

Title (en)  
Multi-roll calendar

Title (de)  
Mehrwalzenkalender

Title (fr)  
Calandre à plusieurs rouleaux

Publication  
**EP 2325387 B1 20120905 (DE)**

Application  
**EP 10177009 A 20100916**

Priority  
DE 102009046918 A 20091120

Abstract (en)  
[origin: EP2325387A2] The multiroll calendar comprises a roll stack, in which two consecutive rolls form a roller nip for calendaring wood free coated paper on a brightness according to Gardner of greater than 75% or natural gravure papers on a pps-10 S-roughness under 1.15  $\mu\text{m}$  or film-coated light-weight coated papers on a brightness according to Gardner over 55%, where the roll stack is structured in a following row sequence such as a hard controlled deflection top roller (2), an elastic center roller with a thin metallic surface layer, a heatable hard middle roller, and two elastic middle rollers. The multiroll calendar comprises a roll stack, in which two consecutive rolls form a roller nip for calendaring wood free coated paper on a brightness according to Gardner of greater than 75% or natural gravure papers on a pps-10 S-roughness under 1.15  $\mu\text{m}$  or film-coated light-weight coated papers on a brightness according to Gardner over 55%, where the roll stack is structured in a following row sequence such as a hard controlled deflection top roller (2), an elastic center roller with a thin metallic surface layer, a heatable hard middle roller, two elastic middle rollers with a thin metallic surface layer, a heatable hard middle roller, an elastic middle roller with a thin metallic surface layer and a hard controlled deflection bottom roller. The elastic roller with a metal surface layer in the calendaring operation has a surface temperature of 90-130? oC. A line load of 300 N/mm acts in the roller nip in order to receive a nip length in web direction of 10 mm. A pressure element (14) is provided, in which the paper web (11) is designed before or after the roller nip over a contact angle of 5[deg] on the surface of a smooth, hard and heated roller. An independent claim is included for a method for converting multi-roll calendars.

IPC 8 full level  
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CPC (source: EP)  
**D21G 1/00** (2013.01); **D21G 1/0233** (2013.01); **D21G 1/0253** (2013.01)

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