

Title (en)

Method for calendering a fiber web and calender

Title (de)

Verfahren zum Kalandrieren einer Faserstoffbahn und Kalandrier

Title (fr)

Procédé de calandrage d'une bande de matière fibreuse et calandre

Publication

EP 2876205 A1 20150527 (EN)

Application

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Priority

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Abstract (en)

The invention relates to a method for calendering a fiber web, in which method at least one surface of the fiber web (W) is calendered in at least one calendering nip formed between two rolls. In the method at least one surface of the fiber web is roughened by calendering by at least one calender roll (11 R; 14R) with rough surface forming calendering nip with another calender roll (12) to surface roughness greater than the surface roughness of the fiber web when entering the calendering nip. In the method at least one surface of the fiber web is roughened by moisturizing the fiber web (W) during calendering or directly after calender and in the last calendering nip by at least one calender roll (11 R; 14R) with rough surface having surface roughness of 0,4 - 1,6 Ra. The method is utilized in production of a specialty paper web. The invention also relates to a calender of a fiber web machine comprising at least one calendering nip formed between two calender rolls, at least one hard calender roll (11) or at least one deflection compensated roll (14) and at least one soft calender roll (12). The calender has at least one calender roll (11 R; 14R) with rough surface forming calendering nip with another calender roll (12) to roughen at least one surface of the fiber web to surface roughness greater than the surface roughness of the fiber web when entering the calendering nip. The at least one calender roll with roughened surface has surface roughness 0,4 - 1,6 Ra. The calender comprises at least one moisturizing device (17). The calender is utilized in production of a specialty paper web.

IPC 8 full level

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Citation (applicant)

- WO 2005052253 A1 20050609 - METSO PAPER INC [FI], et al
- WO 2007077296 A1 20070712 - METSO PAPER INC [FI], et al
- "Papermaking Science and Technology", 2009, PAPER ENGINEERS' ASSOCIATION, HELSINKI, pages: 404

Citation (search report)

- [YD] WO 2005052253 A1 20050609 - METSO PAPER INC [FI], et al
- [A] EP 2189570 A1 20100526 - VOITH PATENT GMBH [DE]
- [Y] TROND FORSETH: "Surface Roughening mechanisms for printing paper containing mechanical pulp", NORDIC PULP AND PAPER RESEARCH JOURNAL NO. 1/1997, 1997, XP055113698, Retrieved from the Internet <URL:http://www.npprj.se/html/np-viewarticleabstract.asp?m=7053&mp=555> [retrieved on 20140411]

Designated contracting state (EPC)

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