

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 μm 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 μm 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
D21G 1/00 (2006.01); **D21G 1/02** (2006.01)

CPC (source: EP)
D21G 1/00 (2013.01); **D21G 1/0233** (2013.01); **D21G 1/0253** (2013.01)

Cited by
EP2381033A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)
EP 2325387 A2 20110525; EP 2325387 A3 20110601; EP 2325387 B1 20120905; CN 102071589 A 20110525; DE 102009046918 A1 20110526; EP 2385172 A1 20111109; EP 2385172 B1 20120905

DOCDB simple family (application)
EP 10177009 A 20100916; CN 201010558162 A 20101119; DE 102009046918 A 20091120; EP 11175279 A 20100916