappa-Wert nach ISO 302:2015 zwischen 38 und 60, vorzugsweise zwischen 40 und 58 als Basispapier, welches gegebenenfalls wenigstens einseitig beschichtet ist, wobei das Kraftpapier zu wenigstens 90 % aus Primärzellstoff hergestellt ist, ein Flächengewicht nach ISO 536:2019 zwischen 60 g/m<sup>2</sup> und 150 g/m<sup>2</sup> sowie einen Luftwiderstand nach ISO 5636-5:2013 (Gurley) zwischen 5 und 30 Sekunden aufweist, dadurch gekennzeichnet, dass das Basispapier eine Bruchdehnung in Maschinenrichtung nach ISO 1924-3:2005 zwischen 2,5 % und 8,5 % aufweist und eine Bendtsen-Rauheit nach ISO 8791-2:2013 zwischen 70 ml/min und 600 ml/min, vorzugsweise zwischen 150 ml/min bis 550 ml/min, insbesondere bevorzugt 200 ml/min bis 500 ml/min ' aufweist sowie Verfahren zu seiner Herstellung.

IPC 8 full level

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CPC (source: CN EP US)

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Citation (search report)

- [XY] WO 2020120535 A1 20200618 - MONDI AG [AT]
- [Y] EP 2449176 B1 20160928 - DOW GLOBAL TECHNOLOGIES LLC [US]
- [A] EP 3088606 A1 20161102 - BILLERUDKORSNAES AB [SE]
- [Y] US 2021102340 A1 20210408 - NORDLING NILS [SE], et al
- [Y] EP 3168362 A1 20170517 - BILLERUDKORSNAES AB [SE]

Citation (third parties)

Third party : KRANSELL & WENNBORG

- GB 2613511 A 20230607 - MONDI AG [AT]
- WO 2018185216 A1 20181011 - BILLERUDKORSNAES AB [SE]
- ANONYMOUS: "Royal Extensible - Unbleached Unglazed Kraft Paper", ASSIDOMAN KRAFT PRODUCTS, 1 May 1997 (1997-05-01), pages 1 - 2, XP093134900
- EK MONICA, GORAN GELLERSTEDT, HENRIKSSON GUNNAR: "Pulping chemistry and technology", PULPING CHEMISTRY AND TECHNOLOGY, 1 January 2009 (2009-01-01), pages 437 - 438, XP093134866
- "DT Paper Science Publications", 1 January 1991, article EKLUND DAN, LINDSTROM.T.: "Paper Chemistry - An Introduction", pages: 77 - 81, XP093134853
- "Papermaking part 3 : finishing", 1 January 2009, article PENTTI R.: "Papermaking part 3 : finishing", pages: 18, XP093134890
- 1 January 2000, ISBN: 978-952-5216-08-0, article PAULAPURO H.: "Book 8: Papermaking part 1: stock preparation and wet end", pages: 90, XP093062905
- FORSETH T, HELLE T, STUDENT GRAD: "Effect of Moistening on Cross Sectional Details of Calendered Mechanical Paper", ANNUAL MEETING-TECHNICAL SECTION, 82ND, 1 January 1996 (1996-01-01), pages 1 - 8, XP093134841

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