

EUROPEAN PATENT OFFICE
U.S. PATENT AND TRADEMARK OFFICE

CPC NOTICE OF CHANGES 331

DATE: NOVEMBER 1, 2016

PROJECT RP0200

The following classification changes will be effected by this Notice of Changes:

| <u>Action</u> | <u>Subclass</u> | <u>Group(s)</u> |
|-------------------------------|-----------------|-----------------|
| Symbols deleted: | B23Q | 2003/15593 |
| Symbols newly created: | B23Q | 3/15503 |
| | B23Q | 2003/15527 |
| | B23Q | 2003/15528 |
| | B23Q | 2003/1553 |
| | B23Q | 2003/15531 |
| | B23Q | 2003/15532 |
| | B23Q | 3/15534 |
| | B23Q | 3/15536 |
| | B23Q | 2003/15537 |
| | B23Q | 3/15539 |
| | B23Q | 2003/155404 |
| | B23Q | 2003/155407 |
| | B23Q | 2003/155411 |
| | B23Q | 2003/155414 |
| | B23Q | 2003/155418 |
| | B23Q | 2003/155421 |
| | B23Q | 2003/155425 |
| | B23Q | 2003/155428 |
| | B23Q | 2003/155432 |
| | B23Q | 2003/155435 |
| | B23Q | 2003/155439 |
| | B23Q | 2003/155442 |
| | B23Q | 2003/155446 |
| | B23Q | 2003/155449 |
| | B23Q | 2003/155453 |
| | B23Q | 2003/155456 |
| | B23Q | 3/15722 |
| | B23Q | 3/15724 |
| Title wording changes: | B23Q | 1/00 |
| | B23Q | 3/00 |
| | B23Q | 3/155 |
| | B23Q | 3/1554 |
| | B23Q | 3/15553 |
| | B23Q | 2003/1558 |
| | B23Q | 3/1572 |
| | B23Q | 9/00 |
| New Definitions: | B23Q | 1/48 |
| | B23Q | 1/50 |
| | B23Q | 1/56 |
| | B23Q | 3/155 |

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| <u>Action</u> | <u>Subclass</u> | <u>Group(s)</u> |
|---|-----------------|-----------------|
| | | |
| Modified Definitions: | B23Q | (subclass) |
| | B23Q | 1/00 |
| | B23Q | 3/00 |
| | B23Q | 3/15536 |
| | B23Q | 3/15553 |
| | B23Q | 9/00 |
| | | |
| Scheme Warning Notices to be added | B23Q | 3/15526 |
| | B23Q | 2003/15527 |
| | B23Q | 2003/15528 |
| | B23Q | 2003/1553 |
| | B23Q | 2003/15531 |
| | B23Q | 2003/15532 |
| | B23Q | 3/15534 |
| | B23Q | 3/15536 |
| | B23Q | 2003/15537 |
| | B23Q | 3/15539 |
| | B23Q | 3/1554 |
| | B23Q | 2003/155404 |
| | B23Q | 2003/155407 |
| | B23Q | 2003/155411 |
| | B23Q | 2003/155414 |
| | B23Q | 2003/155418 |
| | B23Q | 2003/155421 |
| | B23Q | 2003/155425 |
| | B23Q | 2003/155428 |
| | B23Q | 2003/155432 |
| | B23Q | 2003/155435 |
| | B23Q | 2003/155439 |
| | B23Q | 2003/155442 |
| | B23Q | 2003/155446 |
| | B23Q | 2003/155449 |
| | B23Q | 2003/155453 |
| | B23Q | 2003.155456 |
| | B23Q | 3/1572 |
| | B23Q | 3/15722 |
| | B23Q | 3/15724 |
| | | |
| Scheme Notes to be added: | B23Q | (subclass) |
| | B23Q | 3/15526 |
| | B23Q | 3/1554 |

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No other subclasses/groups are impacted by this Notice of Changes.

This Notice of Changes includes the following [Check the ones included]:

1. CLASSIFICATION SCHEME CHANGES
 - A. New, Modified or Deleted Group(s)
 - B. New, Modified or Deleted Warning Notice(s)
 - C. New, Modified or Deleted Note(s)
 - D. New, Modified or Deleted Guidance Heading(s)
2. DEFINITIONS (New or Modified)
 - A. DEFINITIONS (Full definition template)
 - B. DEFINITIONS (Definitions Quick Fix)
3. REVISION CONCORDANCE LIST (RCL)
4. CHANGES TO THE CPC-TO-IPC CONCORDANCE LIST (CICL)
5. CROSS-REFERENCE LIST (CRL)

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1. CLASSIFICATION SCHEME CHANGES

A. New, Modified or Deleted Group(s)

SUBCLASS B23Q – DETAILS, COMPONENTS, OR ACCESSORIES FOR MACHINE TOOLS, e.g. ARRANGEMENTS FOR COPYING OR CONTROLLING (tools of the kind used in lathes or boring machines B23B27/00); MACHINE TOOLS IN GENERAL CHARACTERISED BY THE CONSTRUCTION OF PARTICULAR DETAILS OR COMPONENTS; COMBINATIONS OR ASSOCIATIONS OF METAL-WORKING MACHINES, NOT DIRECTED TO A PARTICULAR RESULT

| <u>Type*</u> | <u>Symbol</u> | <u>Indent Level Number of dots (e.g. 0, 1, 2)</u> | <u>Title (new or modified)</u> <u>“CPC only” text should normally be enclosed in {curly brackets}**</u> | <u>Transferred to</u> |
|--------------|---------------|---|---|-----------------------|
| M | B23Q1/00 | 0 | Members which are comprised in the general build-up of a form of machine, particularly relatively large fixed members (B23Q37/00 takes precedence {; positioning supports for measuring arrangements G01B5/0004; motorised alignment for optical elements G02B7/005; handling of mask or wafer G03F7/70691; adjusting or compensating devices for optical apparatuses G12B5/00; piezoelectric or electrostrictive positioners H01L41/09}) | |
| M | B23Q3/00 | 0 | Devices holding, supporting, or positioning work or tools, of a kind normally removable from the machine (work-tables or other parts, e.g. faceplates, normally not incorporating means for securing work B23Q1/00; automatic position control B23Q15/00 {; food cutting boards A47J47/00; workpiece support for dies B21D37/02}; rotary tool heads for turning-machines B23B3/24, B23B3/26; non-driven tool holders B23B29/00; general features of turrets B23B29/24 {; drawbars in spindles B23B31/261; for electrical discharge machining B23H11/003; for welding B23K37/04; means for securing grinding wheels B24B | |

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| <u>Type*</u> | <u>Symbol</u> | <u>Indent Level</u> <u>Number of</u> <u>dots (e.g. 0,</u> <u>1, 2)</u> | <u>Title</u> <u>(new or modified)</u> <u>“CPC only” text should normally be</u> <u>enclosed in {curly brackets}**</u> | <u>Transferred to</u> |
|--------------|----------------|---|---|--|
| | | | 45/00; mountings for abrasive wheels B24D5/16}; tools or bench devices for fastening, connecting, disengaging or holding B25B {; chucks for percussive tools B25D17/084; work benches for manual work B25H1/00; devices for securing circular saw blades B27B5/32; for assembling or manufacturing aircrafts B64F5/0009; for holding semiconductors or wafers H01L21/67; devices for holding circuit boards H05K13/0061 } | |
| M | B23Q3/155 | 1 | Arrangements for automatic insertion or removal of tools {, e.g. combined with manual handling (B23Q7/046 takes precedence)} | |
| N | B23Q3/15503 | 2 | {Processes characterized by special sequencing of operations or the like, e.g. for optimizing tool changing time or capacity in tool storage } | |
| C | B23Q3/15526 | 3 | {Storage devices; Drive mechanisms therefor } | B23Q3/15526, B23Q2003/15527, B23Q2003/15528, B23Q2003/1553, B23Q2003/15531, B23Q2003/15532, B23Q3/15534, B23Q3/15536, B23Q2003/15537, B23Q3/15539 |
| N | B23Q2003/15527 | 4 | {the storage device including means to latch tools } | |
| N | B23Q2003/15528 | 4 | {the storage device including means to project tools therefrom, e.g. for transferring them } | |
| N | B23Q2003/1553 | 5 | {by rectilinear projection } | |
| N | B23Q2003/15531 | 5 | {by pivoting projection movement } | |
| N | B23Q2003/15532 | 4 | {the storage device including tool pots, adaptors or the like } | |
| U | B23Q3/15533 | 4 | {combined with manual tool transfers } | |

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| Type* | Symbol | Indent Level Number of dots (e.g. 0, 1, 2) | Title (new or modified) “CPC only” text should normally be enclosed in {curly brackets}** | Transferred to |
|--------------|-----------------|---|--|---|
| N | B23Q3/15534 | 4 | {Magazines mounted on the spindle} | |
| N | B23Q3/15536 | 4 | {Non-rotary fixed racks} | |
| N | B23Q2003/15537 | 4 | {Linearly moving storage devices} | |
| N | B23Q3/15539 | 4 | {Plural magazines, e.g. involving tool transfer from one magazine to another (involving manual operation B23Q3/15533)} | |
| C | B23Q3/1554 | 3 | {Transfer mechanisms, e.g. tool gripping arms; Drive mechanisms therefore } | B23Q3/1554, B23Q2003/155404, B23Q2003/155407, B23Q2003/155411, B23Q2003/155414, B23Q2003/155418, B23Q2003/155421, B23Q2003/155425, B23Q2003/155428, B23Q2003/155432, B23Q2003/155435, B23Q2003/155439, B23Q2003/155442, B23Q2003/155446, B23Q2003/155449, B23Q2003/155453 B23Q2003/155456 |
| N | B23Q2003/155404 | 4 | {the transfer mechanism comprising a single gripper } | |
| N | B23Q2003/155407 | 5 | {linearly movable} | |
| N | B23Q2003/155411 | 5 | {pivotable} | |
| N | B23Q2003/155414 | 4 | {the transfer mechanism comprising two or more grippers } | |
| N | B23Q2003/155418 | 5 | {the grippers moving together} | |
| N | B23Q2003/155421 | 5 | {the grippers moving independently from each other} | |
| N | B23Q2003/155425 | 5 | {pivotable} | |
| N | B23Q2003/155428 | 6 | {about a common axis} | |
| N | B23Q2003/155432 | 6 | {about different axes} | |
| N | B23Q2003/155435 | 6 | {and linearly movable} | |
| N | B23Q2003/155439 | 7 | {along the pivoting axis } | |
| N | B23Q2003/155442 | 7 | {radially to the pivoting axis} | |
| N | B23Q2003/155446 | 7 | {with translation of the pivoting axis} | |
| N | B23Q2003/155449 | 5 | {linearly movable only} | |

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| <u>Type*</u> | <u>Symbol</u> | <u>Indent Level</u> <u>Number of dots (e.g. 0, 1, 2)</u> | <u>Title</u> <u>(new or modified)</u> <u>“CPC only” text should normally be enclosed in {curly brackets}**</u> | <u>Transferred to</u> |
|--------------|-----------------|---|--|--|
| N | B23Q2003/155453 | 5 | {including different gripper configurations for holding differently-configured tools} | |
| N | B23Q2003/155456 | 4 | {using separate transfer mechanisms for each tool in the magazine} | |
| M | B23Q3/15553 | 3 | {Tensioning devices or tool holders, e.g. grippers (driving working-spindles and adjusting or stopping them in a predetermined angular position B23Q5/20; securing milling cutters to the driving spindle in a given angular position B23C5/26)} | |
| U | B23Q3/15573 | 3 | {the tool being taken from a storage device and transferred to a tool holder by means of transfer devices} | |
| M | B23Q2003/1558 | 2 | {involving insertion or removal of other machine components together with the removal or insertion of tools or tool holders} | |
| D | B23Q2003/15593 | 2 | {Optimising tool changing time or capacity in tool storage} | <administrative transfer to B23Q3/15503> |
| C | B23Q3/1572 | 4 | {the storage device comprising rotating or circulating storing means} | B23Q3/1572, B23Q3/15722, B23Q3/15724 |
| N | B23Q3/15722 | 5 | {Rotary discs or drums} | |
| N | B23Q3/15724 | 5 | {Chains or belts} | |
| U | B23Q3/15726 | 5 | {the storage means rotating or circulating in a plane parallel to the axis of the spindle} | |
| M | B23Q9/00 | 0 | Arrangements for supporting or guiding portable metal-working machines or apparatus ({turning machine for reconditioning wheel sets without removing same from vehicle B23B 5/32; } for tapping pipes {B23B 41/00, F16L 41/04}; specially designed for drilling {B23B 45/00, B25H 1/0021}) | |

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*N = new entries where reclassification into entries is involved; C = entries with modified file scope where reclassification of documents from the entries is involved; Q = new entries which are firstly populated with documents via administrative transfers from deleted (D) entries. Afterwards, the transferred documents into the Q entry will either stay or be moved to more appropriate entries, as determined by intellectual reclassification; E= existing entries with enlarged file scope, which receive documents from C or D entries, e.g. when a limiting reference is removed from the entry title; M = entries with no change to the file scope (no reclassification); D = deleted entries; F = frozen entries will be deleted once reclassification of documents from the entries is completed; U = entries that are unchanged.

NOTES:

- **No { curly brackets } are used for titles in CPC only subclasses, e.g. C12Y, A23Y; 2000 series symbol titles of groups found at the end of schemes (orthogonal codes); or the Y section titles. The { curly brackets } are used for 2000 series symbol titles found interspersed throughout the main trunk schemes (breakdown codes).
- For U groups, the minimum requirement is to include the U group located immediately prior to the N group or N group array, in order to show the N group hierarchy and improve the readability and understanding of the scheme. Always include the symbol, indent level and title of the U group in the table above.
- All entry types should be included in the scheme changes table above for better understanding of the overall scheme change picture. Symbol, indent level, and title are required for all types except “D” which requires only a symbol.
- #“Transferred to” column must be completed for all C, D, F, and Q type entries. F groups will be deleted once reclassification is completed.
- When multiple symbols are included in the “Transferred to” column, avoid using ranges of symbols in order to be as precise as possible.
- For administrative transfer of documents, the following text should be used: “< administrative transfer to XX>” or “<administrative transfer to XX and YY simultaneously>” when administrative transfer of the same documents is to more than one place.
- Administrative transfer to main trunk groups is assumed to be “invention information”, unless otherwise indicated, and to 2000 series groups is assumed to be “additional information”.

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B. New, Modified or Deleted Warning notice(s)

SUBCLASS B23Q - DETAILS, COMPONENTS, OR ACCESSORIES FOR MACHINE TOOLS, e.g. ARRANGEMENTS FOR COPYING OR CONTROLLING (tools of the kind used in lathes or boring machines B23B27/00); MACHINE TOOLS IN GENERAL CHARACTERISED BY THE CONSTRUCTION OF PARTICULAR DETAILS OR COMPONENTS; COMBINATIONS OR ASSOCIATIONS OF METAL-WORKING MACHINES, NOT DIRECTED TO A PARTICULAR RESULT

| <u>Type*</u> | <u>Location</u> | <u>Old Warning notice</u> | <u>New/Modified Warning notice</u> |
|--------------|-----------------|---------------------------|--|
| N | B23Q3/15526 | | Group B23Q 3/15526 is impacted by reclassification into groups B23Q 2003/15527, B23Q2003/15528, B23Q 2003/1553, B23Q2003/15531, B23Q 2003/15532, B23Q3/15534, B23Q 3/15536, B23Q2003/15537 and B23Q 3/15539. All groups listed in this Warning should be considered in order to perform a complete search. |
| N | B23Q2003/15527 | | Group B23Q2003/15527 is incomplete pending reclassification of documents from group B23Q3/15526. Groups B23Q3/15526 and B23Q 2003/15527 should be considered in order to perform a complete search. |
| N | B23Q2003/15528 | | Group B23Q2003/15528 is incomplete pending reclassification of documents from group B23Q3/15526. Groups B23Q3/15526 and B23Q 2003/15528 should be considered in order to perform a complete search. |
| N | B23Q2003/1553 | | Group B23Q2003/1553 is incomplete pending reclassification of documents from group B23Q3/15526. Groups B23Q 3/15526 and B23Q2003/1553 should be considered in order to perform a complete search. |
| N | B23Q2003/15531 | | Group B23Q2003/15531 is incomplete pending reclassification of documents from group B23Q3/15526. Groups B23Q3/15526 and B23Q 2003/15531 should be considered in order to perform a complete search. |
| N | B23Q2003/15532 | | Group B23Q2003/15532 is incomplete pending reclassification of documents from group B23Q3/15526. Groups B23Q3/15526 and B23Q 2003/15532 should be considered in order to perform a complete search. |

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| <u>Type*</u> | <u>Location</u> | <u>Old Warning notice</u> | <u>New/Modified Warning notice</u> |
|--------------|-----------------|---------------------------|---|
| N | B23Q3/15534 | | Group B23Q3/15534 is incomplete pending reclassification of documents from group B23Q3/15526. Groups B23Q3/15526 and B23Q3/15534 should be considered in order to perform a complete search. |
| N | B23Q3/15536 | | Group B23Q3/15536 is incomplete pending reclassification of documents from group B23Q3/15526. Groups B23Q3/15526 and B23Q3/15536 should be considered in order to perform a complete search. |
| N | B23Q2003/15537 | | Group B23Q2003/15537 is incomplete pending reclassification of documents from group B23Q3/15526. Groups B23Q3/15526 and B23Q2003/15537 should be considered in order to perform a complete search. |
| N | B23Q3/15539 | | Group B23Q3/15539 is incomplete pending reclassification of documents from group B23Q3/15526. Groups B23Q3/15526 and B23Q3/15539 should be considered in order to perform a complete search. |
| N | B23Q3/1554 | | Group B23Q3/1554 is impacted by reclassification into groups B23Q 2003/155404, B23Q2003/155407, B23Q2003/155411, B23Q2003/155414, B23Q2003/155418, B23Q2003/155421, B23Q2003/155425, B23Q 2003/155428, B23Q 2003/155432, B23Q2003/155435, B23Q2003/155439, B23Q2003/155442, B23Q2003/155446, B23Q2003/155449, B23Q2003/155453 and B23Q 2003/155456. All groups listed in this Warning should be considered in order to perform a complete search. |
| N | B23Q2003/155404 | | Group B23Q2003/155404 is incomplete pending reclassification of documents from group B23Q3/1554. Groups B23Q 3/1554 and B23Q2003/155404 should be considered in order to perform a complete search. |
| N | B23Q2003/155407 | | Group B23Q2003/155407 is incomplete pending reclassification of documents from group B23Q3/1554. Groups B23Q 3/1554 and B23Q2003/155407 should be considered in order to perform a complete search. |

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| <u>Type*</u> | <u>Location</u> | <u>Old Warning notice</u> | <u>New/Modified Warning notice</u> |
|--------------|-----------------|---------------------------|--|
| N | B23Q2003/155411 | | Group B23Q2003/155411 is incomplete pending reclassification of documents from group B23Q3/1554. Groups B23Q3/1554 and B23Q2003/155411 should be considered in order to perform a complete search. |
| N | B23Q2003/155414 | | Group B23Q2003/155414 is incomplete pending reclassification of documents from group B23Q3/1554. Groups B23Q3/1554 and B23Q2003/155414 should be considered in order to perform a complete search. |
| N | B23Q2003/155418 | | Group B23Q2003/155418 is incomplete pending reclassification of documents from group B23Q3/1554. Groups B23Q3/1554 and B23Q2003/155418 should be considered in order to perform a complete search. |
| N | B23Q2003/155421 | | Group B23Q2003/155421 is incomplete pending reclassification of documents from group B23Q3/1554. Groups B23Q3/1554 and B23Q2003/155421 should be considered in order to perform a complete search. |
| N | B23Q2003/155425 | | Group B23Q2003/155425 is incomplete pending reclassification of documents from group B23Q3/1554. Groups B23Q3/1554 and B23Q2003/155425 should be considered in order to perform a complete search. |
| N | B23Q2003/155428 | | Group B23Q2003/155428 is incomplete pending reclassification of documents from group B23Q3/1554. Groups B23Q3/1554 and B23Q2003/155428 should be considered in order to perform a complete search. |
| N | B23Q2003/155432 | | Group B23Q2003/155432 is incomplete pending reclassification of documents from group B23Q3/1554. Groups B23Q3/1554 and B23Q2003/155432 should be considered in order to perform a complete search. |
| N | B23Q2003/155435 | | Group B23Q2003/155435 is incomplete pending reclassification of documents from group B23Q3/1554. Groups B23Q3/1554 and B23Q2003/155435 should be considered in order to perform a complete search. |

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| <u>Type*</u> | <u>Location</u> | <u>Old Warning notice</u> | <u>New/Modified Warning notice</u> |
|--------------|-----------------|---------------------------|--|
| N | B23Q2003/155439 | | Group B23Q2003/155439 is incomplete pending reclassification of documents from group B23Q3/1554. Groups B23Q3/1554 and B23Q2003/155439 should be considered in order to perform a complete search. |
| N | B23Q2003/155442 | | Group B23Q2003/155442 is incomplete pending reclassification of documents from group B23Q3/1554. Groups B23Q3/1554 and B23Q2003/155442 should be considered in order to perform a complete search. |
| N | B23Q2003/155446 | | Group B23Q2003/155446 is incomplete pending reclassification of documents from group B23Q3/1554. Groups B23Q3/1554 and B23Q2003/155446 should be considered in order to perform a complete search. |
| N | B23Q2003/155449 | | Group B23Q2003/155449 is incomplete pending reclassification of documents from group B23Q3/1554. Groups B23Q3/1554 and B23Q2003/155449 should be considered in order to perform a complete search. |
| N | B23Q2003/155453 | | Group B23Q2003/155453 is incomplete pending reclassification of documents from group B23Q3/1554. Groups B23Q3/1554 and B23Q2003/155453 should be considered in order to perform a complete search. |
| N | B23Q2003/155456 | | Group B23Q2003/155456 is incomplete pending reclassification of documents from group B23Q3/1554. Groups B23Q3/1554 and B23Q2003/155456 should be considered in order to perform a complete search. |
| N | B23Q3/1572 | | Group B23Q3/1572 is impacted by reclassification into groups B23Q3/15722 and B23Q3/15724. All groups listed in this Warning should be considered in order to perform a complete search. |
| N | B23Q3/15722 | | Group B23Q3/15722 is incomplete pending reclassification of documents from group B23Q3/1572. Groups B23Q3/1572 and B23Q3/15722 should be considered in order to perform a complete search. |

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| <u>Type*</u> | <u>Location</u> | <u>Old Warning notice</u> | <u>New/Modified Warning notice</u> |
|--------------|-----------------|---------------------------|--|
| N | B23Q3/15724 | | Group B23Q3/15724 is incomplete pending reclassification of documents from group B23Q3/1572. Groups B23Q3/1572 and B23Q3/15724 should be considered in order to perform a complete search. |

*N = new warning, M = modified warning, D = deleted warning

NOTE: The "Location" column only requires the symbol PRIOR to the location of the warning. No further directions such as "before" or "after" are required.

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C. New, Modified or Deleted Note(s)

SUBCLASS B23Q - DETAILS, COMPONENTS, OR ACCESSORIES FOR MACHINE TOOLS, e.g. ARRANGEMENTS FOR COPYING OR CONTROLLING (tools of the kind used in lathes or boring machines B23B27/00); MACHINE TOOLS IN GENERAL CHARACTERISED BY THE CONSTRUCTION OF PARTICULAR DETAILS OR COMPONENTS; COMBINATIONS OR ASSOCIATIONS OF METAL-WORKING MACHINES, NOT DIRECTED TO A PARTICULAR RESULT

| <u>Type*</u> | <u>Location</u> | <u>Old Note</u> | <u>New/Modified Note</u> |
|--------------|-----------------|-----------------|---|
| N | B23Q (subclass) | | In Note 2, ADD the following under the last line (“ <i>automatic control</i> ” is ...): – “Machine tool” means a mechanical working machine that removes material from a workpiece with a mechanical cutting edge to perform a shaping operation, essentially through drilling, milling, turning or cutting, e.g. sawing. The workpiece is generally made of metal, wood or plastic and is not a human body, food or clothes. |
| N | B23Q3/15526 | | When classifying in this group or one of its subgroups the usage of indexing codes B23Q2003/15527 – B23Q2003/15532, B23Q2003/15537 is obligatory. |
| N | B23Q3/1554 | | When classifying in this group the usage of indexing codes B23Q2003/155404 – B23Q2003/155456 is obligatory. |

*N = new note, M = modified note, D = deleted note

NOTE: The “Location” column only requires the symbol PRIOR to the location of the note. No further directions such as “before” or “after” are required.

2. A. DEFINITIONS (new)

INSERT the following new definitions:

B23Q 1/48

References

Limiting references

This place does not cover:

| |
|--|
| Movable or adjustable work or tool supports with sliding pairs and rotating pairs, whereby particular mechanisms with screw pairs are being used |
|--|

| |
|--------------------------|
| B23Q1/46 |
|--------------------------|

Special rules of classification

See table provided under [B23Q1/00](#) for summary of kinematic connections.

B23Q 1/50

Special rules of classification

See table provided under [B23Q1/00](#) for summary of kinematic connections.

B23Q 1/56

Special rules of classification

See table provided under [B23Q1/00](#) for summary of kinematic connections.

B23Q 3/155

References

Limiting references

This place does not cover:

| | |
|---|----------------------------|
| handling workpieces or tools by means of grippers specially adapted for use in connection with arrangements for automatic insertion or removal of tools | B23Q 7/046 |
|---|----------------------------|

B23Q 3/15536

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

| | |
|--|-----------------------------|
| Arrangements for automatic insertion or removal of rotary tools by a transfer device taking a single tool from a storage device comprising rotating or circulating storage means and inserting it into a spindle | B23Q 3/1572 |
|--|-----------------------------|

2. A. DEFINITIONS (modified)

B23Q

Definition statement

In the first paragraph, **DELETE** only the word “usually” in: “General components that usually...machine.”

REPLACE the second paragraph “Machine configurations combining ... or turning”
with

Machine configurations combining different kinds of machining operations, such as drilling, milling, turning, or cutting, e.g. sawing.

Relationship with other classification places

DELETE the existing **five** paragraphs: “There are other groups ...B21 deals with mechanical working without removing material”.

REPLACE with the following paragraphs including the flowchart diagram:

In the subclass **B23Q**, a machine tool is considered to be a mechanical working machine that removes material from a workpiece with a mechanical cutting edge to perform a shaping operation, essentially through drilling, milling, turning, or cutting, e.g. sawing.

B23Q is in general related to machine tools in the sense of the wording as being referred to above, not related to a particular result. There are, however, subclasses that are specially dedicated to specific machining techniques and their corresponding equipment or methods. Classification is done in the specific subclasses and not in **B23Q**, if the process or apparatus is fully covered in said specific subclasses.

B21 deals with mechanical working of metal without removing material.

B23B is the subclass for machines or components dedicated to turning or boring operations. In particular, group **B23B31/00** relates to chucks and group **B23B27/00** to

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tools for turning or boring machines. [B23C](#) is the subclass for milling, [B23D](#) for slotting or sawing, [B23F](#) for making gears, [B23G](#) for thread cutting, [B23H](#) for electro discharge machining, [B23K](#) for welding, [B24](#) for grinding or polishing.

[B25B](#) relates to clamps, vices or chucks as such, with no special relation to a specific configuration of a machine tool. [B25J](#) deals with manipulators.

The subclasses [B25C](#), [B25D](#), [B25F](#) deal with portable power driven tools. [B25H](#) refers to workshop equipment, e.g. work benches. Subclass [B26D](#) relates to cutting and severing, [B26F](#) to perforating and punching.

Transport or storage devices not used in particular handling or treatment are covered by [B65G](#).

[F16](#) is a general class of mechanical components (such as linear guides and bearings) that are used in machine tools, as well as in other technical fields.

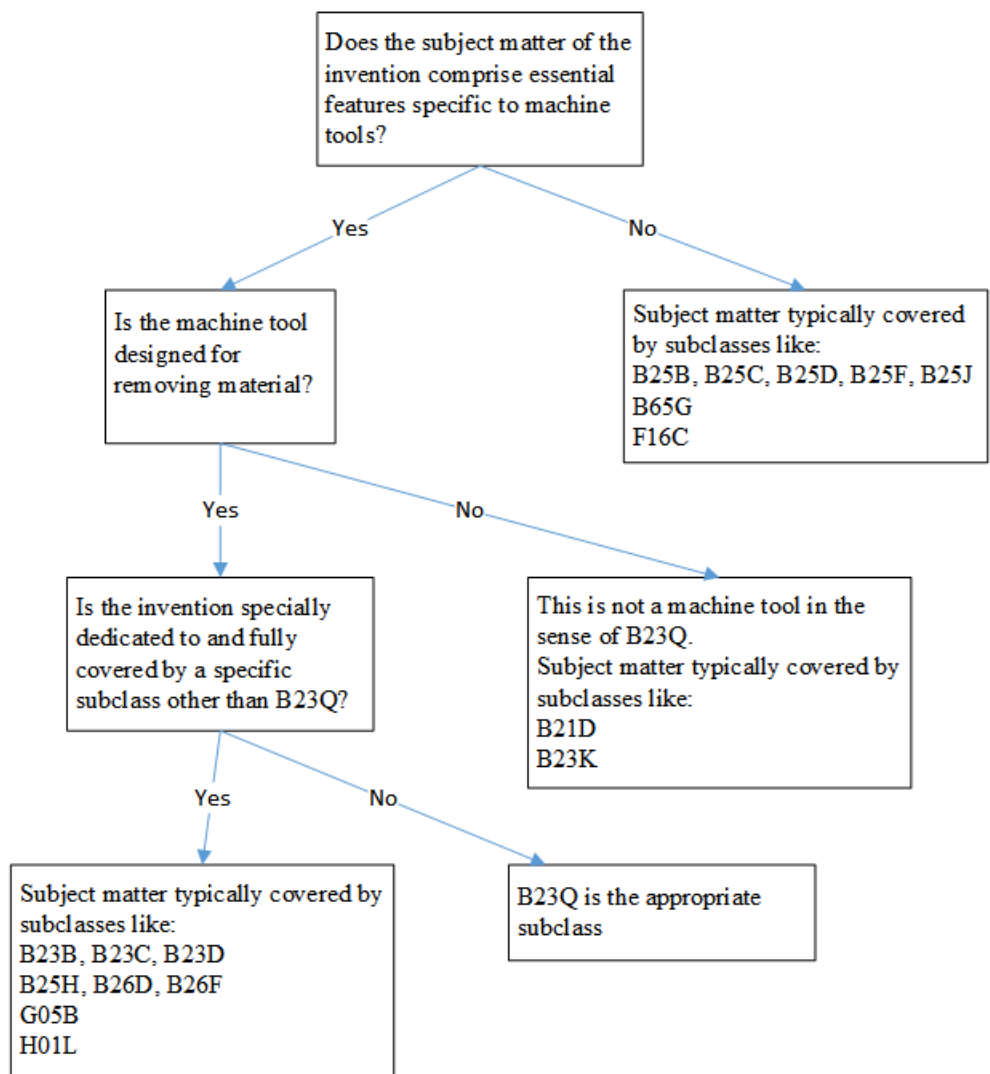
Group [G05B19/00](#) covers program control systems.

[H01L21/67](#) covers apparatus specially adapted for handling semiconductor or electric solid state devices, e.g. wafers, during manufacture or treatment thereof.

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As guidance for finding the appropriate subclass, reference is made to the following flow chart:



The preceding image includes references to B25B, B25C, B25D, B25F, B25J, B65G, F16C, B23Q, B21D, B23K, B23B, B23C, B23D, B25H, B26D, B26F, G05B, and H01L.

ADD the following new Reference section:

References

Limiting references

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This place does not cover:

| |
|---|
| Tools of the kind used in lathes or boring machines |
|---|

| |
|-----------|
| B23B27/00 |
|-----------|

Glossary of terms

For Machine tool (*see* first column), **DELETE** the existing description: “mechanical working machine... is not a human body, food or clothe.” from the table.

REPLACE with the following description:

a mechanical working machine that removes material from a workpiece with a mechanical cutting edge to perform a shaping operation essentially through drilling, milling, turning, or cutting, e.g. sawing. The workpiece is generally made of metal, wood or plastic and is not a human body, food or cloth.

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B23Q1/00

ADD the following new section:

Relationships with other classification places

The groups [B23Q1/48](#) - [B23Q1/62](#) do not cover parallel kinematic structures as such, without special application in a machine tool, which is covered by [B25J9/00](#), [B25J17/00](#).

References

Limiting references

Insert the following new row:

| | |
|--|---------------------------|
| Members which are comprised in the general build-up of a form of machine, whereby said machine is a metal-working machines, or constructional combinations thereof, built-up from units designed so that at least some of the units can form parts of different machines or combinations | B23Q37/00 |
|--|---------------------------|

Delete the following existing row:

| | |
|--|--|
| The groups B23Q1/48 - B23Q1/62 do not cover parallel kinematic structures as such, without special application in a machine tool | B25J9/00 , B25J17/00 |
|--|--|

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Special rules of classification

REPLACE in the first statement (*The following table summarises the content of the classes, wherein*) the word “classes” with the word “groups”.

INSERT below the statement (*The rotation of the cutting tool ...movement R.*) the following new statement as the last statement before the table.

To illustrate the meaning of the symbols P, R, A, E, the drawings below indicate the relation between the symbol(s) and the actual movement:

In the Table, **CHANGE** the heading in the first column from “Class” to “Group.”

ADD the following new row in the table.

| | |
|------------|-------|
| B23Q1/4838 | REPER |
|------------|-------|

In these three rows B23Q1/522, B23Q1/525 and B23Q1/527, **change R as follows:**

| | |
|-----------|------|
| B23Q1/522 | R' |
| B23Q1/525 | R'' |
| B23Q1/527 | R''' |

For the two rows shown in the table below, **REPLACE** the descriptions in the 2nd column with the following text.

| | |
|------------|---|
| B23Q1/5437 | RAR' (The last rotation of the supporting surface is perpendicular to the surface on which the last rotation is mounted to) |
| B23Q1/5443 | RAR'' (The last rotation of the supporting surface is parallel to the surface on which the last rotation is mounted to) |

For the row shown in the table below, **REPLACE** the description in the 2nd column with the following text.

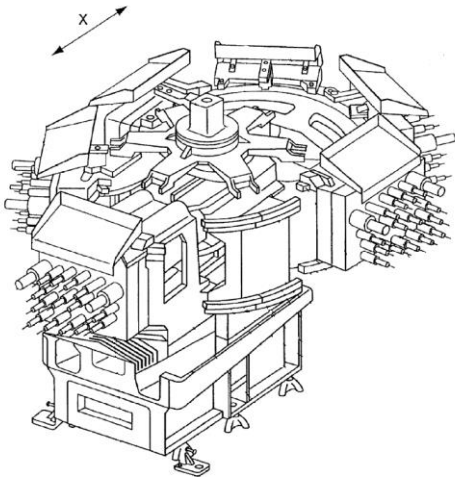
| | |
|--------------------------|---|
| B23Q1/62 | PAP (Use this group when the perpendicular axes are not piled, that is that both axes are at a same level (not one on top of the other; JP3234488)) |
|--------------------------|---|

B23Q 3/00

Definition statement

INSERT the following (statement, image, and statement) after the existing 4th paragraph (*Arrangements for the automatic...tool (B23Q3/155.)*).

Arrangements for replacing, inserting or removing multi-spindle head modules:



Illustrative document [B23Q2003/1558](#)

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References

Limiting references

In the table, **DELETE** existing rows 1 and 2 shown below:

Work supports with reconfigurable surface... B23Q1/03
Quick clamping cylinders...B23Q1/0063

In the table, **INSERT** the following new rows:

| | |
|---|--|
| Rotary tool heads for turning-machines | B23B3/24 , B23B3/26 |
| Non-driven tool holders | B23B29/00 |
| General features of turrets | B23B29/24 |
| Work-tables or other parts, e.g. faceplates, normally not incorporating means for securing work | B23Q1/00 |
| Automatic position control | B23Q15/00 |

Special rules of classification

REPLACE the second paragraph with the following:

The documents shall thus receive a classification symbol in one of the [B23Q3/15706](#) or [B23Q3/15713](#) groups and eventually one of the groups [B23Q3/1572](#) to [B23Q3/15766](#).

ADD a third paragraph with the following text:

Arrangements for automatic insertion or removal of tools are classified in the appropriate entries foreseen in the groups [B23Q3/155](#) through [B23Q3/15793](#), and when comprising guards, fences, doors or any other kind of housing for protection of some parts of said arrangements, then additional classification in [B23Q11/08](#) is required.

B23Q 3/15553

INSERT the following new section:

References

Limiting references

This group does not cover:

| | |
|---|-----------|
| Securing milling cutters to the driving spindle in a given angular position | B23C 5/26 |
| Driving working-spindles and adjusting or stopping them in a predetermined angular position | B23Q 5/20 |

B23Q9/00

Definition statement

INSERT the following new statements as the 3rd and 4th paragraphs:

Machines that are automatically guided by means supported directly on the workpiece, e.g. via an automatic cart or crawler (B23Q9/0007).

Machines that are manually guided by means supported directly on the workpiece (B23Q9/0014).

References

Limiting references

INSERT the following two new rows in the existing table:

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| | |
|--|-------------------------|
| For tapping pipes | B23B41/00, F16L41/04 |
| Hand-held or like portable drilling machines, e.g. drill guns; Equipment therefor | B23B45/00 |

INSERT the following new section:

Informative references

Attention is drawn to the following places, which may be of interest for search:

| | |
|---|----------|
| Portable hand-operated wood-milling machines; Routers | B27C5/10 |
|---|----------|

Special rules of classification

INSERT the following new symbol and paragraph **before** symbol B23Q9/0014:

[B23Q9/0007](#)

Automatic machine usually used for machining large workpieces which require high machining accuracy (e.g. aeronautic components, pipes, or profiles), wherein the machine or the guide means are supported by the workpiece. If the guide means form part of the machine, then classify also in [B23Q9/0028](#) or [B23Q9/0035](#); if they are independent from the machine and fixed on the workpiece, then classify also in [B23Q9/0042](#) through [B23Q9/0057](#).

MODIFY the paragraph for symbol B23Q9/0014 as shown below:

REPLACE the existing statement with the following new statement:

Smaller portable machine that is manually guided by the operator, wherein the machine or the guide means are supported by the workpiece. If the guide means form part of the machine, then classify also in [B23Q9/0028](#) or [B23Q9/0035](#); if they are independent from the machine and fixed on the workpiece, then classify also in [B23Q9/0042](#) through [B23Q9/0057](#).

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3. REVISION CONCORDANCE LIST (RCL)

| <u>Type*</u> | <u>From CPC Symbol (existing)</u> | <u>To CPC Symbol(s)</u> |
|--------------|-----------------------------------|---|
| C | B23Q3/15526 | B23Q3/15526, B23Q2003/15527, B23Q2003/15528, B23Q2003/1553, B23Q2003/15531, B23Q2003/15532, B23Q3/15534, B23Q3/15536, B23Q2003/15537, B23Q3/15539 |
| C | B23Q3/1554 | B23Q3/1554, B23Q2003/155404, B23Q2003/155407, B23Q2003/155411, B23Q2003/155414, B23Q2003/155418 B23Q2003/155421, B23Q2003/155425, B23Q2003/155428, B23Q2003/155432, B23Q2003/155435, B23Q2003/155439, B23Q2003/155442, B23Q2003/155446, B23Q2003/155449, B23Q2003/155453, B23Q2003/155456 |
| D | B23Q2003/15593 | < administrative transfer to B23Q15503> |
| C | B23Q3/1572 | B23Q3/1572, B23Q3/15722, B23Q3/15724 |

* C = entries with modified file scope where reclassification of documents from the entries is involved; Q = new entries which are firstly populated with documents via administrative transfers from deleted (D) entries. Afterwards, the transferred documents into the Q entry will either stay or be moved to more appropriate entries, as determined by intellectual reclassification; D = deleted entries.

NOTES:

- Only C, D, F and Q type entries are included in the table above.
- When multiple symbols are included in the “To” column, avoid using ranges of symbols in order to be as precise as possible.
- For administrative transfer of documents, the following text should be used: “< administrative transfer to XX>” or “<administrative transfer to XX and YY simultaneously>” when administrative transfer of the same documents is to more than one place.

Administrative transfer to main trunk groups is assumed to be “invention information”, unless otherwise indicated, and to 2000 series groups is assumed to be “additional information”.

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4. CHANGES TO THE CPC-TO-IPC CONCORDANCE LIST (CICL)

| <u>CPC</u> | <u>IPC</u> | <u>Action*</u> |
|-----------------|------------|----------------|
| B23Q3/15503 | B23Q3/155 | NEW |
| B23Q2003/15527 | B23Q3/155 | NEW |
| B23Q2003/15528 | B23Q3/155 | NEW |
| B23Q2003/1553 | B23Q3/155 | NEW |
| B23Q2003/15531 | B23Q3/155 | NEW |
| B23Q2003/15532 | B23Q3/155 | NEW |
| B23Q3/15534 | B23Q3/155 | NEW |
| B23Q3/15536 | B23Q3/155 | NEW |
| B23Q2003/15537 | B23Q3/155 | NEW |
| B23Q3/15539 | B23Q3/155 | NEW |
| B23Q2003/155404 | B23Q3/155 | NEW |
| B23Q2003/155407 | B23Q3/155 | NEW |
| B23Q2003/155411 | B23Q3/155 | NEW |
| B23Q2003/155414 | B23Q3/155 | NEW |
| B23Q2003/155418 | B23Q3/155 | NEW |
| B23Q2003/155421 | B23Q3/155 | NEW |
| B23Q2003/155425 | B23Q3/155 | NEW |
| B23Q2003/155428 | B23Q3/155 | NEW |
| B23Q2003/155432 | B23Q3/155 | NEW |
| B23Q2003/155435 | B23Q3/155 | NEW |
| B23Q2003/155439 | B23Q3/155 | NEW |
| B23Q2003/155442 | B23Q3/155 | NEW |
| B23Q2003/155446 | B23Q3/155 | NEW |
| B23Q2003/155449 | B23Q3/155 | NEW |
| B23Q2003/155453 | B23Q3/155 | NEW |
| B23Q2003/155456 | B23Q3/155 | NEW |
| B23Q3/15722 | B23Q3/157 | NEW |
| B23Q3/15724 | B23Q3/157 | NEW |
| B23Q2003/15593 | | DELETE |

*Action column:

- For an (N) or (Q) entry, provide an IPC symbol and complete the Action column with “NEW.”
- For an existing CPC main trunk entry or indexing entry where the existing IPC symbol needs to be changed, provide an updated IPC symbol and complete the Action column with “UPDATED.”
- For a (D) CPC entry or indexing entry complete the Action column with “DELETE.” IPC symbol does not need to be included in the IPC column.
- For an (N) 2000 series CPC entry which is positioned within the main trunk scheme (breakdown code) provide an IPC symbol and complete the action column with “NEW”.
- For an (N) 2000 series CPC entry positioned at the end of the CPC scheme (orthogonal code), with no IPC equivalent, complete the IPC column with “CPCONLY” and complete the action column with “NEW”.

NOTES:

- F symbols are not included in the CICL table above.
- E and M symbols are not included in the CICL table above unless a change to the existing IPC is desired.