SECTION B — PERFORMING OPERATIONS; TRANSPORTING

B41 PRINTING; LINING MACHINES; TYPEWRITERS; STAMPS

B41B MACHINES OR ACCESSORIES FOR MAKING, SETTING, OR DISTRIBUTING TYPE; TYPE; PHOTOGRAPHIC OR PHOTOELECTRONIC COMPOSING DEVICES (photographic devices in general G03)

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MECHANICAL COMPOSING
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By casting the type....7/00, 9/00, 11/00
PHOTOGRAPHIC COMPOSING
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PREPARATION OF RECORD CARRIERS....25/00
CONTROL, INDICATING, SAFETY....27/00

1/00 Elements or appliances for hand composition; Chases, quoins, or galleys

1/02 • Printing letters; Type
1/04 • Quadrats or quads; Spaces or other justifiers
1/06 • for special purposes
1/08 • • for inserting latest news
1/10 • • for inserting advertisements
1/12 • • for setting musical notations
1/14 • Composing rules, e.g. of brass
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

3/00 Apparatus for mechanical composition using prefabricated type, i.e. without casting equipment

3/02 • Mechanical composing machines using single types or logotypes and having slide magazines therefor, e.g. flat, cylindrical, radial, single magazines
3/04 • Means for distributing type
3/06 • Justifying means

5/00 Devices for making type or lines (for mechanical composition B41B 7/00, B41B 9/00, B41B 11/00)

5/02 • Matrices
5/04 • Casting devices
5/06 • • mechanically operated
5/08 • Tools or auxiliaries
5/10 • • for polishing or finishing type (polishing in general B24B)
5/12 • • for making type in the form of lines, e.g. by drawing or casting
5/14 • • for cutting spaces

7/00 Kinds or types of apparatus for mechanical composition in which the type is cast or moulded from matrices

7/02 • operating with fixed combinations of matrices (details B41B 9/00)
7/04 • • for casting individual characters or spaces, e.g. "monotype" machines
7/06 • • for composing, justifying, and casting complete lines of matrices, e.g. "monoline" machines
7/08 • operating with separate matrices for individual characters or spaces which are selected and assembled (details B41B 11/00)
7/10 • • in which a line is composed of matrices and in which single types or spaces are cast, e.g. stringer type
7/12 • • in which a justified line is composed of matrices and a type line is cast in one piece
7/14 • • • the matrices being composed by hand
7/16 • • • the lines of matrices being composed and justified by machine operation, e.g. "linotype", "intertype" machines
7/18 • • • • the matrices being guided by wires, e.g. "typograph" machines

9/00 Details of, or accessories for, machines for mechanical composition using fixed combinations of matrices from which type is cast or moulded

9/02 • Combinations of matrices
9/04 • Carriers for combinations of matrices, e.g. blocks, cylinders, wheels, bars

9/06 • Mechanisms for effecting relative movements of matrix carriers and moulds for character or space selection
9/08 • Moulding or casting devices
9/10 • • Moulds
9/12 • • Justifying devices
9/14 • • Supply devices for molten metal
9/16 • Devices for handling type after casting
9/18 • • Ejector mechanisms
9/20 • • Trimming devices

11/00 Details of, or accessories for, machines for mechanical composition using matrices for individual characters which are selected and assembled for type casting or moulding
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 centring
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

<u>Photographic or photoelectronic composing devices</u>

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 fount
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 [3]
19/01 • having electron-beam tubes producing an image of at least one character which is photographed **[3]**
19/02 • • the characters appearing on the screen in succession **[3]**
19/04 • • • at the same place **[3]**
19/06 • • • at different predetermined places **[3]**
19/08 • • with combinations of characters appearing on the screen at the same time **[3]**
19/10 • • • in unbroken lines or columns **[3]**
19/12 • • • in broken lines or columns **[3]**
19/14 • • • and presenting a text of more than one line **[3]**
19/16 • • Character carriers associated with electron-beam tubes **[3]**

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 "monotype" 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 of 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 (devices, non-fluid media or methods for cancelling or correcting errors in typewriters or selective printing mechanisms B41J 29/26)

27/50 • • operated by coupled machines