

Title (en)
Embossing rollers for paper

Title (de)
Papierprägekalanders

Title (fr)
Rouleaux de gaufrage pour papier

Publication
EP 1208965 A3 20040317 (DE)

Application
EP 01127608 A 20011120

Priority
DE 10058993 A 20001128

Abstract (en)
[origin: EP1208965A2] A paper embossing calender (1) has a hard cylinder (2) and a soft cylinder (3) together forming a nip. The hard cylinder has especially a smooth surface and the soft cylinder has a smooth surface with depressions forming the embossing pattern. The depressions are pref. deeper than 1 mm deep. The base part of the depression surface is rougher than the cylinder surface. The cylinder surface between depressions has a roughness of less than 1 ma. The freshly polished surface (8) of a soft cylinder is the same as that of the smooth surface of the hard cylinder (2). The depressions (7) forming a pattern are milled, routed or etched. The line-load within the nip is (5) in the range pref. 150 to 250 N/mm. The cylinders rotate at a mantle speed of pref. 700 to 950 m/min. The calender (1) is an on-line calender. and is heated in operation to pref. 100-130C.

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B31F 1/07

IPC 8 full level
B31F 1/07 (2006.01)

CPC (source: EP)
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Citation (search report)
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• [A] EP 0279773 A2 19880824 - BENECKE GMBH J [DE]
• [A] DATABASE WPI Section Ch Week 199907, Derwent World Patents Index; Class A17, AN 1999-075352, XP002267556

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EP2050869A1; WO03064764A1; WO2012105891A1; WO2016159966A1; US9567129B2; US10040265B2; US10814579B2; US11548258B2

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