

| Symbol | Typ | Titel |
|-------------------|---------------------|---|
| D | Sektion | SECTION D — TEXTILES; PAPER |
| D21 | Untersektion | PAPER |
| D21 | Klasse | PAPER-MAKING; PRODUCTION OF CELLULOSE |
| D21H | Unterklasse | PULP COMPOSITIONS; PREPARATION THEREOF NOT COVERED BY SUBCLASSES D21C, D21D; IMPREGNATING OR COATING OF PAPER; TREATMENT OF FINISHED PAPER NOT COVERED BY CLASS B31 OR SUBCLASS D21G; PAPER NOT OTHERWISE PROVIDED FOR [5] |
| D21H 11/00 | Hauptgruppe | Pulp or paper, comprising cellulose or lignocellulose fibres of natural origin only [5] |
| D21H 11/02 | 1-Punkt Untergruppe | . Chemical or chemomechanical pulp [5] |
| D21H 11/04 | 2-Punkt Untergruppe | . . Kraft or sulfate pulp [5] |
| D21H 11/06 | 2-Punkt Untergruppe | . . Sulfite or bisulfite pulp [5] |
| D21H 11/08 | 1-Punkt Untergruppe | . Mechanical or thermomechanical pulp [5] |
| D21H 11/10 | 1-Punkt Untergruppe | . Mixtures of chemical and mechanical pulp [5] |
| D21H 11/12 | 1-Punkt Untergruppe | . Pulp from non-woody plants or crops, e.g. cotton, flax, straw, bagasse [5] |
| D21H 11/14 | 1-Punkt Untergruppe | . Secondary fibres (working-up waste paper D21C 5/02) [5] |
| D21H 11/16 | 1-Punkt Untergruppe | . modified by a particular after-treatment [5] |
| D21H 11/18 | 2-Punkt Untergruppe | . . Highly hydrated, swollen or fibrillatable fibres [5] |
| D21H 11/20 | 2-Punkt Untergruppe | . . Chemically or biochemically modified fibres [5] |
| D21H 11/22 | 3-Punkt Untergruppe | . . . cationised [5] |
| D21H 13/00 | Hauptgruppe | Pulp or paper, comprising synthetic cellulose or non-cellulose fibres or web-forming material (chemical features in the manufacture of artificial fibres D01F) [5] |
| D21H 13/02 | 1-Punkt Untergruppe | . Synthetic cellulose fibres [5] |
| D21H 13/04 | 2-Punkt Untergruppe | . . Cellulose ethers [5] |
| D21H 13/06 | 2-Punkt Untergruppe | . . Cellulose esters [5] |
| D21H 13/08 | 2-Punkt Untergruppe | . . from regenerated cellulose [5] |
| D21H 13/10 | 1-Punkt Untergruppe | . Organic non-cellulose fibres [5] |
| D21H 13/12 | 2-Punkt Untergruppe | . . from macromolecular compounds obtained by reactions only involving carbon-to-carbon unsaturated bonds [5] |
| D21H 13/14 | 3-Punkt Untergruppe | . . . Polyalkenes, e.g. polystyrene [5] |
| D21H 13/16 | 3-Punkt Untergruppe | . . . Polyalkenylalcohols; Polyalkenylethers; Polyalkenylesters [5] |
| D21H 13/18 | 3-Punkt Untergruppe | . . . Polymers of unsaturated acids or derivatives thereof, e.g. polyacrylonitriles [5] |
| D21H 13/20 | 2-Punkt Untergruppe | . . from macromolecular compounds obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds [5] |
| D21H 13/22 | 3-Punkt Untergruppe | . . . Condensation polymers of aldehydes or ketones [5] |
| D21H 13/24 | 3-Punkt Untergruppe | . . . Polyesters [5] |

| Symbol | Typ | Titel |
|-------------------|---------------------|---|
| D21H 13/26 | 3-Punkt Untergruppe | . . . Polyamides; Polyimides [5] |
| D21H 13/28 | 2-Punkt Untergruppe | . . from natural polymers [5] |
| D21H 13/30 | 3-Punkt Untergruppe | . . . Non-cellulose polysaccharides [5] |
| D21H 13/32 | 4-Punkt Untergruppe | Alginate fibres [5] |
| D21H 13/34 | 3-Punkt Untergruppe | . . . Protein fibres [5] |
| D21H 13/36 | 1-Punkt Untergruppe | . Inorganic fibres or flakes [5] |
| D21H 13/38 | 2-Punkt Untergruppe | . . siliceous [5] |
| D21H 13/40 | 3-Punkt Untergruppe | . . . vitreous, e.g. mineral wool, glass fibres [5] |
| D21H 13/42 | 3-Punkt Untergruppe | . . . Asbestos [5] |
| D21H 13/44 | 3-Punkt Untergruppe | . . . Flakes, e.g. mica, vermiculite [5] |
| D21H 13/46 | 2-Punkt Untergruppe | . . Non-siliceous fibres, e.g. from metal oxides [5] |
| D21H 13/48 | 3-Punkt Untergruppe | . . . Metal or metallised fibres [5] |
| D21H 13/50 | 3-Punkt Untergruppe | . . . Carbon fibres [5] |
| D21H 15/00 | Hauptgruppe | Pulp or paper, comprising fibres or web-forming material characterised by features other than their chemical constitution [5] |
| D21H 15/02 | 1-Punkt Untergruppe | . characterised by configuration [5] |
| D21H 15/04 | 2-Punkt Untergruppe | . . crimped, kinked, curled or twisted fibres [5] |
| D21H 15/06 | 2-Punkt Untergruppe | . . Long fibres, i.e. fibres exceeding the upper length limit of conventional paper-making fibres; Filaments [5] |
| D21H 15/08 | 2-Punkt Untergruppe | . . Flakes (D21H 13/44 takes precedence) [5] |
| D21H 15/10 | 2-Punkt Untergruppe | . . Composite fibres [5] |
| D21H 15/12 | 3-Punkt Untergruppe | . . . partly organic, partly inorganic [5] |
| D21H 17/00 | Hauptgruppe | Non-fibrous material added to the pulp, characterised by its constitution; Paper-impregnating material characterised by its constitution [5] |
| D21H 17/01 | 1-Punkt Untergruppe | . Waste products, e.g. sludge [5] |
| D21H 17/02 | 1-Punkt Untergruppe | . Material of vegetable origin (proteins D21H 17/22; lignins D21H 17/23; polysaccharides D21H 17/24; rosin D21H 17/62) [5] |
| D21H 17/03 | 1-Punkt Untergruppe | . Non-macromolecular organic compounds [5] |
| D21H 17/04 | 2-Punkt Untergruppe | . . Hydrocarbons [5] |
| D21H 17/05 | 2-Punkt Untergruppe | . . containing elements other than carbon and hydrogen only [5] |
| D21H 17/06 | 3-Punkt Untergruppe | . . . Alcohols; Phenols; Ethers; Aldehydes; Ketones; Acetals; Ketals [5] |
| D21H 17/07 | 3-Punkt Untergruppe | . . . Nitrogen-containing compounds [5] |
| D21H 17/08 | 4-Punkt Untergruppe | Isocyanates [5] |
| D21H 17/09 | 3-Punkt Untergruppe | . . . Sulfur-containing compounds [5] |
| D21H 17/10 | 3-Punkt Untergruppe | . . . Phosphorus-containing compounds [5] |

| Symbol | Typ | Titel |
|------------|---------------------|---|
| D21H 17/11 | 3-Punkt Untergruppe | . . . Halides [5] |
| D21H 17/12 | 3-Punkt Untergruppe | . . . Organo-metallic compounds [5] |
| D21H 17/13 | 3-Punkt Untergruppe | . . . Silicon-containing compounds [5] |
| D21H 17/14 | 3-Punkt Untergruppe | . . . Carboxylic acids; Derivatives thereof [5] |
| D21H 17/15 | 4-Punkt Untergruppe | Polycarboxylic acids, e.g. maleic acid [5] |
| D21H 17/16 | 5-Punkt Untergruppe | Addition products thereof with hydrocarbons [5] |
| D21H 17/17 | 3-Punkt Untergruppe | . . . Ketenes, e.g. ketene dimers [5] |
| D21H 17/18 | 3-Punkt Untergruppe | . . . forming new compounds <u>in situ</u> , e.g. within the pulp or paper, by chemical reaction with itself, or other added substances [5] |
| D21H 17/19 | 4-Punkt Untergruppe | by reactions only involving carbon-to-carbon unsaturated bonds [5] |
| D21H 17/20 | 1-Punkt Untergruppe | . Macromolecular organic compounds [5] |
| D21H 17/21 | 2-Punkt Untergruppe | . . of natural origin; Derivatives thereof [5] |
| D21H 17/22 | 3-Punkt Untergruppe | . . . Proteins [5] |
| D21H 17/23 | 3-Punkt Untergruppe | . . . Lignins [5] |
| D21H 17/24 | 3-Punkt Untergruppe | . . . Polysaccharides [5] |
| D21H 17/25 | 4-Punkt Untergruppe | Cellulose [5] |
| D21H 17/26 | 5-Punkt Untergruppe | Ethers thereof [5] |
| D21H 17/27 | 5-Punkt Untergruppe | Esters thereof [5] |
| D21H 17/28 | 4-Punkt Untergruppe | Starch [5] |
| D21H 17/29 | 5-Punkt Untergruppe | cationic [5] |
| D21H 17/30 | 4-Punkt Untergruppe | Alginic acid or alginates [5] |
| D21H 17/31 | 4-Punkt Untergruppe | Gums [5] |
| D21H 17/32 | 5-Punkt Untergruppe | Guar gum [5] |
| D21H 17/33 | 2-Punkt Untergruppe | . . Synthetic macromolecular compounds [5] |
| D21H 17/34 | 3-Punkt Untergruppe | . . . obtained by reactions only involving carbon-to-carbon unsaturated bonds [5] |
| D21H 17/35 | 4-Punkt Untergruppe | Polyalkenes, e.g. polystyrene [5] |
| D21H 17/36 | 4-Punkt Untergruppe | Polyalkenylalcohols; Polyalkenylethers; Polyalkenylesters [5] |
| D21H 17/37 | 4-Punkt Untergruppe | Polymers of unsaturated acids or derivatives thereof, e.g. polyacrylates [5] |
| D21H 17/38 | 4-Punkt Untergruppe | containing crosslinkable groups [5] |
| D21H 17/39 | 5-Punkt Untergruppe | forming ether crosslinkages, e.g. alkylol groups [5] |
| D21H 17/40 | 5-Punkt Untergruppe | unsaturated [5] |
| D21H 17/41 | 4-Punkt Untergruppe | containing ionic groups [5] |

| Symbol | Typ | Titel |
|------------|---------------------|---|
| D21H 17/42 | 5-Punkt Untergruppe | anionic [5] |
| D21H 17/43 | 6-Punkt Untergruppe | Carboxyl groups or derivatives thereof [5] |
| D21H 17/44 | 5-Punkt Untergruppe | cationic [5] |
| D21H 17/45 | 6-Punkt Untergruppe | Nitrogen-containing groups [5] |
| D21H 17/46 | 3-Punkt Untergruppe | . . . obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds [5] |
| D21H 17/47 | 4-Punkt Untergruppe | Condensation polymers of aldehydes or ketones [5] |
| D21H 17/48 | 5-Punkt Untergruppe | with phenols [5] |
| D21H 17/49 | 5-Punkt Untergruppe | with compounds containing hydrogen bound to nitrogen [5] |
| D21H 17/50 | 6-Punkt Untergruppe | Acyclic compounds [5] |
| D21H 17/51 | 6-Punkt Untergruppe | Triazines, e.g. melamine [5] |
| D21H 17/52 | 4-Punkt Untergruppe | Epoxy resins [5] |
| D21H 17/53 | 4-Punkt Untergruppe | Polyethers; Polyesters [5] |
| D21H 17/54 | 4-Punkt Untergruppe | obtained by reactions forming in the main chain of the macromolecule a linkage containing nitrogen [5] |
| D21H 17/55 | 5-Punkt Untergruppe | Polyamides; Polyaminoamides; Polyester-amides [5] |
| D21H 17/56 | 5-Punkt Untergruppe | Polyamines; Polyimines; Polyester-imides [5] |
| D21H 17/57 | 5-Punkt Untergruppe | Polyureas; Polyurethanes [5] |
| D21H 17/58 | 4-Punkt Untergruppe | obtained by reactions forming in the main chain of the macromolecule a linkage containing sulfur [5] |
| D21H 17/59 | 4-Punkt Untergruppe | obtained by reactions forming in the main chain of the macromolecule a linkage containing silicon [5] |
| D21H 17/60 | 1-Punkt Untergruppe | . Waxes [5] |
| D21H 17/61 | 1-Punkt Untergruppe | . Bitumen [5] |
| D21H 17/62 | 1-Punkt Untergruppe | . Rosin; Derivatives thereof [5] |
| D21H 17/63 | 1-Punkt Untergruppe | . Inorganic compounds [5] |
| D21H 17/64 | 2-Punkt Untergruppe | . . Alkaline compounds [5] |
| D21H 17/65 | 2-Punkt Untergruppe | . . Acid compounds [5] |
| D21H 17/66 | 2-Punkt Untergruppe | . . Salts, e.g. alums [5] |
| D21H 17/67 | 2-Punkt Untergruppe | . . Water-insoluble compounds, e.g. fillers, pigments [5] |
| D21H 17/68 | 3-Punkt Untergruppe | . . . siliceous, e.g. clays [5] |
| D21H 17/69 | 3-Punkt Untergruppe | . . . modified, e.g. by association with other compositions prior to incorporation in the pulp or paper [5] |
| D21H 17/70 | 2-Punkt Untergruppe | . . forming new compounds <u>in situ</u> , e.g. within the pulp or paper, by chemical reaction with other substances added separately [5] |
| D21H 17/71 | Gelöscht | (covered by D21H 17/00) |
| D21H 17/72 | Gelöscht | (covered by D21H 17/00) |
| D21H 17/73 | Gelöscht | (covered by D21H 17/00) |

| Symbol | Typ | Titel |
|-------------------|---------------------|---|
| D21H 17/74 | Gelöscht | (covered by D21H 17/00) |
| D21H 19/00 | Hauptgruppe | Coated paper (coated fibreboard D21J 1/08); Coating material (recording sheets characterised by the coating used to improve ink, dye or pigment receptivity B41M 5/50) [5] |
| D21H 19/02 | 1-Punkt Untergruppe | . Metal coatings (D21H 19/66 takes precedence) [5] |
| D21H 19/04 | 2-Punkt Untergruppe | . . applied as foil [5] |
| D21H 19/06 | 2-Punkt Untergruppe | . . applied as liquid or powder [5] |
| D21H 19/08 | 2-Punkt Untergruppe | . . applied as vapour, e.g. in vacuum [5] |
| D21H 19/10 | 1-Punkt Untergruppe | . Coatings without pigments (D21H 19/66 takes precedence) [5] |
| D21H 19/12 | 2-Punkt Untergruppe | . . applied as a solution using water as the only solvent, e.g. in the presence of acid or alkaline compounds [5] |
| D21H 19/14 | 2-Punkt Untergruppe | . . applied in a form other than the aqueous solution defined in group D21H 19/12 [5] |
| D21H 19/16 | 3-Punkt Untergruppe | . . . comprising curable or polymerisable compounds (D21H 19/24 takes precedence) [5] |
| D21H 19/18 | 3-Punkt Untergruppe | . . . comprising waxes [5] |
| D21H 19/20 | 3-Punkt Untergruppe | . . . comprising macromolecular compounds obtained by reactions only involving carbon-to-carbon unsaturated bonds [5] |
| D21H 19/22 | 4-Punkt Untergruppe | Polyalkenes, e.g. polystyrene [5] |
| D21H 19/24 | 3-Punkt Untergruppe | . . . comprising macromolecular compounds obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds [5] |
| D21H 19/26 | 4-Punkt Untergruppe | Aminoplasts [5] |
| D21H 19/28 | 4-Punkt Untergruppe | Polyesters [5] |
| D21H 19/30 | 4-Punkt Untergruppe | Polyamides; Polyimides [5] |
| D21H 19/32 | 4-Punkt Untergruppe | obtained by reactions forming a linkage containing silicon in the main chain of the macromolecule [5] |
| D21H 19/34 | 3-Punkt Untergruppe | . . . comprising cellulose or derivatives thereof [5] |
| D21H 19/36 | 1-Punkt Untergruppe | . Coatings with pigments (D21H 19/66 takes precedence; metal powder D21H 19/06) [5] |
| D21H 19/38 | 2-Punkt Untergruppe | . . characterised by the pigments [5] |
| D21H 19/40 | 3-Punkt Untergruppe | . . . siliceous, e.g. clays [5] |
| D21H 19/42 | 3-Punkt Untergruppe | . . . at least partly organic [5] |
| D21H 19/44 | 2-Punkt Untergruppe | . . characterised by the other ingredients, e.g. the binder or dispersing agent [5] |
| D21H 19/46 | 3-Punkt Untergruppe | . . . Non-macromolecular organic compounds [5] |
| D21H 19/48 | 4-Punkt Untergruppe | Diolefins, e.g. butadiene; Aromatic vinyl monomers, e.g. styrene; Polymerisable unsaturated acids or derivatives thereof, e.g. acrylic acid [5] |
| D21H 19/50 | 3-Punkt Untergruppe | . . . Proteins [5] |
| D21H 19/52 | 3-Punkt Untergruppe | . . . Cellulose; Derivatives thereof [5] |
| D21H 19/54 | 3-Punkt Untergruppe | . . . Starch [5] |
| D21H 19/56 | 3-Punkt Untergruppe | . . . Macromolecular organic compounds or oligomers thereof obtained by reactions only involving carbon-to-carbon unsaturated bonds [5] |

| Symbol | Typ | Titel |
|-------------------|---------------------|---|
| D21H 19/58 | 4-Punkt Untergruppe | Polymers or oligomers of diolefins, aromatic vinyl monomers or unsaturated acids or derivatives thereof [5] |
| D21H 19/60 | 4-Punkt Untergruppe | Polyalkenylalcohols; Polyalkenylethers; Polyalkenylesters [5] |
| D21H 19/62 | 3-Punkt Untergruppe | . . . Macromolecular organic compounds or oligomers thereof obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds [5] |
| D21H 19/64 | 3-Punkt Untergruppe | . . . Inorganic compounds [5] |
| D21H 19/66 | 1-Punkt Untergruppe | . Coatings characterised by a special visual effect, e.g. patterned, textured (marbled paper D21H 27/04) [5] |
| D21H 19/68 | 2-Punkt Untergruppe | . . uneven, broken, discontinuous [5] |
| D21H 19/70 | 2-Punkt Untergruppe | . . with internal voids, e.g. bubble coatings [5] |
| D21H 19/72 | 1-Punkt Untergruppe | . Coated paper characterised by the paper substrate [5] |
| D21H 19/74 | 2-Punkt Untergruppe | . . the substrate having an uneven surface, e.g. crêped or corrugated paper [5] |
| D21H 19/76 | 2-Punkt Untergruppe | . . the substrate having specific absorbent properties [5] |
| D21H 19/78 | 3-Punkt Untergruppe | . . . being substantially impervious to the coating [5] |
| D21H 19/80 | 1-Punkt Untergruppe | . Paper comprising more than one coating (D21H 19/02 takes precedence) [5] |
| D21H 19/82 | 2-Punkt Untergruppe | . . superposed [5] |
| D21H 19/84 | 2-Punkt Untergruppe | . . on both sides of the substrate [5] |
| D21H 21/00 | Hauptgruppe | Non-fibrous material added to the pulp, characterised by its function, form or properties; Paper impregnating or coating material, characterised by its function, form or properties [5] |
| D21H 21/02 | 1-Punkt Untergruppe | . Agents for preventing deposition on the paper mill equipment, e.g. pitch or slime control (removal of fats, resins, pitch, or waxes D21C 9/08) [5] |
| D21H 21/04 | 2-Punkt Untergruppe | . . Slime-control agents [5] |
| D21H 21/06 | 1-Punkt Untergruppe | . Paper forming aids [5] |
| D21H 21/08 | 2-Punkt Untergruppe | . . Dispersing agents for fibres [5] |
| D21H 21/10 | 2-Punkt Untergruppe | . . Retention agents or drainage improvers [5] |
| D21H 21/12 | 2-Punkt Untergruppe | . . Defoamers [5] |
| D21H 21/14 | 1-Punkt Untergruppe | . characterised by function or properties in or on the paper (D21H 19/66, D21H 27/02 take precedence) [5] |
| D21H 21/16 | 2-Punkt Untergruppe | . . Sizing or water-repelling agents [5] |
| D21H 21/18 | 2-Punkt Untergruppe | . . Reinforcing agents [5] |
| D21H 21/20 | 3-Punkt Untergruppe | . . . Wet strength agents [5] |
| D21H 21/22 | 2-Punkt Untergruppe | . . Agents rendering paper porous, absorbent or bulky [5] |
| D21H 21/24 | 3-Punkt Untergruppe | . . . Surfactants [5] |
| D21H 21/26 | 2-Punkt Untergruppe | . . Agents rendering paper transparent or translucent [5] |
| D21H 21/28 | 2-Punkt Untergruppe | . . Colorants [5] |
| D21H 21/30 | 2-Punkt Untergruppe | . . Luminescent or fluorescent substances, e.g. for optical bleaching (D21H 21/40 takes precedence) [5] |

| Symbol | Typ | Titel |
|-------------------|---------------------|--|
| D21H 21/32 | 2-Punkt Untergruppe | . . Bleaching agents (bleaching cellulose pulp D21C 9/10) [5] |
| D21H 21/34 | 2-Punkt Untergruppe | . . Ignifugeants [5] |
| D21H 21/36 | 2-Punkt Untergruppe | . . Biocidal agents, e.g. fungicidal, bactericidal, insecticidal agents [5] |
| D21H 21/38 | 2-Punkt Untergruppe | . . Corrosion-inhibiting agents or anti-oxidants [5] |
| D21H 21/40 | 2-Punkt Untergruppe | . . Agents facilitating proof of genuineness or preventing fraudulent alteration, e.g. for security paper (watermarking B41M 3/10, D21F 1/44; security printing B41M 3/14; securities or banknotes characterised by colour effects B44F 1/12; testing paper currency or valuable papers for genuineness G07D 7/00) [5] |
| D21H 21/42 | 3-Punkt Untergruppe | . . . Ribbons or strips (filaments D21H 15/06) [5] |
| D21H 21/44 | 3-Punkt Untergruppe | . . . Latent security elements, i.e. detectable or becoming apparent only by use of special verification or tampering devices or methods [5] |
| D21H 21/46 | 4-Punkt Untergruppe | Elements suited for chemical verification or impeding chemical tampering, e.g. by use of eradicators [5] |
| D21H 21/48 | 4-Punkt Untergruppe | Elements suited for physical verification, e.g. by irradiation [5] |
| D21H 21/50 | 1-Punkt Untergruppe | . characterised by form (D21H 19/66, D21H 21/42, D21H 27/02 take precedence) [5] |
| D21H 21/52 | 2-Punkt Untergruppe | . . Additives of definite length or shape [5] |
| D21H 21/54 | 3-Punkt Untergruppe | . . . being spherical, e.g. microcapsules, beads [5] |
| D21H 21/56 | 2-Punkt Untergruppe | . . Foam [5] |
| D21H 23/00 | Hauptgruppe | Processes or apparatus for adding material to the pulp or to the paper (applying liquids or other fluent material to surfaces, in general B05; processes for making continuous lengths of paper D21F 11/00) [5] |
| D21H 23/02 | 1-Punkt Untergruppe | . characterised by the manner in which substances are added [5] |
| D21H 23/04 | 2-Punkt Untergruppe | . . Addition to the pulp; After-treatment of added substances in the pulp [5] |
| D21H 23/06 | 3-Punkt Untergruppe | . . . Controlling the addition [5] |
| D21H 23/08 | 4-Punkt Untergruppe | by measuring pulp properties, e.g. zeta potential, pH [5] |
| D21H 23/10 | 5-Punkt Untergruppe | at least two kinds of compounds being added [5] |
| D21H 23/12 | 4-Punkt Untergruppe | by measuring properties of the formed web [5] |
| D21H 23/14 | 4-Punkt Untergruppe | by selecting point of addition or time of contact between components [5] |
| D21H 23/16 | 5-Punkt Untergruppe | Addition before or during pulp beating or refining (disintegrating fibrous raw materials in mills in the presence of chemical agents D21B 1/16; methods of beating D21D 1/02; methods of refining D21D 1/20) [5] |
| D21H 23/18 | 5-Punkt Untergruppe | Addition at a location where shear forces are avoided before sheet-forming, e.g. after pulp beating or refining [5] |
| D21H 23/20 | 3-Punkt Untergruppe | . . . Apparatus therefor [5] |
| D21H 23/22 | 2-Punkt Untergruppe | . . Addition to the formed paper [5] |
| D21H 23/24 | 3-Punkt Untergruppe | . . . during paper manufacture [5] |
| D21H 23/26 | 4-Punkt Untergruppe | by selecting point of addition or moisture content of the paper [5] |
| D21H 23/28 | 5-Punkt Untergruppe | Addition before the dryer section, e.g. at the wet end or press section [5] |

| Symbol | Typ | Titel |
|-------------------|---------------------|---|
| D21H 23/30 | 3-Punkt Untergruppe | . . . Pretreatment of the paper (D21H 23/70, D21H 23/76 take precedence) [5] |
| D21H 23/32 | 3-Punkt Untergruppe | . . . by contacting paper with an excess of material, e.g. from a reservoir or in a manner necessitating removal of applied excess material from the paper (D21H 23/66 takes precedence; removing excess material D21H 25/08) [5] |
| D21H 23/34 | 4-Punkt Untergruppe | Knife or blade type coaters [5] |
| D21H 23/36 | 5-Punkt Untergruppe | Knife or blade forming part of the fluid reservoir, e.g. puddle-type trailing blade [5] |
| D21H 23/38 | 5-Punkt Untergruppe | the fluid material being applied with a special device, e.g. with a roll in a flooded-nip inverted blade coater [5] |
| D21H 23/40 | 4-Punkt Untergruppe | only one side of the paper being in contact with the material (D21H 23/34 takes precedence) [5] |
| D21H 23/42 | 4-Punkt Untergruppe | Paper being at least partly surrounded by the material on both sides (D21H 23/34 takes precedence) [5] |
| D21H 23/44 | 5-Punkt Untergruppe | Treatment with a gas or vapour [5] |
| D21H 23/46 | 3-Punkt Untergruppe | . . . Pouring or allowing the fluid to flow in a continuous stream on to the surface, the entire stream being carried away by the paper (D21H 23/66 takes precedence) [5] |
| D21H 23/48 | 4-Punkt Untergruppe | Curtain coaters [5] |
| D21H 23/50 | 3-Punkt Untergruppe | . . . Spraying or projecting (D21H 23/44, D21H 23/66 take precedence) [5] |
| D21H 23/52 | 3-Punkt Untergruppe | . . . by contacting paper with a device carrying the material (D21H 23/32, D21H 23/46, D21H 23/66 take precedence) [5] |
| D21H 23/54 | 4-Punkt Untergruppe | Rubbing devices, e.g. brush, pad, felt [5] |
| D21H 23/56 | 4-Punkt Untergruppe | Rolls (D21H 23/38 takes precedence) [5] |
| D21H 23/58 | 5-Punkt Untergruppe | Details thereof, e.g. surface characteristics, peripheral speed [5] |
| D21H 23/60 | 6-Punkt Untergruppe | the material on the applicator roll being subjected to a particular treatment before applying to the paper (D21H 23/64 takes precedence) [5] |
| D21H 23/62 | 6-Punkt Untergruppe | Reverse roll coating, i.e. applicator roll surface moving in direction opposite to that of the paper [5] |
| D21H 23/64 | 4-Punkt Untergruppe | the material being non-fluent at the moment of transfer, e.g. in form of preformed, at least partially hardened coating [5] |
| D21H 23/66 | 3-Punkt Untergruppe | . . . Treating discontinuous paper, e.g. sheets, blanks, rolls [5] |
| D21H 23/68 | 4-Punkt Untergruppe | whereby the paper moves continuously [5] |
| D21H 23/70 | 3-Punkt Untergruppe | . . . Multistep processes; Apparatus for adding one or several substances in portions or in various ways to the paper, not covered by another single group of this main group [5] |
| D21H 23/72 | 4-Punkt Untergruppe | Plural serial stages only [5] |
| D21H 23/74 | 4-Punkt Untergruppe | Apparatus permitting switching from one technique to another [5] |
| D21H 23/76 | 1-Punkt Untergruppe | . characterised by choice of auxiliary compounds which are added separately from at least one other compound, e.g. to improve the incorporation of the latter or to obtain an enhanced combined effect (D21H 17/18, D21H 17/70, D21H 23/10 take precedence) [5] |
| D21H 23/78 | 1-Punkt Untergruppe | . Controlling or regulating not limited to any particular process or apparatus [5] |
| D21H 25/00 | Hauptgruppe | After-treatment of paper not provided for in groups D21H 17/00-D21H 23/00 [5] |
| D21H 25/02 | 1-Punkt Untergruppe | . Chemical or biochemical treatment (D21H 25/18 takes precedence) [5] |

| Symbol | Typ | Titel |
|-------------------|---------------------|---|
| D21H 25/04 | 1-Punkt Untergruppe | . Physical treatment, e.g. heating, irradiating (D21H 25/18 takes precedence; dryer section of machines for making continuous webs of paper D21F 5/00) [5] |
| D21H 25/06 | 2-Punkt Untergruppe | . . of impregnated or coated paper (D21H 25/08 takes precedence) [5] |
| D21H 25/08 | 1-Punkt Untergruppe | . Rearranging applied substances, e.g. metering, smoothing; Removing excess material [5] |
| D21H 25/10 | 2-Punkt Untergruppe | . . with blades [5] |
| D21H 25/12 | 2-Punkt Untergruppe | . . with an essentially cylindrical body, e.g. roll or rod [5] |
| D21H 25/14 | 3-Punkt Untergruppe | . . . the body being a casting drum [5] |
| D21H 25/16 | 2-Punkt Untergruppe | . . with a blast of vapour or gas, e.g. air knife [5] |
| D21H 25/18 | 1-Punkt Untergruppe | . of old paper as in books, documents, e.g. restoring [5] |
| D21H 27/00 | Hauptgruppe | Special paper not otherwise provided for, e.g. made by multi-step processes [5] |
| D21H 27/02 | 1-Punkt Untergruppe | . Patterned paper (patterned coatings D21H 19/66; embossing B31F 1/07; prepared on the paper-making machines D21F 11/00) [5] |
| D21H 27/04 | 2-Punkt Untergruppe | . . marbled [5] |
| D21H 27/06 | 1-Punkt Untergruppe | . Vegetable or imitation parchment; Glassine paper [5] |
| D21H 27/08 | 1-Punkt Untergruppe | . Filter paper (self-supporting filtering material B01D 39/14; making on paper-making machines D21F 11/14) [5] |
| D21H 27/10 | 1-Punkt Untergruppe | . Packing paper (packaging materials of special type or form B65D 65/38) [5] |
| D21H 27/12 | 1-Punkt Untergruppe | . Electrically-insulating paper [5] |
| D21H 27/14 | 1-Punkt Untergruppe | . Paper having stable form or dimension; Curl-resistant paper (anticoil photographic support G03C 1/81) [5] |
| D21H 27/16 | 1-Punkt Untergruppe | . Pure paper, i.e. paper lacking or having low content of contaminants (after-treatment of cellulose pulp D21C 9/00) [5] |
| D21H 27/18 | 1-Punkt Untergruppe | . Paper- or board-based structures for surface covering [5] |
| D21H 27/20 | 2-Punkt Untergruppe | . . Flexible structures being applied by the user, e.g. wallpaper (printed wallpapers B41M 3/18; paperhanging B44C 7/00; pregummed wallpaper C09J 7/04) [5] |
| D21H 27/22 | 2-Punkt Untergruppe | . . Structures being applied on the surface by special manufacturing processes, e.g. in presses [5] |
| D21H 27/24 | 3-Punkt Untergruppe | . . . characterised by the surface to be covered being phenolic-resin paper laminates, vulcan fibre or similar cellulosic fibreboards [5] |
| D21H 27/26 | 3-Punkt Untergruppe | . . . characterised by the overlay sheet or the top layers of the structures (decorative panels B44C 5/04; wood grain effects B44F 9/02) [5] |
| D21H 27/28 | 4-Punkt Untergruppe | treated to obtain specific resistance properties, e.g. against wear or weather (water-repelling agents D21H 21/16) [5] |
| D21H 27/30 | 1-Punkt Untergruppe | . Multi-ply (for surface covering D21H 27/18; making on paper-making machines D21F 9/00, D21F 11/00) [5] |
| D21H 27/32 | 2-Punkt Untergruppe | . . with materials applied between the sheets (attaching together paper or cardboard sheets B31F 5/00; adhesives C09J) [5] |
| D21H 27/34 | 3-Punkt Untergruppe | . . . Continuous materials, e.g. filaments, sheets, nets [5] |
| D21H 27/36 | 4-Punkt Untergruppe | Films made from synthetic macromolecular compounds [5] |
| D21H 27/38 | 2-Punkt Untergruppe | . . at least one of the sheets having a fibrous composition differing from that of other sheets [5] |

| Symbol | Typ | Titel |
|------------|---------------------|--|
| D21H 27/40 | 2-Punkt Untergruppe | . . at least one of the sheets being non-planar, e.g. crêped (creping or corrugating paper B31F) [5] |
| D21H 27/42 | 2-Punkt Untergruppe | . . comprising dry-laid paper [5] |