

| Symbol | Typ | Titel |
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| B | Sektion | SECTION B — PERFORMING OPERATIONS; TRANSPORTING |
| B41 | Untersektion | PRINTING |
| B41 | Klasse | PRINTING; LINING MACHINES; TYPEWRITERS; STAMPS (reproduction or duplication of pictures or patterns by scanning and converting into electrical signals H04N) [4] |
| B41J | Unterklasse | TYPEWRITERS; SELECTIVE PRINTING MECHANISMS, i.e. MECHANISMS PRINTING OTHERWISE THAN FROM A FORME; CORRECTION OF TYPOGRAPHICAL ERRORS (composing B41B; printing on special surfaces B41F; laundry marking B41K; erasers, rubbers or erasing devices B43L 19/00; fluid media for correction of typographical errors by coating C09D 10/00; recording the results of measuring G01; recognition or presentation of data, marking record carriers in digital fashion, e.g. by punching, G06K ; franking or ticket-printing and issuing apparatus G07B; electric keyboard switches, in general H01H 13/70, H03K 17/94; coding in connection with keyboards or like devices, in general H03M 11/00; receivers or transmitters for transmission of digital information H04L; transmission or reproduction of documents, or the like, e.g. facsimile transmission, H04N 1/00; printing mechanisms specially adapted for apparatus, e.g. cash registers, weighing machines, producing records of their own performance, <u>see</u> the relevant subclasses) |
| | | <u>Kinds of typewriters or of selective printing mechanisms</u> |
| B41J 1/00 | Hauptgruppe | Typewriters or selective printing mechanisms characterised by the mounting, arrangement, or disposition of the types or dies (non-selective embossing B44B 5/00) |
| B41J 1/02 | 1-Punkt Untergruppe | . with separate or detached types or dies |
| B41J 1/04 | 1-Punkt Untergruppe | . with types or dies carried upon levers or radial arms, e.g. manually operated (B41J 1/16 takes precedence) |
| B41J 1/06 | 2-Punkt Untergruppe | . . on power-operated levers or arms |
| B41J 1/08 | 1-Punkt Untergruppe | . with types or dies carried on sliding bars or rods |
| B41J 1/10 | 2-Punkt Untergruppe | . . on end surfaces thereof |
| B41J 1/12 | 2-Punkt Untergruppe | . . on side surfaces thereof, e.g. fixed thereto |
| B41J 1/14 | 3-Punkt Untergruppe | . . . the types or dies being movable relative to the bars or rods (mounted on flexible bars or rods B41J 1/16) |
| B41J 1/16 | 1-Punkt Untergruppe | . with types or dies arranged in stationary or sliding cases or frames or upon flexible strips, plates, bars, or rods |
| B41J 1/18 | 1-Punkt Untergruppe | . with types or dies strung on wires or rods |
| B41J 1/20 | 1-Punkt Untergruppe | . with types or dies mounted on endless bands or the like |
| B41J 1/22 | 1-Punkt Untergruppe | . with types or dies mounted on carriers rotatable for selection |
| B41J 1/24 | 2-Punkt Untergruppe | . . the plane of the type or die face being perpendicular to the axis of rotation (B41J 1/60 takes precedence) |
| B41J 1/26 | 3-Punkt Untergruppe | . . . Carriers moving for impression (B41J 1/27 takes precedence) [3] |
| B41J 1/27 | 3-Punkt Untergruppe | . . . Carriers moving during impression [3] |
| B41J 1/28 | 3-Punkt Untergruppe | . . . Carriers stationary for impression, e.g. with the types or dies not moving relative to the carriers |
| B41J 1/30 | 4-Punkt Untergruppe | with the types or dies moving relative to the carriers or mounted on flexible carriers |
| B41J 1/32 | 2-Punkt Untergruppe | . . the plane of the type or die face being parallel to the axis of rotation, e.g. with type on the periphery of cylindrical carriers (B41J 1/60 takes precedence) |

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| B41J 1/34 | 3-Punkt Untergruppe | . . . Carriers rotating during impression |
| B41J 1/36 | 3-Punkt Untergruppe | . . . Carriers sliding for impression, e.g. manually operated |
| B41J 1/38 | 4-Punkt Untergruppe | power operated |
| B41J 1/40 | 3-Punkt Untergruppe | . . . Carriers swinging for impression |
| B41J 1/42 | 4-Punkt Untergruppe | about an axis parallel to the axis of rotation of the carrier |
| B41J 1/44 | 3-Punkt Untergruppe | . . . Carriers stationary for impression |
| B41J 1/46 | 4-Punkt Untergruppe | Types or dies fixed on wheel, drum, cylinder, or like carriers |
| B41J 1/48 | 5-Punkt Untergruppe | with a plurality of carriers, one for each character space |
| B41J 1/50 | 5-Punkt Untergruppe | with one or more carriers travelling across copy material in letter-space direction |
| B41J 1/52 | 5-Punkt Untergruppe | with copy material moving in the letter-space direction, and carrier mounting being fixed relative to the machine |
| B41J 1/54 | 4-Punkt Untergruppe | Types or dies movable on wheel, drum, cylinder, or like carriers |
| B41J 1/56 | 4-Punkt Untergruppe | Types or dies on shuttles or like loose carriers |
| B41J 1/58 | 4-Punkt Untergruppe | Types or dies upon arcuate bars |
| B41J 1/60 | 1-Punkt Untergruppe | . with types or dies on spherical, truncated-spherical, or like surfaces |
| B41J 2/00 | Hauptgruppe | Typewriters or selective printing mechanisms characterised by the printing or marking process for which they are designed (mounting, arrangement, or disposition of types or dies B41J 1/00; marking methods B41M 5/00; structure or manufacture of heads, e.g. inductive, for recording by magnetisation or demagnetisation of a record carrier G11B 5/127; heads for reproducing capacitive information G11B 9/07) [5] |
| B41J 2/005 | 1-Punkt Untergruppe | . characterised by bringing liquid or particles selectively into contact with a printing material (printing by selective application of impact or pressure on a printing or impression-transfer material B41J 2/22) [5] |
| B41J 2/01 | 2-Punkt Untergruppe | . . Ink jet [5] |
| B41J 2/015 | 3-Punkt Untergruppe | . . . characterised by the jet generation process (B41J 2/215 takes precedence) [5] |
| B41J 2/02 | 4-Punkt Untergruppe | generating a continuous ink jet [5] |
| B41J 2/025 | 5-Punkt Untergruppe | by vibration [5] |
| B41J 2/03 | 5-Punkt Untergruppe | by pressure [5] |
| B41J 2/035 | 5-Punkt Untergruppe | by electric or magnetic field [5] |
| B41J 2/04 | 4-Punkt Untergruppe | generating single droplets or particles on demand [5] |
| B41J 2/045 | 5-Punkt Untergruppe | by pressure, e.g. electromechanical transducers [5] |
| B41J 2/05 | 6-Punkt Untergruppe | produced by the application of heat [5] |
| B41J 2/055 | 6-Punkt Untergruppe | Devices for absorbing or preventing back-pressure [5] |
| B41J 2/06 | 5-Punkt Untergruppe | by electric or magnetic field [5] |
| B41J 2/065 | 6-Punkt Untergruppe | involving the preliminary making of ink protuberances [5] |
| B41J 2/07 | 3-Punkt Untergruppe | . . . characterised by jet control (B41J 2/205 takes precedence) [5] |

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| B41J 2/075 | 4-Punkt Untergruppe | for many-valued deflection [5] |
| B41J 2/08 | 5-Punkt Untergruppe | charge-control type [5] |
| B41J 2/085 | 6-Punkt Untergruppe | Charge means, e.g. electrodes [5] |
| B41J 2/09 | 6-Punkt Untergruppe | Deflection means [5] |
| B41J 2/095 | 5-Punkt Untergruppe | electric field-control type [5] |
| B41J 2/10 | 5-Punkt Untergruppe | magnetic field-control type [5] |
| B41J 2/105 | 4-Punkt Untergruppe | for binary-valued deflection [5] |
| B41J 2/11 | 4-Punkt Untergruppe | for ink spray [5] |
| B41J 2/115 | 4-Punkt Untergruppe | synchronising the droplet separation and charging time [5] |
| B41J 2/12 | 4-Punkt Untergruppe | testing or correcting charge or deflection [5] |
| B41J 2/125 | 4-Punkt Untergruppe | Sensors, e.g. deflection sensors [5] |
| B41J 2/13 | 4-Punkt Untergruppe | for inclination of printed pattern [5] |
| B41J 2/135 | 3-Punkt Untergruppe | . . . Nozzles [5] |
| B41J 2/14 | 4-Punkt Untergruppe | Structure thereof [5] |
| B41J 2/145 | 4-Punkt Untergruppe | Arrangement thereof [5] |
| B41J 2/15 | 5-Punkt Untergruppe | for serial printing [5] |
| B41J 2/155 | 5-Punkt Untergruppe | for line printing [5] |
| B41J 2/16 | 4-Punkt Untergruppe | Production of nozzles [5] |
| B41J 2/165 | 4-Punkt Untergruppe | Prevention of nozzle clogging, e.g. cleaning, capping or moistening for nozzles [5] |
| B41J 2/17 | 3-Punkt Untergruppe | . . . characterised by ink handling [5] |
| B41J 2/175 | 4-Punkt Untergruppe | Ink supply systems [5] |
| B41J 2/18 | 4-Punkt Untergruppe | Ink recirculation systems [5] |
| B41J 2/185 | 5-Punkt Untergruppe | Ink-collectors; Ink-catchers [5] |
| B41J 2/19 | 4-Punkt Untergruppe | for removing air bubbles [5] |
| B41J 2/195 | 4-Punkt Untergruppe | for monitoring ink quality [5] |
| B41J 2/20 | 4-Punkt Untergruppe | for preventing or detecting contamination of compounds [5] |
| B41J 2/205 | 3-Punkt Untergruppe | . . . for printing a discrete number of tones (B41J 2/21 takes precedence) [5] |
| B41J 2/21 | 3-Punkt Untergruppe | . . . for multi-colour printing [5] |
| B41J 2/215 | 2-Punkt Untergruppe | . . by passing a medium, e.g. consisting of an air or particle stream, through an ink mist [5] |
| B41J 2/22 | 1-Punkt Untergruppe | . characterised by selective application of impact or pressure on a printing material or impression- transfer material [5] |
| B41J 2/225 | 2-Punkt Untergruppe | . . ballistic, e.g. using solid balls or pellets [5] |

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| B41J 2/23 | 2-Punkt Untergruppe | . . using print wires [5] |
| B41J 2/235 | 3-Punkt Untergruppe | . . . Print head assemblies [5] |
| B41J 2/24 | 4-Punkt Untergruppe | serial printer type (B41J 2/25, B41J 2/265 take precedence) [5] |
| B41J 2/245 | 4-Punkt Untergruppe | line printer type (B41J 2/25, B41J 2/265 take precedence) [5] |
| B41J 2/25 | 4-Punkt Untergruppe | Print wires [5] |
| B41J 2/255 | 5-Punkt Untergruppe | Arrangement of the print ends of the wires [5] |
| B41J 2/26 | 5-Punkt Untergruppe | Connection of print wire and actuator [5] |
| B41J 2/265 | 4-Punkt Untergruppe | Guides for print wires [5] |
| B41J 2/27 | 3-Punkt Untergruppe | . . . Actuators for print wires [5] |
| B41J 2/275 | 4-Punkt Untergruppe | of clapper type (B41J 2/28 takes precedence) [5] |
| B41J 2/28 | 4-Punkt Untergruppe | of spring charge type, i.e. with mechanical power under electro-magnetic control [5] |
| B41J 2/285 | 4-Punkt Untergruppe | of plunger type [5] |
| B41J 2/29 | 4-Punkt Untergruppe | of moving-coil type [5] |
| B41J 2/295 | 4-Punkt Untergruppe | using piezo-electric elements [5] |
| B41J 2/30 | 3-Punkt Untergruppe | . . . Control circuits for actuators [5] |
| B41J 2/305 | 3-Punkt Untergruppe | . . . Ink supply apparatus (ink ribbons, ink-ribbon mechanisms B41J 31/00-B41J 35/00) [5] |
| B41J 2/31 | 2-Punkt Untergruppe | . . using a print element with projections on its surface impacted or impressed by hammers [5] |
| B41J 2/315 | 1-Punkt Untergruppe | . characterised by selective application of heat to a heat sensitive printing or impression-transfer material (B41J 2/385, B41J 2/435 take precedence) [5] |
| B41J 2/32 | 2-Punkt Untergruppe | . . using thermal heads [5] |
| B41J 2/325 | 3-Punkt Untergruppe | . . . by selective transfer of ink from ink carrier, e.g. from ink ribbon or sheet [5] |
| B41J 2/33 | 4-Punkt Untergruppe | from ink roller [5] |
| B41J 2/335 | 3-Punkt Untergruppe | . . . Structure of thermal heads [5] |
| B41J 2/34 | 4-Punkt Untergruppe | comprising semiconductors [5] |
| B41J 2/345 | 3-Punkt Untergruppe | . . . characterised by the arrangement of resistors or conductors [5] |
| B41J 2/35 | 3-Punkt Untergruppe | . . . providing current or voltage to the thermal head [5] |
| B41J 2/355 | 4-Punkt Untergruppe | Control circuits for heating-element selection [5] |
| B41J 2/36 | 5-Punkt Untergruppe | Print density control [5] |
| B41J 2/365 | 6-Punkt Untergruppe | by compensation for variation in temperature [5] |
| B41J 2/37 | 6-Punkt Untergruppe | by compensation for variation in current [5] |
| B41J 2/375 | 3-Punkt Untergruppe | . . . Protection arrangements against overheating [5] |
| B41J 2/38 | 2-Punkt Untergruppe | . . Preheating, i.e. heating to a temperature insufficient to cause printing [5] |

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| B41J 2/385 | 1-Punkt Untergruppe | . characterised by selective supply of electric current or selective application of magnetism to a printing or impression-transfer material (B41J 2/005 takes precedence; electrography, magnetography G03G) [5] |
| B41J 2/39 | 2-Punkt Untergruppe | . . using multi-stylus heads [5] |
| B41J 2/395 | 3-Punkt Untergruppe | . . . Structure of multi-stylus heads [5] |
| B41J 2/40 | 3-Punkt Untergruppe | . . . providing current or voltage to the multi-stylus head [5] |
| B41J 2/405 | 4-Punkt Untergruppe | Selection of the stylus or auxiliary electrode to be supplied (electronic switching circuits in general H03K 17/00) [5] |
| B41J 2/41 | 2-Punkt Untergruppe | . . for electrostatic printing (B41J 2/39 takes precedence) [5] |
| B41J 2/415 | 3-Punkt Untergruppe | . . . by passing charged particles through a hole or a slit [5] |
| B41J 2/42 | 2-Punkt Untergruppe | . . for heating selectively [5] |
| B41J 2/425 | 2-Punkt Untergruppe | . . for removing surface layer selectively from electro-sensitive material, e.g. matel coated paper [5] |
| B41J 2/43 | 2-Punkt Untergruppe | . . for magnetic printing [5] |
| B41J 2/435 | 1-Punkt Untergruppe | . characterised by selective application of radiation to a printing material or impression-transfer material (optical elements, systems, or apparatus G02B; modulation or deflection of light G02F; electrophotography G03G) [5] |
| B41J 2/44 | 2-Punkt Untergruppe | . . using single radiation source, e.g. lighting beams or shutter arrangements (B41J 2/475 takes precedence) [5] |
| B41J 2/445 | 3-Punkt Untergruppe | . . . using liquid crystals [5] |
| B41J 2/447 | 2-Punkt Untergruppe | . . using arrays of radiation sources (B41J 2/475 takes precedence) [6] |
| B41J 2/45 | 3-Punkt Untergruppe | . . . using light-emitting diode arrays [5] |
| B41J 2/455 | 3-Punkt Untergruppe | . . . using laser arrays [5] |
| B41J 2/46 | 3-Punkt Untergruppe | . . . characterised by using glass fibres [5] |
| B41J 2/465 | 2-Punkt Untergruppe | . . using masks, e.g. light-switching masks (photographic composing B41B) [5] |
| B41J 2/47 | 2-Punkt Untergruppe | . . using the combination of scanning and modulation of light [5] |
| B41J 2/475 | 2-Punkt Untergruppe | . . for heating selectively [5] |
| B41J 2/48 | 3-Punkt Untergruppe | . . . melting ink on a film or melting ink granules [5] |
| B41J 2/485 | 1-Punkt Untergruppe | . characterised by the process of building-up characters applicable to two or more kinds of printing or marking processes [5] |
| B41J 2/49 | 2-Punkt Untergruppe | . . by writing [5] |
| B41J 2/495 | 2-Punkt Untergruppe | . . by selective printing from a rotating helical member [5] |
| B41J 2/50 | 2-Punkt Untergruppe | . . by the selective combination of two or more non-identical printing elements [5] |
| B41J 2/505 | 2-Punkt Untergruppe | . . from an assembly of identical printing elements [5] |
| B41J 2/51 | 3-Punkt Untergruppe | . . . serial printer type [5] |
| B41J 2/515 | 3-Punkt Untergruppe | . . . line printer type [5] |

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| B41J 2/52 | 1-Punkt Untergruppe | . Arrangement for printing a discrete number of tones, not covered by group B41J 2/205, e.g. applicable to two or more kinds of printing or marking process (B41J 2/525 takes precedence; for photomechanical production G03F 5/00) [5] |
| B41J 2/525 | 1-Punkt Untergruppe | . Arrangement for multi-colour printing, not covered by group B41J 2/21, e.g. applicable to two or more kinds of printing or marking process (for photomechanical production G03F 3/00) [5] |
| B41J 3/00 | Hauptgruppe | Typewriters or selective printing or marking mechanisms characterised by the purpose for which they are constructed (cryptographic typewriters G09C 3/00) [5] |
| B41J 3/01 | 1-Punkt Untergruppe | . for special character, e.g. for Chinese characters or bar codes [5] |
| B41J 3/24 | 1-Punkt Untergruppe | . for perforating or stencil cutting using special types or dies |
| B41J 3/26 | 1-Punkt Untergruppe | . for stenographic writing |
| B41J 3/28 | 1-Punkt Untergruppe | . for printing downwardly on flat surfaces, e.g. of books, drawings, boxes |
| B41J 3/30 | 1-Punkt Untergruppe | . for printing with large type, e.g. on bulletins, tickets |
| B41J 3/32 | 1-Punkt Untergruppe | . for printing in Braille or with keyboards specially adapted for use by blind or disabled persons |
| B41J 3/34 | 1-Punkt Untergruppe | . for printing musical scores |
| B41J 3/36 | 1-Punkt Untergruppe | . for portability |
| B41J 3/37 | 2-Punkt Untergruppe | . . Foldable typewriters [5] |
| B41J 3/38 | 1-Punkt Untergruppe | . for embossing, e.g. for making matrices for stereotypes |
| B41J 3/39 | 2-Punkt Untergruppe | . . hand-held (manually-controlled or manually-operable label dispensers having printing equipment B65C 11/02) [5] |
| B41J 3/407 | 1-Punkt Untergruppe | . for marking on special material (printing on special surfaces B41F 17/00) [5] |
| B41J 3/413 | 2-Punkt Untergruppe | . . for metal [5] |
| B41J 3/42 | 1-Punkt Untergruppe | . Two or more complete typewriters coupled for simultaneous operation |
| B41J 3/44 | 1-Punkt Untergruppe | . Typewriters or selective printing mechanisms having dual functions or combined with, or coupled to, apparatus performing other functions (printing mechanisms coupled to typographical composing machines B41B 27/41) |
| B41J 3/46 | 2-Punkt Untergruppe | . . Printing mechanisms combined with apparatus providing a visual indication |
| B41J 3/50 | 2-Punkt Untergruppe | . . Mechanisms producing characters by printing and also producing a record by other means (punching mechanisms G06K) [5] |
| B41J 3/51 | 3-Punkt Untergruppe | . . . the printed and recorded information being identical; using type elements with code-generating means (G06K 1/12 takes precedence) [5] |
| B41J 3/54 | 1-Punkt Untergruppe | . with two or more sets of type or printing elements (B41J 3/60 takes precedence) [5] |
| B41J 3/60 | 1-Punkt Untergruppe | . for printing on both faces of the printing material [5] |
| B41J 3/62 | 1-Punkt Untergruppe | . for printing on two or more separate sheets or strips of printing material (B41J 3/54 takes precedence) [5] |
| | | <u>Common details or accessories</u> |
| B41J 5/00 | Hauptgruppe | Devices or arrangements for controlling character selection (methods or arrangements for sensing record carriers G06K 7/00) |
| B41J 5/02 | 1-Punkt Untergruppe | . Character or syllable selected by setting an index |
| B41J 5/04 | 2-Punkt Untergruppe | . . Single-character selection |

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| B41J 5/06 | 2-Punkt Untergruppe | . . Multiple-character selection |
| B41J 5/08 | 1-Punkt Untergruppe | . Character or syllable selected by means of keys or keyboards of the typewriter type |
| B41J 5/10 | 2-Punkt Untergruppe | . . Arrangements of keyboards |
| B41J 5/12 | 2-Punkt Untergruppe | . . Construction of key buttons |
| B41J 5/14 | 2-Punkt Untergruppe | . . Construction of key levers |
| B41J 5/16 | 2-Punkt Untergruppe | . . Mounting or connecting key buttons on or to key levers |
| B41J 5/18 | 2-Punkt Untergruppe | . . Locks |
| B41J 5/20 | 3-Punkt Untergruppe | . . . for subsidiary keys, e.g. for shift keys |
| B41J 5/22 | 3-Punkt Untergruppe | . . . Interlocks between keys, e.g. without detent arrangements |
| B41J 5/24 | 4-Punkt Untergruppe | with detent arrangements |
| B41J 5/26 | 2-Punkt Untergruppe | . . Regulating touch, key dip or stroke, or the like |
| B41J 5/28 | 2-Punkt Untergruppe | . . Multiple-action keys, e.g. keys depressed by two or more amounts or movable in two or more directions to effect different functions or selections |
| B41J 5/30 | 1-Punkt Untergruppe | . Character or syllable selection controlled by recorded information |
| B41J 5/31 | 2-Punkt Untergruppe | . . characterised by form of recorded information |
| B41J 5/32 | 3-Punkt Untergruppe | . . . by printed, embossed, or photographic records, e.g. cards, sheets |
| B41J 5/34 | 4-Punkt Untergruppe | by strips or tapes |
| B41J 5/36 | 3-Punkt Untergruppe | . . . by punched records, e.g. cards, sheets |
| B41J 5/38 | 4-Punkt Untergruppe | by strips or tapes |
| B41J 5/40 | 3-Punkt Untergruppe | . . . by magnetic or electrostatic records, e.g. cards, sheets |
| B41J 5/42 | 4-Punkt Untergruppe | by strips or tapes |
| B41J 5/44 | 2-Punkt Untergruppe | . . characterised by the kind of storage of recorded information |
| B41J 5/46 | 3-Punkt Untergruppe | . . . the storage being on internal storages |
| B41J 5/48 | 3-Punkt Untergruppe | . . . the storage being on external storages |
| B41J 5/50 | 4-Punkt Untergruppe | on a single storage |
| B41J 5/51 | 4-Punkt Untergruppe | on more than one separate storage, e.g. on additional correction strips or tapes [3] |
| B41J 5/52 | 2-Punkt Untergruppe | . . characterised by the provision of additional devices for producing a punched or like record, e.g. simultaneously |
| B41J 7/00 | Hauptgruppe | Type-selecting or type-actuating mechanisms (index setting B41J 5/02) |
| B41J 7/02 | 1-Punkt Untergruppe | . Type-lever actuating mechanisms |
| B41J 7/04 | 2-Punkt Untergruppe | . . Levers mounted on fixed pivots |
| B41J 7/06 | 3-Punkt Untergruppe | . . . and connected to transmission members, e.g. toothed gearing |
| B41J 7/08 | 4-Punkt Untergruppe | with pin-and-slot or like loose connections; Cam-slot members |

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| B41J 7/10 | 4-Punkt Untergruppe | Chain, belt, flexible-cable, or like members |
| B41J 7/12 | 3-Punkt Untergruppe | . . . U-shaped type-lever on two pivots |
| B41J 7/14 | 3-Punkt Untergruppe | . . . Single key-and-type lever |
| B41J 7/16 | 3-Punkt Untergruppe | . . . Type-head pivoted to, or rotating on, lever |
| B41J 7/18 | 2-Punkt Untergruppe | . . Levers having moving or variable fulcra to alter the mechanical advantage during the stroke |
| B41J 7/20 | 2-Punkt Untergruppe | . . Levers having moving pivots fixed relative to the lever; Type-bars each pivoted on two links |
| B41J 7/22 | 2-Punkt Untergruppe | . . Type-baskets; Bearings or hangers for type-levers |
| B41J 7/24 | 2-Punkt Untergruppe | . . Construction of type-levers (U-shaped levers B41J 7/12) |
| B41J 7/26 | 2-Punkt Untergruppe | . . Special means, e.g. repulsers, for ensuring return of type-levers |
| B41J 7/28 | 2-Punkt Untergruppe | . . Key-lever and type-member returned independently to rest position |
| B41J 7/30 | 2-Punkt Untergruppe | . . Preventing rebound or clash of levers or type-members |
| B41J 7/32 | 1-Punkt Untergruppe | . Type-face selected by operation of sliding members |
| B41J 7/34 | 1-Punkt Untergruppe | . Type-face selected by operation of rotary members |
| B41J 7/36 | 1-Punkt Untergruppe | . Selecting arrangements applied to type-carriers rotating during impression |
| B41J 7/38 | 2-Punkt Untergruppe | . . Type movable on carrier for selection |
| B41J 7/40 | 2-Punkt Untergruppe | . . Type movable on carrier for impression |
| B41J 7/42 | 2-Punkt Untergruppe | . . Timed impression, e.g. without impact |
| B41J 7/44 | 3-Punkt Untergruppe | . . . with impact |
| B41J 7/46 | 2-Punkt Untergruppe | . . Rolling contact during impression |
| B41J 7/48 | 1-Punkt Untergruppe | . Type-carrier arrested in selected position by electromagnetic means |
| B41J 7/50 | 1-Punkt Untergruppe | . Type-face selected by combinations of two movements of type-carrier |
| B41J 7/52 | 2-Punkt Untergruppe | . . by combined rotary and sliding movement |
| B41J 7/54 | 1-Punkt Untergruppe | . Selecting arrangements including combination, permutation, summation, or aggregation means |
| B41J 7/56 | 2-Punkt Untergruppe | . . Summation devices for mechanical movements |
| B41J 7/58 | 3-Punkt Untergruppe | . . . Wedges |
| B41J 7/60 | 3-Punkt Untergruppe | . . . Levers |
| B41J 7/62 | 3-Punkt Untergruppe | . . . Gearing |
| B41J 7/64 | 3-Punkt Untergruppe | . . . Pulley-and-strand mechanism |
| B41J 7/66 | 2-Punkt Untergruppe | . . Movable members, e.g. pins, displaceable according to a code |
| B41J 7/68 | 2-Punkt Untergruppe | . . with means for selectively closing an electric circuit for type presentation |
| B41J 7/90 | 1-Punkt Untergruppe | . Syllable, line, or like type selection |
| B41J 7/92 | 1-Punkt Untergruppe | . Impact adjustment; Means to give uniformity of impression (B41J 9/46, B41J 9/48 take precedence) [5] |

| Symbol | Typ | Titel |
|------------------|---------------------|---|
| B41J 7/94 | 2-Punkt Untergruppe | . . Character-by-character adjustment |
| B41J 7/96 | 1-Punkt Untergruppe | . Means for checking correctness of setting |
| B41J 9/00 | Hauptgruppe | Hammer-impression mechanisms |
| B41J 9/02 | 1-Punkt Untergruppe | . Hammers; Arrangements thereof |
| B41J 9/04 | 2-Punkt Untergruppe | . . of single hammers, e.g. travelling along printing line |
| B41J 9/06 | 3-Punkt Untergruppe | . . . of stationary hammers, e.g. engaging a single type-carrier |
| B41J 9/08 | 4-Punkt Untergruppe | engaging more than one type-carrier |
| B41J 9/10 | 2-Punkt Untergruppe | . . of more than one hammer, e.g. one for each character position |
| B41J 9/12 | 3-Punkt Untergruppe | . . . each operating in more than one character position |
| B41J 9/127 | 2-Punkt Untergruppe | . . Mounting of hammers [3] |
| B41J 9/133 | 2-Punkt Untergruppe | . . Construction of hammer body or tip [3] |
| B41J 9/14 | 1-Punkt Untergruppe | . Means for selecting or suppressing individual hammers |
| B41J 9/16 | 1-Punkt Untergruppe | . Means for cocking or resetting hammers |
| B41J 9/18 | 2-Punkt Untergruppe | . . Cams |
| B41J 9/20 | 2-Punkt Untergruppe | . . Springs |
| B41J 9/22 | 2-Punkt Untergruppe | . . Fluid-pressure means |
| B41J 9/24 | 2-Punkt Untergruppe | . . Electromagnetic means |
| B41J 9/26 | 1-Punkt Untergruppe | . Means for operating hammers to effect impression |
| B41J 9/28 | 2-Punkt Untergruppe | . . Cams |
| B41J 9/30 | 2-Punkt Untergruppe | . . Springs |
| B41J 9/32 | 2-Punkt Untergruppe | . . arranged to be clutched to snatch roll |
| B41J 9/34 | 2-Punkt Untergruppe | . . Fluid-pressure means |
| B41J 9/36 | 2-Punkt Untergruppe | . . in which mechanical power is applied under electromagnetic control |
| B41J 9/38 | 2-Punkt Untergruppe | . . Electromagnetic means |
| B41J 9/40 | 2-Punkt Untergruppe | . . including an electro-adhesive clutch |
| B41J 9/42 | 1-Punkt Untergruppe | . with anti-rebound arrangements |
| B41J 9/44 | 1-Punkt Untergruppe | . Control for hammer-impression mechanisms [5] |
| B41J 9/46 | 2-Punkt Untergruppe | . . for deciding or adjusting hammer-firing time [5] |
| B41J 9/48 | 2-Punkt Untergruppe | . . for deciding or adjusting hammer-drive energy [5] |
| B41J 9/50 | 2-Punkt Untergruppe | . . for compensating for the variations of printer drive conditions, e.g. for compensating for the variation of temperature or current supply [5] |
| B41J 9/52 | 2-Punkt Untergruppe | . . for checking the operation of print hammers [5] |
| B41J 9/54 | 3-Punkt Untergruppe | . . . for checking the breakage of print hammers [5] |

| Symbol | Typ | Titel |
|-------------------|---------------------|--|
| B41J 11/00 | Hauptgruppe | Devices or arrangements for supporting or handling copy material in sheet or web form (specially adapted for supporting or handling copy material in short lengths B41J 13/00, in continuous form B41J 15/00; holders for text to be copied B41J 29/00) |
| B41J 11/02 | 1-Punkt Untergruppe | . Platen |
| B41J 11/04 | 2-Punkt Untergruppe | . . Roller platen |
| B41J 11/053 | 3-Punkt Untergruppe | . . . with sound-deadening devices (structure of surface B41J 11/057) [3] |
| B41J 11/057 | 3-Punkt Untergruppe | . . . Structure of the surface [3] |
| B41J 11/06 | 2-Punkt Untergruppe | . . Flat page-size platen |
| B41J 11/08 | 2-Punkt Untergruppe | . . Bar or like line-size platen |
| B41J 11/10 | 2-Punkt Untergruppe | . . Anvil or like character-size platen |
| B41J 11/13 | 2-Punkt Untergruppe | . . Backings or blankets (for roller platen B41J 11/057) [3] |
| B41J 11/14 | 2-Punkt Untergruppe | . . Platen-shift mechanisms; Driving gear therefor |
| B41J 11/16 | 2-Punkt Untergruppe | . . with balancing means |
| B41J 11/18 | 1-Punkt Untergruppe | . Platen-impression arrangements |
| B41J 11/20 | 1-Punkt Untergruppe | . Platen adjustments for varying the strength of impression, for a varying number of papers, for wear or for alignment |
| B41J 11/22 | 1-Punkt Untergruppe | . Paper-carriage guides or races |
| B41J 11/24 | 1-Punkt Untergruppe | . Detents, brakes, or couplings for feed rollers or platen |
| B41J 11/26 | 1-Punkt Untergruppe | . Pin feeds |
| B41J 11/27 | 2-Punkt Untergruppe | . . on or within the platen-rollers |
| B41J 11/28 | 2-Punkt Untergruppe | . . Pin wheels |
| B41J 11/30 | 2-Punkt Untergruppe | . . Pin traction elements other than wheels, e.g. pins on endless bands |
| B41J 11/32 | 2-Punkt Untergruppe | . . Adjustment of pin wheels or traction elements, e.g. laterally |
| B41J 11/34 | 2-Punkt Untergruppe | . . Guides coacting with pin feeds |
| B41J 11/36 | 1-Punkt Untergruppe | . Blanking or long feeds; Feeding to a particular line, e.g. by rotation of platen or feed roller |
| B41J 11/38 | 2-Punkt Untergruppe | . . Manually-operated feeding devices |
| B41J 11/40 | 2-Punkt Untergruppe | . . specially adapted for printing musical scores |
| B41J 11/42 | 2-Punkt Untergruppe | . . Controlling |
| B41J 11/44 | 3-Punkt Untergruppe | . . . by devices, e.g. programme tape or contact wheel, moved in correspondence with movement of paper-feeding devices, e.g. platen rotation |
| B41J 11/46 | 3-Punkt Untergruppe | . . . by marks or formations on the paper being fed |
| B41J 11/48 | 1-Punkt Untergruppe | . Apparatus for condensed record, tally strip, or like work using two or more papers, or sets of papers |
| B41J 11/50 | 2-Punkt Untergruppe | . . in which two or more papers or sets are separately fed in the same direction towards the printing position |
| B41J 11/51 | 3-Punkt Untergruppe | . . . with different feed rates [3] |

| Symbol | Typ | Titel |
|-------------------|---------------------|---|
| B41J 11/52 | 2-Punkt Untergruppe | . . in which one paper or set is moved transversely relative to another |
| B41J 11/53 | 3-Punkt Untergruppe | . . . Devices for holding in place one paper or set during replacement of one or more of the auxiliary papers or sets |
| B41J 11/54 | 2-Punkt Untergruppe | . . in which one paper or set is fed towards printing position from the front of the apparatus |
| B41J 11/55 | 3-Punkt Untergruppe | . . . with means for adjusting a paper or set [3] |
| B41J 11/56 | 1-Punkt Untergruppe | . specially constructed to facilitate storage or transport of typewriter |
| B41J 11/58 | 1-Punkt Untergruppe | . Supply holders for sheets or fan-folded webs, e.g. shelves, tables, scrolls, pile holders |
| B41J 11/60 | 1-Punkt Untergruppe | . Erasing or correcting tables |
| B41J 11/62 | 1-Punkt Untergruppe | . Shields or masks |
| B41J 11/64 | 1-Punkt Untergruppe | . Applications of scales or indicators |
| B41J 11/66 | 1-Punkt Untergruppe | . Applications of cutting devices |
| B41J 11/68 | 2-Punkt Untergruppe | . . cutting parallel to the direction of paper feed |
| B41J 11/70 | 2-Punkt Untergruppe | . . cutting perpendicular to the direction of paper feed |
| B41J 13/00 | Hauptgruppe | Devices or arrangements specially adapted for supporting or handling copy material in short lengths, e.g. sheets |
| B41J 13/02 | 1-Punkt Untergruppe | . Rollers (roller platens B41J 11/04) |
| B41J 13/03 | 2-Punkt Untergruppe | . . driven, e.g. feed rollers separate from platen |
| B41J 13/036 | 2-Punkt Untergruppe | . . co-operating with a roller platen [3] |
| B41J 13/042 | 3-Punkt Untergruppe | . . . Front and rear rollers or sets of front or rear rollers each mounted on a separate carrier [3] |
| B41J 13/048 | 3-Punkt Untergruppe | . . . Front and rear rollers both mounted on a common carrier [3] |
| B41J 13/054 | 4-Punkt Untergruppe | on the paper apron concentric with the roller platen [3] |
| B41J 13/076 | 2-Punkt Untergruppe | . . Construction of rollers; Bearings therefor |
| B41J 13/08 | 1-Punkt Untergruppe | . Bands or like feeding devices |
| B41J 13/10 | 1-Punkt Untergruppe | . Sheet holders, retainers, or stationary guides |
| B41J 13/12 | 2-Punkt Untergruppe | . . specially adapted for cards, envelopes, or the like |
| B41J 13/14 | 2-Punkt Untergruppe | . . Aprons or guides |
| B41J 13/16 | 3-Punkt Untergruppe | . . . movable for insertion or release of sheets |
| B41J 13/18 | 3-Punkt Untergruppe | . . . concentric with roller platen |
| B41J 13/20 | 2-Punkt Untergruppe | . . Bails |
| B41J 13/22 | 2-Punkt Untergruppe | . . Clamps or grippers |
| B41J 13/24 | 2-Punkt Untergruppe | . . Strips for supporting or holding papers |
| B41J 13/26 | 1-Punkt Untergruppe | . Registering devices |
| B41J 13/28 | 2-Punkt Untergruppe | . . Front lays, stops, or gauges |

| Symbol | Typ | Titel |
|-------------------|---------------------|---|
| B41J 13/30 | 2-Punkt Untergruppe | . . Side lays or gauges |
| B41J 13/32 | 2-Punkt Untergruppe | . . Means for positioning sheets in two directions under one control, e.g. for format control or orthogonal sheet positioning |
| B41J 15/00 | Hauptgruppe | Devices or arrangements specially adapted for supporting or handling copy material in continuous form, e.g. webs |
| B41J 15/02 | 1-Punkt Untergruppe | . Web rolls or spindles; Attaching webs to cores or spindles |
| B41J 15/04 | 1-Punkt Untergruppe | . Supporting, feeding, or guiding devices; Mountings for web rolls or spindles |
| B41J 15/06 | 2-Punkt Untergruppe | . . characterised by being applied to printers having stationary carriages |
| B41J 15/08 | 2-Punkt Untergruppe | . . characterised by being applied to printers having transversely-moving carriages |
| B41J 15/10 | 3-Punkt Untergruppe | . . . and mounted on the carriage |
| B41J 15/12 | 3-Punkt Untergruppe | . . . and coupled to the carriage |
| B41J 15/14 | 3-Punkt Untergruppe | . . . and detached from the carriage |
| B41J 15/16 | 1-Punkt Untergruppe | . Means for tensioning or winding the web |
| B41J 15/18 | 1-Punkt Untergruppe | . Multiple-web feeding apparatus |
| B41J 15/20 | 2-Punkt Untergruppe | . . for webs superimposed during printing (machines for separating superposed webs B65H 41/00) |
| B41J 15/22 | 2-Punkt Untergruppe | . . for feeding webs in separate paths during printing |
| B41J 15/24 | 2-Punkt Untergruppe | . . with means for registering the webs with each other |
| B41J 17/00 | Hauptgruppe | Mechanisms for manipulating page-width impression-transfer material, e.g. carbon paper (in manfolding devices B41L; sheet material for duplicating or marking B41M 5/00) |
| B41J 17/02 | 1-Punkt Untergruppe | . Feeding mechanisms |
| B41J 17/04 | 2-Punkt Untergruppe | . . Feed dependent on the record-paper feed, e.g. both moved at the same time |
| B41J 17/06 | 3-Punkt Untergruppe | . . . "Creep" feed, i.e. impression-transfer material fed slower than the record paper |
| B41J 17/07 | 3-Punkt Untergruppe | . . . electromagnetically controlled |
| B41J 17/08 | 2-Punkt Untergruppe | . . Feed independent of the record-paper feed |
| B41J 17/10 | 3-Punkt Untergruppe | . . . electromagnetically controlled |
| B41J 17/12 | 2-Punkt Untergruppe | . . Special adaptations for ensuring maximum life |
| B41J 17/14 | 2-Punkt Untergruppe | . . Automatic arrangements for reversing the feed direction |
| B41J 17/16 | 1-Punkt Untergruppe | . Holders in the machine for sheets of impression-transfer material |
| B41J 17/18 | 2-Punkt Untergruppe | . . pivotable to and from the platen |
| B41J 17/20 | 2-Punkt Untergruppe | . . slidable to and from the platen |
| B41J 17/22 | 1-Punkt Untergruppe | . Supply arrangements for webs or impression-transfer material |
| B41J 17/24 | 2-Punkt Untergruppe | . . Webs supplied from reels or spools attached to the machine (reels <u>per se</u> B65H 75/02) |
| B41J 17/26 | 2-Punkt Untergruppe | . . Webs supplied from trays or like supports attached to the machines |
| B41J 17/28 | 1-Punkt Untergruppe | . Arrangements of guides for the impression-transfer material |

| Symbol | Typ | Titel |
|-------------------|---------------------|--|
| B41J 17/30 | 1-Punkt Untergruppe | . Constructions of guides for the impression-transfer material |
| B41J 17/32 | 1-Punkt Untergruppe | . Detachable carriers or holders for impression-transfer material mechanism |
| B41J 17/34 | 1-Punkt Untergruppe | . Backings for impression-transfer material, e.g. sheets for reducing friction, shields for preventing imprint |
| B41J 17/36 | 1-Punkt Untergruppe | . Alarms, indicators, or feed-disabling devices responsive to material breakage or exhaustion |
| B41J 17/38 | 1-Punkt Untergruppe | . for dealing with the impression-transfer material after use |
| B41J 17/40 | 2-Punkt Untergruppe | . . for retracting sheets for re-use |
| B41J 17/42 | 2-Punkt Untergruppe | . . for webs |
| B41J 19/00 | Hauptgruppe | Character- or line-spacing mechanisms (key actions B41J 25/02) |
| B41J 19/02 | 1-Punkt Untergruppe | . with retarding devices, e.g. brakes |
| B41J 19/04 | 1-Punkt Untergruppe | . Sound-deadening or shock-absorbing devices or measures therein (B41J 19/38 takes precedence) |
| B41J 19/06 | 2-Punkt Untergruppe | . . Resilient mounting of mechanism |
| B41J 19/08 | 2-Punkt Untergruppe | . . Buffers, springs, or like carriage stops |
| B41J 19/10 | 2-Punkt Untergruppe | . . Dash-pots |
| B41J 19/12 | 2-Punkt Untergruppe | . . Gearing made of special material or specially constructed to reduce sound or shock |
| B41J 19/14 | 1-Punkt Untergruppe | . with means for effecting line or character spacing in either direction |
| B41J 19/16 | 1-Punkt Untergruppe | . Special spacing mechanisms for circular, spiral, or diagonal-printing apparatus |
| B41J 19/18 | 1-Punkt Untergruppe | . Character-spacing or back-spacing mechanisms; Carriage-return or release devices therefor |
| B41J 19/20 | 2-Punkt Untergruppe | . . Positive-feed character-spacing mechanisms (controlled by escapements B41J 19/52) |
| B41J 19/22 | 3-Punkt Untergruppe | . . . acting by friction or gripping effect |
| B41J 19/24 | 3-Punkt Untergruppe | . . . Pawl and ratchet |
| B41J 19/26 | 4-Punkt Untergruppe | moving a paper or like carriage |
| B41J 19/28 | 4-Punkt Untergruppe | moving a paper or like web or strip, e.g. over a stationary support |
| B41J 19/30 | 3-Punkt Untergruppe | . . . Electromagnetically-operated mechanisms |
| B41J 19/32 | 3-Punkt Untergruppe | . . . Differential or variable-spacing arrangements |
| B41J 19/34 | 2-Punkt Untergruppe | . . Escapement-feed character-spacing mechanisms |
| B41J 19/36 | 3-Punkt Untergruppe | . . . Driving mechanisms, e.g. springs stressed during carriage return |
| B41J 19/38 | 4-Punkt Untergruppe | adapted for silent return |
| B41J 19/40 | 3-Punkt Untergruppe | . . . Escapements having a single pawl or like detent |
| B41J 19/42 | 3-Punkt Untergruppe | . . . Escapements having two pawls or like detents |
| B41J 19/44 | 4-Punkt Untergruppe | coacting with two toothed members, e.g. racks or wheels |
| B41J 19/46 | 4-Punkt Untergruppe | and mounted on a single rocker |
| B41J 19/48 | 4-Punkt Untergruppe | and mounted on a single slider |

| Symbol | Typ | Titel |
|-------------------|---------------------|--|
| B41J 19/50 | 3-Punkt Untergruppe | . . . Electromagnetically-controlled escapements |
| B41J 19/52 | 3-Punkt Untergruppe | . . . Escapements controlling positive-feed mechanism |
| B41J 19/54 | 3-Punkt Untergruppe | . . . Construction of universal bars |
| B41J 19/56 | 3-Punkt Untergruppe | . . . Escapements controlling web or strip feed |
| B41J 19/58 | 3-Punkt Untergruppe | . . . Differential or variable-spacing arrangements |
| B41J 19/60 | 2-Punkt Untergruppe | . . Auxiliary feed or adjustment devices |
| B41J 19/62 | 3-Punkt Untergruppe | . . . for back-spacing |
| B41J 19/64 | 3-Punkt Untergruppe | . . . for justifying |
| B41J 19/66 | 2-Punkt Untergruppe | . . Carriage-release mechanisms |
| B41J 19/68 | 2-Punkt Untergruppe | . . Carriage-return mechanisms, e.g. manually actuated |
| B41J 19/70 | 3-Punkt Untergruppe | . . . power driven |
| B41J 19/72 | 4-Punkt Untergruppe | with power stored during character spacing |
| B41J 19/74 | 2-Punkt Untergruppe | . . with special means to maintain character-spacing or back-spacing elements in engagement during case-shift or like movement |
| B41J 19/76 | 1-Punkt Untergruppe | . Line-spacing mechanisms (special line-feeds, e.g. long feeds, B41J 11/36) |
| B41J 19/78 | 2-Punkt Untergruppe | . . Positive-feed mechanisms |
| B41J 19/80 | 3-Punkt Untergruppe | . . . Pawl-and-ratchet mechanisms |
| B41J 19/82 | 4-Punkt Untergruppe | moving a paper or like carriage |
| B41J 19/84 | 5-Punkt Untergruppe | in the form of a roller rotated for line spacing |
| B41J 19/86 | 6-Punkt Untergruppe | the pawl being normally in engagement with the ratchet |
| B41J 19/88 | 4-Punkt Untergruppe | moving a type carriage |
| B41J 19/90 | 4-Punkt Untergruppe | moving a paper or like web or strip, e.g. over a stationary support, automatically in response to movements other than carriage return |
| B41J 19/92 | 3-Punkt Untergruppe | . . . Electromagnetically-operated mechanisms |
| B41J 19/94 | 3-Punkt Untergruppe | . . . automatically operated in response to carriage return |
| B41J 19/96 | 3-Punkt Untergruppe | . . . Variable-spacing arrangements |
| B41J 19/98 | 2-Punkt Untergruppe | . . Escapement-feed mechanisms |
| B41J 21/00 | Hauptgruppe | Column, tabular, or like printing arrangements; Means for centralising short lines (carriage-release mechanisms B41J 19/66; key actions B41J 25/18) |
| B41J 21/02 | 1-Punkt Untergruppe | . Stops or stop-racks |
| B41J 21/04 | 1-Punkt Untergruppe | . Mechanisms for setting or restoring tabulation stops |
| B41J 21/06 | 1-Punkt Untergruppe | . with means for preventing rebound from stops |
| B41J 21/08 | 1-Punkt Untergruppe | . Mechanisms for initiating, effecting, skipping, or stopping tabulation movement; Means for centralising short lines |

| Symbol | Typ | Titel |
|-------------------|---------------------|---|
| B41J 21/10 | 1-Punkt Untergruppe | . with central, counter, or equivalent stop projected into path of tabulation stops |
| B41J 21/12 | 1-Punkt Untergruppe | . characterised by arrangements of electrical contacts |
| B41J 21/14 | 1-Punkt Untergruppe | . characterised by denominational arrangements |
| B41J 21/16 | 1-Punkt Untergruppe | . controlled by the sensing of marks or formations on the paper being typed, an undersheet, or the platen |
| B41J 21/17 | 1-Punkt Untergruppe | . controlled by stored information [5] |
| B41J 21/18 | 1-Punkt Untergruppe | . characterised by applications of scales or indicators |
| B41J 23/00 | Hauptgruppe | Power drives for actions or mechanisms (B41J 9/00 take precedence) |
| B41J 23/02 | 1-Punkt Untergruppe | . Mechanical power drives |
| B41J 23/04 | 2-Punkt Untergruppe | . . with driven mechanism arranged to be clutched to continuously-operating power source |
| B41J 23/06 | 3-Punkt Untergruppe | . . . by snatch rolls |
| B41J 23/08 | 3-Punkt Untergruppe | . . . by one-revolution or part-revolution clutches |
| B41J 23/10 | 3-Punkt Untergruppe | . . . and arrested in selected position |
| B41J 23/12 | 2-Punkt Untergruppe | . . Mechanism driven by cams engaging rotating roller |
| B41J 23/14 | 2-Punkt Untergruppe | . . Mechanism driven through an oscillating or reciprocating member |
| B41J 23/16 | 2-Punkt Untergruppe | . . Mechanism driven by a spring tensioned by power means |
| B41J 23/18 | 2-Punkt Untergruppe | . . Continuously-cycling drives |
| B41J 23/20 | 1-Punkt Untergruppe | . Fluid-pressure power drives |
| B41J 23/22 | 2-Punkt Untergruppe | . . for key or like type selection |
| B41J 23/24 | 2-Punkt Untergruppe | . . for impression mechanisms |
| B41J 23/26 | 2-Punkt Untergruppe | . . for platen or carriage movements, e.g. for line spacing, letter spacing, or carriage return |
| B41J 23/28 | 2-Punkt Untergruppe | . . for type-carriage movements |
| B41J 23/30 | 2-Punkt Untergruppe | . . for case shift |
| B41J 23/32 | 1-Punkt Untergruppe | . Electromagnetic power drives, e.g. applied to key levers |
| B41J 23/34 | 2-Punkt Untergruppe | . . applied to elements other than key levers |
| B41J 23/36 | 3-Punkt Untergruppe | . . . and acting on type members |
| B41J 23/38 | 3-Punkt Untergruppe | . . . and acting on aligning or case-shift mechanisms |
| B41J 25/00 | Hauptgruppe | Actions or mechanisms not otherwise provided for |
| B41J 25/02 | 1-Punkt Untergruppe | . Key actions for specified purposes |
| B41J 25/04 | 2-Punkt Untergruppe | . . Back-spacing |
| B41J 25/06 | 2-Punkt Untergruppe | . . Carriage return |
| B41J 25/08 | 2-Punkt Untergruppe | . . Case shift |
| B41J 25/10 | 2-Punkt Untergruppe | . . Ink-ribbon adjustment |
| B41J 25/12 | 2-Punkt Untergruppe | . . Character spacing |

| Symbol | Typ | Titel |
|-------------------|---------------------|---|
| B41J 25/14 | 2-Punkt Untergruppe | . . Line spacing |
| B41J 25/16 | 2-Punkt Untergruppe | . . Line spacing and carriage return by a single key |
| B41J 25/18 | 2-Punkt Untergruppe | . . Tabulating |
| B41J 25/20 | 1-Punkt Untergruppe | . Auxiliary type mechanisms for printing distinguishing marks, e.g. for accenting, using dead or half-dead key arrangements, for printing marks in telegraph printers to indicate that machine is receiving |
| B41J 25/22 | 1-Punkt Untergruppe | . for aligning characters for impression (in machines using index setting B41J 5/02) |
| B41J 25/24 | 1-Punkt Untergruppe | . Case-shift mechanisms (B41J 11/14 takes precedence; key actions B41J 25/08); Fount-change arrangements |
| B41J 25/304 | 1-Punkt Untergruppe | . Bodily-movable mechanisms for print heads or carriages movable towards or from paper surface (type carriers sliding for impression B41J 1/36; type carriers swinging for impression B41J 1/40) [5] |
| B41J 25/308 | 2-Punkt Untergruppe | . . with print gap adjustment mechanisms [5] |
| B41J 25/312 | 2-Punkt Untergruppe | . . with print pressure adjustment mechanisms, e.g. pressure-on-the-paper mechanisms [5] |
| B41J 25/316 | 2-Punkt Untergruppe | . . with tilting motion mechanisms relative to paper surface [5] |
| B41J 25/32 | 1-Punkt Untergruppe | . Impression mechanisms in which a roller co-operates with stationary type-faces |
| B41J 25/34 | 1-Punkt Untergruppe | . Bodily-changeable print heads or carriages (B41J 1/20, B41J 1/22, B41J 1/60 take precedence) [5] |
| B41J 27/00 | Hauptgruppe | Inking apparatus |
| B41J 27/02 | 1-Punkt Untergruppe | . with ink applied by pads or rotary discs |
| B41J 27/04 | 2-Punkt Untergruppe | . . Pads or discs; Ink-supply arrangements therefor |
| B41J 27/06 | 2-Punkt Untergruppe | . . Arrangements to ensure maximum life of pads or discs |
| B41J 27/08 | 2-Punkt Untergruppe | . . Arrangements for multicolour work |
| B41J 27/10 | 1-Punkt Untergruppe | . with ink applied by rollers; Ink-supply arrangements therefor |
| B41J 27/12 | 2-Punkt Untergruppe | . . Rollers |
| B41J 27/14 | 2-Punkt Untergruppe | . . Arrangements for multicolour work |
| B41J 27/16 | 1-Punkt Untergruppe | . with ink deposited electrostatically or electromagnetically, e.g. powdered ink |
| B41J 27/18 | 2-Punkt Untergruppe | . . with liquid ink deposited |
| B41J 27/20 | 1-Punkt Untergruppe | . with ink supplied by capillary action, e.g. through porous type-members, through porous platens |
| B41J 27/22 | 1-Punkt Untergruppe | . with inking discs or sectors |
| B41J 29/00 | Hauptgruppe | Details of, or accessories for, typewriters or selective printing mechanisms not otherwise provided for |
| B41J 29/02 | 1-Punkt Untergruppe | . Framework |
| B41J 29/04 | 1-Punkt Untergruppe | . Means for attaching machines to baseboards |
| B41J 29/06 | 1-Punkt Untergruppe | . Special supports, platforms, or trolleys for supporting machines on tables |
| B41J 29/08 | 1-Punkt Untergruppe | . Sound-deadening or shock-absorbing stands, supports, cases, or pads separate from machines |
| B41J 29/10 | 1-Punkt Untergruppe | . Sound-deadening devices embodied in machines (B41J 19/04 takes precedence) |
| B41J 29/12 | 1-Punkt Untergruppe | . Guards, shields or dust excluders [5] |

| Symbol | Typ | Titel |
|-------------|---------------------|--|
| B41J 29/13 | 2-Punkt Untergruppe | . . Cases or covers [5] |
| B41J 29/14 | 1-Punkt Untergruppe | . Attachments operated by the leg, e.g. the foot or knee |
| B41J 29/15 | 1-Punkt Untergruppe | . Script supports connected to the typewriter or printer (tables, desks, office furniture, in general A47B) [5] |
| B41J 29/16 | 1-Punkt Untergruppe | . Auxiliary receptacles for articles, e.g. erasers, pencils |
| B41J 29/17 | 1-Punkt Untergruppe | . Cleaning arrangements [5] |
| B41J 29/18 | 1-Punkt Untergruppe | . Mechanisms for rendering the print visible to the operator (ink-ribbon shifts B41J 35/20) [5] |
| B41J 29/19 | 2-Punkt Untergruppe | . . with reflectors or illuminating devices [5] |
| B41J 29/20 | 1-Punkt Untergruppe | . Arrangements of counting devices |
| B41J 29/22 | 2-Punkt Untergruppe | . . Line counters |
| B41J 29/24 | 2-Punkt Untergruppe | . . Word counters |
| B41J 29/26 | 1-Punkt Untergruppe | . Devices, non-fluid media or methods for cancelling, correcting errors, underscoring or ruling [4] |
| B41J 29/28 | 2-Punkt Untergruppe | . . Writing or like instruments in holders or guides |
| B41J 29/30 | 2-Punkt Untergruppe | . . Wheels |
| B41J 29/32 | 2-Punkt Untergruppe | . . Type-members |
| B41J 29/34 | 3-Punkt Untergruppe | . . . repeatedly actuated |
| B41J 29/36 | 2-Punkt Untergruppe | . . for cancelling or correcting errors by overprinting (B41J 31/00 takes precedence) [4] |
| B41J 29/367 | 3-Punkt Untergruppe | . . . sheet media carrying a pigmented transferable correction layer [4] |
| B41J 29/373 | 3-Punkt Untergruppe | . . . sheet media bearing an adhesive layer effective to lift off wrongly typed characters [4] |
| B41J 29/377 | 1-Punkt Untergruppe | . Cooling or ventilating arrangements [5] |
| B41J 29/38 | 1-Punkt Untergruppe | . Drives, motors, controls, or automatic cut-off devices for the entire printing mechanism |
| B41J 29/387 | 2-Punkt Untergruppe | . . Automatic cut-off devices [5] |
| B41J 29/393 | 2-Punkt Untergruppe | . . Devices for controlling or analysing the entire machine [5] |
| B41J 29/40 | 1-Punkt Untergruppe | . Means for printing fixed, i.e. unchanging, matter in addition to selectable matter |
| B41J 29/42 | 1-Punkt Untergruppe | . Scales and indicators, e.g. for determining side margins |
| B41J 29/44 | 2-Punkt Untergruppe | . . for determining top and bottom margins or indicating exhaust of paper |
| B41J 29/46 | 1-Punkt Untergruppe | . Applications of alarms, e.g. responsive to approach of end of line (responsive to transfer-material breakage or exhaustion B41J 17/36, B41J 35/36) |
| B41J 29/48 | 2-Punkt Untergruppe | . . responsive to breakage or exhaustion of paper or approach of bottom of paper |
| B41J 29/50 | 1-Punkt Untergruppe | . Side-stop mechanisms |
| B41J 29/52 | 1-Punkt Untergruppe | . Top-and-bottom stop mechanisms |
| B41J 29/54 | 1-Punkt Untergruppe | . Locking devices applied to printing mechanisms |
| B41J 29/56 | 2-Punkt Untergruppe | . . and manually actuated |

| Symbol | Typ | Titel |
|-------------------|---------------------|--|
| B41J 29/58 | 2-Punkt Untergruppe | . . and automatically actuated |
| B41J 29/60 | 3-Punkt Untergruppe | . . . in response to failure of power supply |
| B41J 29/62 | 3-Punkt Untergruppe | . . . by the absence of paper to lock hammer mechanism |
| B41J 29/64 | 3-Punkt Untergruppe | . . . by a function of the printer to lock the keyboard |
| B41J 29/66 | 4-Punkt Untergruppe | Locking devices actuated when platen reaches the end of a line |
| B41J 29/68 | 3-Punkt Untergruppe | . . . by completion of a page or predetermined number of lines or exhaustion of paper to lock the keyboard |
| B41J 29/70 | 3-Punkt Untergruppe | . . . Interlocks between any two carriage-moving mechanisms, e.g. character-space, back-space, tabulation, carriage-return, or carriage-release mechanisms |
| | | <u>Ink ribbons; Ink-ribbon mechanisms</u> |
| B41J 31/00 | Hauptgruppe | Ink ribbons (sheet material for duplicating or marking B41M 5/00; storing webs or tapes, e.g. on reels, B65H 75/00); Renovating or testing ink ribbons |
| B41J 31/02 | 1-Punkt Untergruppe | . Ink ribbons characterised by the material from which they are woven |
| B41J 31/04 | 2-Punkt Untergruppe | . . woven from synthetic material |
| B41J 31/05 | 1-Punkt Untergruppe | . Ink ribbons having coatings other than impression-material coatings |
| B41J 31/06 | 2-Punkt Untergruppe | . . the coatings being directly on the base material, i.e. below impression-transfer material; Ink ribbons having base material impregnated with material other than impression material |
| B41J 31/08 | 2-Punkt Untergruppe | . . the coatings being superimposed on impression-transfer material |
| B41J 31/09 | 1-Punkt Untergruppe | . Ink ribbons characterised by areas carrying media for obliteration or removal of typing errors [4] |
| B41J 31/10 | 1-Punkt Untergruppe | . Ink ribbons having arrangements to facilitate threading through a machine |
| B41J 31/12 | 1-Punkt Untergruppe | . Ink ribbons having arrangements to prevent undesired contact between the impression-transfer material and machine parts or other articles |
| B41J 31/14 | 1-Punkt Untergruppe | . Renovating or testing ink ribbons |
| B41J 31/16 | 2-Punkt Untergruppe | . . while fitted in the machine using the ink ribbons |
| B41J 32/00 | Hauptgruppe | Ink-ribbon cartridges [3] |
| B41J 32/02 | 1-Punkt Untergruppe | . for endless ribbons [3] |
| B41J 33/00 | Hauptgruppe | Apparatus or arrangements for feeding ink ribbons or like character-size impression-transfer material (ink-ribbon cartridges B41J 32/00) |
| B41J 33/02 | 1-Punkt Untergruppe | . Ribbon arrangements |
| B41J 33/04 | 2-Punkt Untergruppe | . . mounted on moving carriages |
| B41J 33/06 | 2-Punkt Untergruppe | . . Ribbons associated, but not moving, with typewriter platens, e.g. extending transversely to the length of the platen |
| B41J 33/08 | 3-Punkt Untergruppe | . . . and extending parallel to the length of the platen |
| B41J 33/10 | 2-Punkt Untergruppe | . . Arrangements of endless ribbons |
| B41J 33/12 | 2-Punkt Untergruppe | . . Ribbons carried by coaxially-mounted spools |
| B41J 33/14 | 1-Punkt Untergruppe | . Ribbon-feed devices or mechanisms |
| B41J 33/16 | 2-Punkt Untergruppe | . . with drive applied to spool or spool spindle |

| Symbol | Typ | Titel |
|-------------|---------------------|---|
| B41J 33/18 | 3-Punkt Untergruppe | . . . by ratchet mechanism (B41J 33/30 takes precedence) |
| B41J 33/20 | 3-Punkt Untergruppe | . . . by friction |
| B41J 33/22 | 3-Punkt Untergruppe | . . . by gears or pulleys |
| B41J 33/24 | 2-Punkt Untergruppe | . . with drive applied directly to ribbon |
| B41J 33/26 | 3-Punkt Untergruppe | . . . by rollers engaging the ribbon |
| B41J 33/28 | 3-Punkt Untergruppe | . . . by mechanism pulling or gripping the ribbon |
| B41J 33/30 | 2-Punkt Untergruppe | . . Escapement mechanisms |
| B41J 33/32 | 2-Punkt Untergruppe | . . Electromagnetic devices |
| B41J 33/34 | 2-Punkt Untergruppe | . . driven by motors independently of the machine as a whole |
| B41J 33/36 | 2-Punkt Untergruppe | . . with means for adjusting feeding rate |
| B41J 33/38 | 2-Punkt Untergruppe | . . Slow, e.g. "creep", feed mechanisms |
| B41J 33/382 | 3-Punkt Untergruppe | . . . the ribbon being fed only during carriage return |
| B41J 33/384 | 4-Punkt Untergruppe | and attached to the carriage during writing |
| B41J 33/386 | 3-Punkt Untergruppe | . . . the ribbon being fed only by operation of the line-spacing mechanism |
| B41J 33/388 | 3-Punkt Untergruppe | . . . the ribbon being fed only when type impression takes place |
| B41J 33/40 | 2-Punkt Untergruppe | . . with arrangements for reversing the feed direction |
| B41J 33/42 | 3-Punkt Untergruppe | . . . manually |
| B41J 33/44 | 3-Punkt Untergruppe | . . . automatically |
| B41J 33/46 | 4-Punkt Untergruppe | and characterised by its application to mechanism in which two spools are driven by pawl-and-ratchet mechanism |
| B41J 33/48 | 5-Punkt Untergruppe | comprising two pawls and ratchets, one for each spool |
| B41J 33/50 | 5-Punkt Untergruppe | comprising a single pawl or integral double-tooth pawl selectively engageable with two ratchets, one for each spool |
| B41J 33/51 | 4-Punkt Untergruppe | and characterised by the use of particular reversing control means |
| B41J 33/512 | 5-Punkt Untergruppe | using a pivoted reversing-feeler engaging the external periphery of the wound ribbon |
| B41J 33/514 | 5-Punkt Untergruppe | using a pivoted reversing-feeler engaging the interior of the wound ribbon |
| B41J 33/516 | 5-Punkt Untergruppe | using a reversing-feeler responsive to the tension of the ribbon |
| B41J 33/518 | 5-Punkt Untergruppe | the reversing-feeler engaging buttons or the like secured to the ribbon near its ends |
| B41J 33/52 | 2-Punkt Untergruppe | . . Braking devices therefor |
| B41J 33/54 | 2-Punkt Untergruppe | . . for ensuring maximum life of the ribbon (B41J 33/38 takes precedence; by adjustment of vibrator mechanisms B41J 35/14) |
| B41J 33/56 | 3-Punkt Untergruppe | . . . Ribbon adjusted transversely |
| B41J 33/58 | 3-Punkt Untergruppe | . . . Ribbon fed angularly |

| Symbol | Typ | Titel |
|-------------------|---------------------|---|
| B41J 33/60 | 2-Punkt Untergruppe | . . responsive to telegraph code or other extraneous signals |
| B41J 35/00 | Hauptgruppe | Other apparatus or arrangements associated with, or incorporated in, ink-ribbon mechanisms |
| B41J 35/02 | 1-Punkt Untergruppe | . Frames or holders for unwound short lengths of ink ribbons |
| B41J 35/03 | 2-Punkt Untergruppe | . . the holder being movable to inoperative position, e.g. by swinging upwardly |
| B41J 35/04 | 1-Punkt Untergruppe | . Ink-ribbon guides |
| B41J 35/06 | 2-Punkt Untergruppe | . . stationary |
| B41J 35/08 | 2-Punkt Untergruppe | . . with tensioning arrangements |
| B41J 35/10 | 2-Punkt Untergruppe | . . Vibrator mechanisms; Driving gear therefor |
| B41J 35/12 | 3-Punkt Untergruppe | . . . adjustable, e.g. for case shift (key actions B41J 25/02) |
| B41J 35/14 | 4-Punkt Untergruppe | for multicolour work; for ensuring maximum life of ink ribbon; for rendering ink ribbon inoperative |
| B41J 35/16 | 1-Punkt Untergruppe | . Multicolour arrangements (B41J 35/10 takes precedence) |
| B41J 35/18 | 2-Punkt Untergruppe | . . Colour change effected automatically |
| B41J 35/20 | 1-Punkt Untergruppe | . Ink-ribbon shifts, e.g. for exposing print, for case-shift adjustment, for rendering ink ribbon inoperative |
| B41J 35/22 | 1-Punkt Untergruppe | . Mechanisms permitting the selective use of a plurality of ink ribbons |
| B41J 35/23 | 2-Punkt Untergruppe | . . with two or more ribbon guides |
| B41J 35/24 | 1-Punkt Untergruppe | . Mechanisms specially adapted for feeding impression-transfer materials of foil form |
| B41J 35/26 | 1-Punkt Untergruppe | . Ink-ribbon shields or backings |
| B41J 35/28 | 1-Punkt Untergruppe | . Detachable carriers or holders for ink-ribbon mechanisms |
| B41J 35/30 | 1-Punkt Untergruppe | . Manifolding or like arrangements |
| B41J 35/32 | 2-Punkt Untergruppe | . . for producing a plurality of copies along the printing line by a single ink ribbon |
| B41J 35/34 | 2-Punkt Untergruppe | . . using a plurality of separate ink ribbons, e.g. including one hectographic ink ribbon |
| B41J 35/35 | 2-Punkt Untergruppe | . . using unwound short lengths of ink ribbons |
| B41J 35/36 | 1-Punkt Untergruppe | . Alarms, indicators, or feed-disabling devices responsive to ink-ribbon breakage or exhaustion |
| B41J 35/38 | 1-Punkt Untergruppe | . Feeding the ink ribbon to waste after use |