

CPC**COOPERATIVE PATENT CLASSIFICATION****D21G****CALENDERS; ACCESSORIES FOR PAPER-MAKING MACHINES**

(winders or rewinders for finished products, means for adjustment of wrinkles or lateral extensions [B65H](#))

Guidance heading:**D21G 1/00**

Calenders (if restricted to the treatment of particular materials see the relevant class, e.g. [B29C 43/24](#), [D06](#)) ; **Smoothing apparatus**

- D21G 1/0006 . {Driving arrangements }
- D21G 1/0013 .. {for controlled deflection rolls }

- D21G 1/002 . {Opening or closing mechanisms; Regulating the pressure }
- D21G 1/0026 .. {Arrangements for maintaining uniform nip conditions }
- D21G 1/0033 ... {by offsetting the roll axes horizontally }
- D21G 1/004 .. {Regulating the pressure }
- D21G 1/0046 ... {depending on the measured properties of the calendered web }
- D21G 1/0053 ... {using magnetic forces }

- D21G 1/006 . { with extended nips }

- D21G 1/0066 . { using a special calendering belt }

- D21G 1/0073 . {Accessories for calenders }
- D21G 1/008 .. {Vibration-preventing or -eliminating devices }
- D21G 1/0086 .. {Web feeding or guiding devices }
- D21G 1/0093 .. {Web conditioning devices }

- D21G 1/02 . Rolls; Their bearings (in general [F16C 13/00](#))
- D21G 1/0206 .. {Controlled deflection rolls }
- D21G 1/0213 ... {with deflection compensation means acting between the roller shell and its supporting member }
- D21G 1/022 {the means using fluid pressure }
- D21G 1/0226 .. {Bearings }
- D21G 1/0233 .. {Soft rolls }
- D21G 1/024 ... {formed from a plurality of compacted disc elements or from a spirally-wound band }
- D21G 1/0246 .. {Hard rolls }
- D21G 1/0253 .. {Heating or cooling the rolls; Regulating the temperature }
- D21G 1/026 ... {using the hydraulic fluid in controlled deflection rolls }
- D21G 1/0266 ... {using a heat-transfer fluid ([D21G 1/026](#) takes precedence) }
- D21G 1/0273 {on the exterior surface of the rolls }

- D21G 1/028 . . . {using electrical means }
- D21G 1/0286 . . . {Regulating the axial or circumferential temperature profile of the roll }
- D21G 1/0293 . . {Provisions or constructions to facilitate the removal of the rolls }

D21G 3/00 Doctors

- D21G 3/005 . {Doctor knives }
- D21G 3/02 . for calenders
- D21G 3/04 . for drying cylinders

D21G 5/00 Safety devices

- D21G 5/005 . {for calenders }

D21G 7/00 Damping devices

D21G 9/00 Other accessories for paper-making machines

- D21G 9/0009 . {Paper-making control systems }
- D21G 9/0018 . . { controlling the stock preparation }
- D21G 9/0027 . . { controlling the forming section }
- D21G 9/0036 . . { controlling the press or drying section }
- D21G 9/0045 . . { controlling the calendering or finishing }
- D21G 9/0054 . . { details of algorithms or programs }
- D21G 9/0063 . {Devices for threading a web tail through a paper-making machine }
- D21G 9/0072 . . { using at least one rope }
- D21G 9/0081 . {Apparatus for removing samples from travelling web material }
- D21G 9/009 . {Apparatus for glaze-coating paper webs }