

# CPC COOPERATIVE PATENT CLASSIFICATION

## B PERFORMING OPERATIONS; TRANSPORTING

(NOTES omitted)

### PRINTING

**B41 PRINTING; LINING MACHINES; TYPEWRITERS; STAMPS** ([reproduction or duplication of pictures or patterns by scanning and converting into electrical signals H04N](#))

**B41B MACHINES OR ACCESSORIES FOR MAKING, SETTING, OR DISTRIBUTING TYPE; TYPE; PHOTOGRAPHIC OR PHOTOELECTRIC COMPOSING DEVICES** ([photographic devices in general G03](#))

- |             |                                                                                        |      |                                                                                                                                                |
|-------------|----------------------------------------------------------------------------------------|------|------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1/00</b> | <b>Elements or appliances for hand composition; Chases, quoins, or galleys</b>         | 7/02 | . operating with fixed combinations of matrices ( <a href="#">details B41B 9/00</a> )                                                          |
| 1/02        | . Printing letters; Type                                                               | 7/04 | . . for casting individual characters or spaces, e.g. type casting machines                                                                    |
| 1/025       | . . {for languages in which the latin alphabet is not used}                            | 7/06 | . . for composing, justifying and casting complete lines of matrices, e.g. "monoline" machines                                                 |
| 1/04        | . Quadrats or quads: Spaces or other justifiers                                        | 7/08 | . operating with separate matrices for individual characters or spaces which are selected and assembled ( <a href="#">details B41B 11/00</a> ) |
| 1/06        | . for special purposes                                                                 | 7/10 | . . in which a line is composed of matrices and in which single types or spaces are cast, e.g. stringer type                                   |
| 1/08        | . . for inserting latest news                                                          | 7/12 | . . in which a justified line is composed of matrices and a type line is cast in one piece                                                     |
| 1/10        | . . for inserting advertisements                                                       | 7/14 | . . . the matrices being composed by hand                                                                                                      |
| 1/12        | . . for setting musical notations                                                      | 7/16 | . . . the lines of matrices being composed and justified by machine operation, e.g. line type casting machines, "intertype" machines           |
| 1/14        | . Composing rules, e.g. of brass                                                       | 7/18 | . . . . the matrices being guided by wires, e.g. "typograph" machines                                                                          |
| 1/16        | . Reglets                                                                              |      |                                                                                                                                                |
| 1/18        | . Chases                                                                               |      |                                                                                                                                                |
| 1/20        | . Quoins or other binding means                                                        |      |                                                                                                                                                |
| 1/22        | . Composing tables; Type cases; Storage cabinets; Washing or cleaning devices therefor |      |                                                                                                                                                |
| 1/24        | . . Washing or cleaning devices                                                        |      |                                                                                                                                                |
| 1/26        | . Composing or setting sticks                                                          |      |                                                                                                                                                |
| 1/28        | . Galleys                                                                              |      |                                                                                                                                                |

#### Machines or other mechanical apparatus for composing

- |             |                                                                                                                                                       |              |                                                                                                                                                                                   |
|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>3/00</b> | <b>Apparatus for mechanical composition using prefabricated type, i.e. without casting equipment</b>                                                  | <b>9/00</b>  | <b>Details of, or accessories for, machines for mechanical composition using fixed combinations of matrices from which type is cast or moulded</b>                                |
| 3/02        | . Mechanical composing machines using single types or logotypes and having slide magazines therefor, e.g. flat, cylindrical, radial, single magazines | 9/02         | . Combinations of matrices                                                                                                                                                        |
| 3/04        | . Means for distributing type                                                                                                                         | 9/04         | . Carriers for combinations of matrices, e.g. blocks, cylinders, wheels, bars                                                                                                     |
| 3/06        | . Justifying means                                                                                                                                    | 9/06         | . Mechanisms for effecting relative movements of matrix carriers and moulds for character or space selection                                                                      |
| <b>5/00</b> | <b>Devices for making type or lines</b> ( <a href="#">for mechanical composition B41B 7/00, B41B 9/00, B41B 11/00</a> )                               | 9/08         | . Moulding or casting devices                                                                                                                                                     |
| 5/02        | . Matrices                                                                                                                                            | 9/10         | . . Moulds                                                                                                                                                                        |
| 5/04        | . Casting devices                                                                                                                                     | 9/12         | . . Justifying devices                                                                                                                                                            |
| 5/06        | . . mechanically operated                                                                                                                             | 9/14         | . . Supply devices for molten metal                                                                                                                                               |
| 5/08        | . Tools or auxiliaries                                                                                                                                | 9/16         | . Devices for handling type after casting                                                                                                                                         |
| 5/10        | . . for polishing or finishing type ( <a href="#">polishing in general B24B</a> )                                                                     | 9/18         | . . Ejector mechanisms                                                                                                                                                            |
| 5/12        | . . for making type in the form of lines, e.g. by drawing or casting                                                                                  | 9/20         | . . Trimming devices                                                                                                                                                              |
| 5/14        | . . for cutting spaces                                                                                                                                | <b>11/00</b> | <b>Details of, or accessories for, machines for mechanical composition using matrices for individual characters which are selected and assembled for type casting or moulding</b> |
| <b>7/00</b> | <b>Kinds or types of apparatus for mechanical composition in which the type is cast or moulded from matrices</b>                                      | 11/02        | . Matrices                                                                                                                                                                        |
|             |                                                                                                                                                       | 11/04        | . Space bands                                                                                                                                                                     |
|             |                                                                                                                                                       | 11/06        | . Storage devices for matrices or space bands                                                                                                                                     |
|             |                                                                                                                                                       | 11/08        | . . Magazines for matrices                                                                                                                                                        |

- 11/10 . . . for composing by hand
- 11/12 . . . Attachment of magazines to machines; Magazine-selection or magazine-shift mechanisms ([controlling selection or shifting B41B 27/42](#))
- 11/14 . . . with escapement devices
- 11/16 . . Boxes for space bands; Escapements or guides for releasing space bands
- 11/18 . Devices or arrangements for assembling matrices and space bands ([control devices therefor B41B 27/44](#))
- 11/20 . . Assembler guide channels
- 11/22 . . Assembler cover plates or framework
- 11/24 . . Belt conveyors co-operating with assembler guides
- 11/26 . . Devices for feeding or guiding space bands into association with matrices
- 11/28 . . Star wheels or other stacking devices for matrices and space bands; Guides associated therewith
- 11/30 . . Assembler elevators or associated mechanisms, e.g. braking devices, retaining pawls, line resistants, delivery slides
- 11/32 . . Transfer channels or line-delivery carriages
- 11/34 . . First elevators or associated mechanisms
- 11/36 . . for presenting matrices or space bands directly to moulds
- 11/38 . Devices for aligning or clamping lines of matrices and space bands
- 11/40 . . Jaw clamps; Operating devices therefor
- 11/42 . . . for quadding and centering
- 11/44 . . . for justifying
- 11/46 . . Aligning devices
- 11/48 . . Cleaning devices for aligning jaws ([cleaning matrices B41B 11/96](#))
- 11/50 . . Vice frames; Devices for releasing or locking
- 11/52 . Moulding or casting devices or associated mechanisms
- 11/54 . . Moulds; Liners therefor
- 11/56 . . . Mould wheels; Slides or driving gear therefor
- 11/58 . . . . with locking wedges
- 11/60 . . . . adjustable or removable
- 11/62 . . . . with interchangeable moulds
- 11/64 . . . . with a series of moulds and mechanism for selecting individual moulds
- 11/66 . . . mounted on reciprocable carriages
- 11/68 . . . with provision for adjusting length or width of slot; with a plurality of slots
- 11/70 . . . for casting type-bars of special form, e.g. with projections
- 11/72 . . Devices for trimming type-bars; Cleaning devices for trimming knives; Ejectors for type-bars
- 11/74 . . Devices for supplying molten metal
- 11/76 . . . Pots ([melting pots for casting stereotype plates B41D 3/20](#))
- 11/78 . . . . movable towards and away from mould
- 11/80 . . . . with stirrers or means for removing dross
- 11/82 . . . . associated with mechanisms for introducing metal in solid form
- 11/84 . . . . Throats or mouthpieces; Wipers for mouthpieces
- 11/86 . . . . Heaters for pots; Temperature-control devices
- 11/88 . . . Pumps; Stop-motions or safety devices therefor

- 11/90 . Arrangements or devices for distributing matrices or space bands after casting or moulding
- 11/92 . . Second elevators
- 11/94 . . Screw conveyors
- 11/96 . Devices for cooling or cleaning matrices

#### **Photographic or photoelectronic composing devices**

- 13/00 Equipment specially adapted for photographing mounted characters or the like, e.g. advertisements, lines**
  - 13/02 . the characters being composed or mounted by hand, and photographed simultaneously
  - 13/04 . . with means for justifying
  - 13/06 . . . by elastic or extensible type-line carriers
  - 13/08 . . . by optical line correction
  - 13/10 . the characters being progressively photographed one by one
- 15/00 Photographic composing machines with movable character carriers for composing lines of characters prior to photography**
  - 15/02 . with means for photographing complete lines
  - 15/04 . . and with carriers for individual characters
  - 15/06 . . and with carriers for complete sets of characters, e.g. slidable elongated members, rotary wheels
  - 15/08 . with means for photographing composed characters in succession
  - 15/10 . Details
  - 15/12 . . Character carriers; Cleaning devices therefor
  - 15/14 . . . with a single character, or with combinations of different styles of a single character
  - 15/16 . . . with combinations of different characters
  - 15/18 . . . with parts of characters for building up complex characters, e.g. oriental characters
  - 15/20 . . Devices for handling or storing character carriers
  - 15/22 . . . Magazines
  - 15/24 . . . for justifying purposes
  - 15/26 . . . for repeating a character
  - 15/28 . . Photographic devices ([in general G03](#))
  - 15/30 . . . Composing cameras
  - 15/32 . . . Film-handling mechanisms
  - 15/34 . . . Adjusting enlargement or register; Correcting exposure time
- 17/00 Photographic composing machines having fixed or movable character carriers and without means for composing lines prior to photography**
  - 17/02 . with manually-adjustable character carriers to enable characters to be photographed in succession
  - 17/04 . with a carrier for all characters in at least one font
  - 17/06 . . with an adjustable carrier
  - 17/08 . . with a fixed carrier
  - 17/10 . . with a continuously-movable carrier
  - 17/12 . . with means for moving the optical path for photographing characters, e.g. intermittently
  - 17/14 . . . continuously
  - 17/16 . . with means for moving the film in its plane for photographing characters in succession
  - 17/18 . Details
  - 17/20 . . Character carriers; Cleaning devices therefor
  - 17/22 . . . with a single character; with a single character in more than one style
  - 17/24 . . . with all characters

- 17/26 . . . . on belts
- 17/28 . . . . on polygonal rods
- 17/30 . . . . on a sheet of square or rectangular shape
- 17/32 . . . . on a flat disc
- 17/34 . . . . on a cylinder
- 17/36 . . . with selection indicators
- 17/38 . . . with means for indicating the width
- 17/40 . . . . in caliper form
- 17/42 . . . . in coded form

#### 19/00 Photoelectronic composing machines

- 19/01 . having electron-beam tubes producing an image of at least one character which is photographed
- 19/02 . . the characters appearing on the screen in succession
- 19/04 . . . at the same place
- 19/06 . . . at different predetermined places
- 19/08 . . with combinations of characters appearing on the screen at the same time
- 19/10 . . . in unbroken lines or columns
- 19/12 . . . in broken lines or columns
- 19/14 . . . and presenting a text of more than one line
- 19/16 . . Character carriers associated with electron-beam tubes

#### 21/00 Common details of photographic composing machines of the kinds covered in groups B41B 17/00 and B41B 19/00

- 21/02 . Shutters in optical systems (in general G03B)
- 21/04 . . for selecting characters
- 21/06 . . for adjusting exposures
- 21/08 . Light sources; Devices associated therewith, e.g. control devices
- 21/10 . . Single light sources
- 21/12 . . Stroboscopic light sources
- 21/14 . . Combinations of light sources
- 21/16 . Optical systems (shutters B41B 21/02; light sources B41B 21/08)
- 21/18 . . defining a single optical path
- 21/20 . . . with means for moving stepwise
- 21/22 . . . with means for moving continuously
- 21/24 . . defining multiple optical paths
- 21/26 . . . with means for selecting individual optical paths (means for moving the optical path B41B 17/12)
- 21/28 . . . with means for fount selection
- 21/30 . Electron-beam tubes or charactrons (in general H01J 31/00)
- 21/32 . Film carriers; Film-conveying or positioning devices (film-handling means in line-composing photographic devices B41B 15/32; machines with means for moving the film in its plane for photographing characters in succession B41B 17/16)
- 21/34 . . with positioning mechanisms
- 21/36 . . . for feeding films stepwise in line direction
- 21/38 . . . for feeding films continuously in line direction
- 21/40 . . . for line spacing
- 21/42 . . . for subscript or superscript notation
- 21/44 . . adjustable for enlarging purposes

#### 23/00 Auxiliary devices for modifying, mixing or correcting text or layout in connection with photographic or photoelectronic composing

- 23/02 . for mixing by line-by-line projection of parts of texts from a number of films on to another
- 23/04 . for facilitating hand correction of texts
- 23/06 . for correcting texts by removing incorrect lines from one film and splicing-in corrected lines from another film

#### Marking record carriers used for controlling composing machines; Control, indicating, or safety devices or systems for composing machines of various kinds or types

#### 25/00 Apparatus specially adapted for preparation of record carriers for controlling composing machines (for casting individual characters or spaces, e.g. in type casting machines B41B 7/04; methods for marking or reproducing record carriers having digital data thereon in general G06K 1/00)

- 25/10 . incorporating devices for line justification, e.g. counting and indicating devices for length of line
- 25/12 . . comprising elements which circulate from and to magazines
- 25/14 . . operating without space bands
- 25/16 . . using a binary code for the width of the matrices
- 25/18 . combined with type-setting machines
- 25/20 . Auxiliary devices; Devices serving special purposes
- 25/22 . . for indicating length of line
- 25/24 . . for error correction
- 25/26 . . for changing the fount of type

#### 27/00 Control, indicating, or safety devices or systems for composing machines of various kinds or types (computers in general G06F)

- 27/02 . Systems for controlling all operations
- 27/04 . . Keyboards
- 27/06 . . . operable by input of recorded or stored information, e.g. on punched tapes
- 27/08 . . . . from several sources
- 27/10 . . with direct control of all operations by input of recorded or stored information
- 27/12 . . . on tapes
- 27/14 . . . . on punched tapes
- 27/16 . . . . on magnetic tapes
- 27/18 . . . from memory devices
- 27/20 . . . . from electromagnetic devices, e.g. memory matrices
- 27/22 . . . from several sources
- 27/24 . . of several associated machines
- 27/26 . . with means for temporarily arresting input of recorded or stored information to introduce time delays
- 27/28 . Control, indicating, or safety devices for individual operations or machine elements (in devices for supplying molten metal B41B 11/86, B41B 11/88; for light sources B41B 21/08)
- 27/30 . . for arresting or varying speed of one operation in response to failure or variation in speed of another operation
- 27/32 . . for line-justification operations
- 27/34 . . . without the use of space bands
- 27/36 . . . using electronic devices
- 27/38 . . for measuring length of composed lines; for reading composed characters
- 27/40 . . for proof-printing operations
- 27/41 . . Printing mechanisms coupled to typographical composing machines

- 27/42 . . for controlling selection or shifting of matrix magazines
- 27/44 . . for controlling assembly of matrices and space bands
- 27/46 . . . for controlling insertion of space bands ([for line justification B41B 27/32](#))
- 27/48 . . for deleting errors or inserting corrections ([means for cancelling or correcting errors in typewriters or selective printing mechanisms B41J 29/26](#))
- 27/50 . . operated by coupled machines