

CPC COOPERATIVE PATENT CLASSIFICATION

D TEXTILES; PAPER

PAPER

D21 PAPER-MAKING; PRODUCTION OF CELLULOSE

D21F PAPER-MAKING MACHINES; METHODS OF PRODUCING PAPER THEREON

WARNING

In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

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| 1/00 | Wet end of machines for making continuous webs of paper | 1/38 | . . Pads |
| 1/0009 | . {Regulating the freeness of the pulp} | 1/40 | . . Rolls |
| 1/0018 | . {Devices for dispensing fibres in a fluid} | 1/42 | . . Jets |
| 1/0027 | . {Screen-cloths} | 1/44 | . Watermarking devices |
| 1/0036 | . . {Multi-layer screen-cloths} | 1/46 | . . Dandy rolls |
| 1/0045 | . . . {Triple layer fabrics} | 1/48 | . Suction apparatus (suction rolls D21F 3/10) |
| 1/0054 | . . {Seams thereof} | 1/483 | . . {Drainage foils and bars} |
| 1/0063 | . . {Perforated sheets} | 1/486 | . . . {adjustable} |
| 1/0072 | . . {Link belts} | 1/50 | . . Suction boxes with rolls |
| 1/0081 | . . {with single endless strands travelling in generally parallel convolutions} | 1/52 | . . Suction boxes without rolls |
| 1/009 | . {Fibre-rearranging devices} | 1/523 | . . . {Covers thereof} |
| 1/02 | . Head boxes of Fourdrinier machines | 1/526 | {consisting of endless moving belts} |
| 1/022 | . . {Means for injecting material into flow within the headbox} | 1/54 | . Skimming devices, e.g. froth ledges |
| 1/024 | . . {Details of the feed chamber} | 1/56 | . Deckle frame arrangements |
| 1/026 | . . {Details of the turbulence section} | 1/58 | . Deckle straps |
| 1/028 | . . {Details of the nozzle section} | 1/60 | . Cylinder moulds |
| 1/04 | . Head boxes of cylinder machines | 1/62 | . Sand traps |
| 1/043 | . . {with immersed cylinders} | 1/64 | . Magnetic separators |
| 1/046 | . . {with non-immersed cylinder} | 1/66 | . Pulp catching, de-watering, or recovering; Re-use of pulp-water |
| 1/06 | . Regulating pulp flow | 1/68 | . . using hydrocyclones (hydrocyclones B04C) |
| 1/065 | . . {Shock-absorbing devices} | 1/70 | . . by flotation |
| 1/08 | . Regulating consistency | 1/72 | . . using funnels |
| 1/10 | . Wire-cloths (production of wire-cloths B21F) | 1/74 | . . using cylinders |
| 1/105 | . . {Multi-layer wire-cloths} | 1/76 | . . . with suction |
| 1/12 | . . Seams thereof | 1/78 | . . . with pressure |
| 1/14 | . . . welded | 1/80 | . . using endless screening belts |
| 1/16 | . . . sewn | 1/82 | . . adding fibre agglomeration compositions |
| 1/18 | . Shaking apparatus for wire-cloths and associated parts | 2/00 | Transferring webs from wet ends to press sections { handling webs in general B65H } |
| 1/20 | . . in Fourdrinier machines | 3/00 | Press section of machines for making continuous webs of paper |
| 1/22 | . . in cylinder machines | 3/02 | . Wet presses |
| 1/24 | . Tilting, raising, or lowering mechanisms for wire-cloths | 3/0209 | . . {with extended press nip} |
| 1/26 | . . in Fourdrinier machines | 3/0218 | . . . {Shoe presses} |
| 1/28 | . . in cylinder machines | 3/0227 | {Belts or sleeves therefor} |
| 1/30 | . Protecting wire-cloths from mechanical damage | 3/0236 | {manufacturing methods} |
| 1/32 | . Washing wire-cloths or felts | 3/0245 | {Means for fixing the sleeve to the roller end} |
| 1/325 | . . {with reciprocating devices} | 3/0254 | . . . {Cluster presses, i.e. presses comprising a press chamber defined by at least three rollers} |
| 1/34 | . Construction or arrangement of spraying pipes | 3/0263 | {Sealing arrangements therefor} |
| 1/345 | . . {Spraying-pipe cleaners} | 3/0272 | . . {in combination with suction or blowing devices} |
| 1/36 | . Guiding mechanisms (suction rolls D21F 3/10) | 3/0281 | . . {in combination with a dryer roll} |
| 1/365 | . . {for controlling the lateral position of the screen} | | |

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| 3/029 | . . {using special water-receiving belts} | 7/006 | . {Cutting the edges of the paper-web} |
| 3/04 | . . Arrangements thereof | 7/008 | . {Steam showers} |
| 3/045 | . . . {including at least one extended press nip} | 7/02 | . Mechanical driving arrangements |
| 3/06 | . . Means for regulating the pressure | 7/04 | . Paper-break control devices |
| 3/08 | . . Pressure rolls | 7/06 | . Indicating or regulating the thickness of the layer; Signal devices |
| 3/083 | . . . {perforated} | 7/08 | . Felts |
| 3/086 | . . . {having a grooved surface} | 7/083 | . . {Multi-layer felts} |
| 3/10 | . . Suction rolls, e.g. couch rolls | 7/086 | . . {Substantially impermeable for transferring fibrous webs} |
| 3/105 | . . . {Covers thereof} | 7/10 | . . Seams thereof |
| 5/00 | Dryer section of machines for making continuous webs of paper | 7/12 | . . Drying |
| 5/001 | . {Drying webs by radiant heating} | 9/00 | Complete machines for making continuous webs of paper |
| 5/002 | . . {from infra-red-emitting elements} | 9/003 | . {of the twin-wire type} |
| 5/003 | . . {Shutter means} | 9/006 | . . {paper or board consisting of two or more layers} |
| 5/004 | . {Drying webs by contact with heated surfaces or materials} | 9/02 | . of the Fourdrinier type |
| 5/005 | . . {in a fluid bed} | 9/04 | . of the cylinder type |
| 5/006 | . {Drying webs by using sonic vibrations} | 9/043 | . . {with immersed cylinder} |
| 5/007 | . {Drying webs by contact with sorbent bodies} | 9/046 | . . {with non-immersed cylinder} |
| 5/008 | . {Drying webs by direct contact with gas flames} | 11/00 | Processes for making continuous lengths of paper, or of cardboard, or of wet web for fibre board production, on paper-making machines |
| 5/009 | . {Drying webs by centrifugal treatment} | 11/002 | . {by using a foamed suspension} |
| 5/02 | . Drying on cylinders | 11/004 | . {by modification of the viscosity of the suspension} |
| 5/021 | . . {Construction of the cylinders} | 11/006 | . {Making patterned paper} |
| 5/022 | . . {Heating the cylinders} | 11/008 | . {Making apertured paper} |
| 5/024 | . . . {using electrical means} | 11/02 | . of the Fourdrinier type |
| 5/025 | . . . {using combustion gases} | 11/04 | . . paper or board consisting on two or more layers |
| 5/027 | . . . {using a heat-transfer fluid between the heating means and the cylinder shell} | 11/06 | . of the cylinder type |
| 5/028 | . . . {using steam} | 11/08 | . . paper or board consisting of two or more layers |
| 5/04 | . . on two or more drying cylinders | 11/10 | . Making imitation mould-made paper |
| 5/042 | . . . {in combination with suction or blowing devices} | 11/12 | . Making corrugated paper or board |
| 5/044 | {using air hoods over the cylinders} | 11/14 | . Making cellulose wadding, filter or blotting paper |
| 5/046 | {using pocket ventilation systems} | 11/145 | . . {including a through-drying process} |
| 5/048 | . . . {in combination with other heating means} | 11/16 | . Making paper strips for spinning or twisting |
| 5/06 | . . Regulating temperature | 13/00 | Making discontinuous sheets of paper, pulpboard or cardboard, or of wet web, for fibreboard production (making discontinuous sheets of board in moulds D21J; drying paper, pulpboard, or cardboard, in discontinuous sheet form F26B) |
| 5/08 | . . Arrangement of steam points in the cylinders | 13/02 | . Making hand-made paper |
| 5/10 | . . Removing condensate from the interior of the cylinders | 13/04 | . on cylinder board machines |
| 5/12 | . Festoon drying | 13/06 | . . Format rolls |
| 5/14 | . Drying webs by applying vacuum | 13/08 | . . . Automatic cut-off rolls |
| 5/143 | . . {through perforated cylinders} | 13/10 | . using board presses |
| 5/146 | . . {Vacuum seals} | 13/12 | . . Platen presses |
| 5/16 | . Drying webs by electrical heating | | |
| 5/162 | . . {Resistance heating} | | |
| 5/165 | . . {Inductive heating; Capacitive heating} | | |
| 5/167 | . . {Microwave heating} | | |
| 5/18 | . Drying webs by hot air | | |
| 5/181 | . . {on Yankee cylinder} | | |
| 5/182 | . . {through perforated cylinders} | | |
| 5/184 | . . . {Surfaces thereof} | | |
| 5/185 | . . {Supporting webs in hot air dryers} | | |
| 5/187 | . . . {by air jets} | | |
| 5/188 | {Blowing devices} | | |
| 5/20 | . Waste heat recovery | | |
| 7/00 | Other details of machines for making continuous webs of paper | | |
| 7/001 | . {Wire-changing arrangements} | | |
| 7/003 | . {Indicating or regulating the moisture content of the layer} | | |
| 7/005 | . {Wire-tensioning devices} | | |