CPC field-specific training
B25G
Overview

- Classification scheme
- Definitions and related fields
- Examples
Classification scheme

B25G group has about **19 000 documents**.

The largest groups are:
- 2 400 documents – B25G1/102
- 1 880 documents – B25G1/04
- 1 670 documents – B25G1/10
- 1 550 documents – B25G1/00

The **average group** size is around **460 documents**, with a higher average size in B25G1 than in B25G3 groups.
Classification scheme

As the aim of classification is the retrieval of technical subject-matter, the search examiner in the field applies a mix of:

- **Figure-feature search**, i.e. a search of features shown in figures
- **Text-feature search**, i.e. a search for written features

When flipping through documents, in B25G, the search examiner mostly looks at the figures, i.e. classification of the figures is often more important than classification of the wording of broad and vague claims.
Classification scheme

The distribution of the technology in B25G is split as follows:

- B25G1 and its subgroups applies to handles of tools/articles *(without motor)*
- B25G3 and its subgroups applies to how working implements are connected to a handle of a non-powered tool/article (i.e. screwdriver, mops, shovels etc.)

It is not uncommon to find in the “popular” groups dealing with ergonomics, items from personal grooming, sports, cooking etc.
Classification scheme

B25G1/00 – Handle constructions

B25G1/002 – for rotary tools with additional levers, e.g. for increasing torque (B25G1/005 takes precedence)

B25G1/005 – for screwdrivers, wrenches or spanners with additional levers, e.g. for increasing torque

B25G1/007 – of crank type

B25G1/01 – Shock-absorbing means (B25G1/02 takes precedence)

B25G1/02 – flexible (hammers heads having shock-absorbing means B25D1/12)

B25G1/025 – for screwdrivers, wrenches or spanners
Classification scheme

B25G1/04 – telescopic; extensible; sectional
  B25G1/043 – for screwdrivers, wrenches or spanners
    B25G1/046 – with free-turning section at end of handle remote from tool
B25G1/06 – reversible or adjustable for position
  B25G1/063 – for screwdrivers, wrenches or spanners
    B25G1/066 – the grip itself being angularly adjustable
B25G1/08 – with provision for storing tool elements
  B25G1/085 – for screwdrivers, wrenches or spanners
Classification scheme

B25G1/10 – characterised by material or shape (B25G1/01, B25G1/02 take precedence)(for hand tools comprising coating rollers B05C17/0205)

B25G1/102 – the shape being specially adapted to facilitate handling or improve grip

B25G1/105 – for screwdrivers, wrenches or spanners (B25G1/102, B25G1/125 take precedence)

B25G1/107 – of thimble type

B25G1/12 – electrically insulating material

B25G1/125 – for screwdrivers, wrenches or spanners
Classification scheme

B25G3/00 – **Attaching handles to the implements**

- B25G3/02 – Socket, tang, or like fixings
  (B25G3/34 takes precedence)

- B25G3/04 – with detachable or separate socket pieces
  (B25G3/12 takes precedence)

- B25G3/06 – with multiple socket, e.g. T-socket
  (B25G3/12 takes precedence)

- B25G3/08 – with dovetail or other groove
  (B25G3/12 takes precedence)

- B25G3/10 – with elastic, taper, or other self-grip socket or tang
  (B25G3/12 takes precedence)

- B25G3/12 – Locking and securing devices
  - B25G3/14 – comprising barbs or teeth
  - B25G3/16 – comprising bayonet joints

B25G3/14

B25G3/16

B25G3/18

B25G3/20

B25G3/22

B25G3/24

B25G3/26

B25G3/28

B25G3/30

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B25G3/94

B25G3/96

B25G3/98
Classification scheme

B25G3/18 – comprising catches or pawls

B25G3/20 – comprising clamping or contracting means acting concentrically on the handle or socket

B25G3/22 – Chucks

B25G3/24 – comprising clamping or contracting means acting transversely on the handle or socket

B25G3/26 – comprising nails, screws, bolts, or pins traversing or entering the socket

B25G3/28 – comprising wedges, keys, or like expanding means

B25G3/30 – comprising screwed sockets or tangs

B25G3/32 – in association with, or including, tang, bolt, or other member passing axially through whole length of handle
Classification scheme

B25G3/34 – by pressing the handle on the implements; using cement or molten metal, e.g. casting, moulding, by welding or the like

B25G3/36 – Lap joints; Riveted, screwed, or like joints (socket, tang, or like fixings B25G3/02)

B25G3/38 – Hinged, pivoted, swivelling, or folding joints
Overview

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- Definitions and related fields
- Examples
Definitions and related fields
Special rules of classification

- Unless having an exclusively specified use (e.g. golf clubs handles), all handle constructions that are mentioned to be suitable for a tool are classified in these groups.

- B25G3/14 - B25G3/32 relate to very specific details of locking implements to the handle, being used like "keywords", usually in combination.
Definitions and related fields

Glossary of terms

- **Tool** = Any portable instrument of operation for performing, assisting the work or facilitating mechanical operations. Tools are manually operated. 
  **Machine tools and devices with power drive means are not considered as tools.**

- **Hand tool** = Hand held device for performing work on a material or a physical system using only muscular strength.
Definitions and related fields

B25G1/00 – Handle constructions

This place covers:

Handle constructions for hand tools without a power drive means:

- Handles for rotary tools with additional levers, e.g. for increasing torque;
- Handles for screwdrivers, wrenches or spanners with additional levers, e.g. for increasing torque;
- Shock-absorbing means & Flexible handles;
- Telescopic; extensible; sectional handles;
- Handles reversible or adjustable for position;
- Handles with provision for storing tool elements;
- Handles characterised by material or shape (ergonomic).
Definitions and related fields

Related fields of B25G1

- B29C45/00 - Injection moulding, i.e. forcing the required volume of moulding material through a nozzle into a closed mould
Definitions and related fields

B25G3/00 – Attaching handles to the implements

This place covers:

- Socket, tang, or like fixings;
- Fixings with detachable or separate socket pieces & multiple socket;
- Fixings with dovetail of other groove;
- Fixings with elastic, taper, or other self-grip socket or tang;
- Fixings by pressing the handle on the implements; using cement or molten metal, e.g. casting, moulding, by welding or the like;
- Fixings using lap joints; riveted, screwed, or like joints;
- Hinged, pivoted, swivelling or folding joints.
## Definitions and related fields

### Related fields of B25G3

<table>
<thead>
<tr>
<th>Class</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>B29C45/00</td>
<td>Injection moulding, i.e. forcing the required volume of moulding material through a nozzle into a closed mould</td>
</tr>
<tr>
<td>F16B2/00</td>
<td>Friction-grip releasable fastenings</td>
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<tr>
<td>F16B3/00</td>
<td>Key-type connections</td>
</tr>
<tr>
<td>F16B4/00</td>
<td>Shrinkage connections, e.g. assembled with the part at different temperature; Force fits</td>
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<tr>
<td>F16B7/00</td>
<td>Connections of rods or tubes, e.g. of non-circular section, mutually, including resilient connections</td>
</tr>
<tr>
<td>F16B9/00</td>
<td>Connections of rods or tubular parts to flat surfaces at an angle</td>
</tr>
<tr>
<td>F16B11/00</td>
<td>Connecting constructional elements or machine parts by sticking or pressing them together, e.g. cold pressure welding</td>
</tr>
<tr>
<td>F16B45/00</td>
<td>Hooks; Eyes</td>
</tr>
</tbody>
</table>
Definitions and related fields

Definitions – Workflow summary

- When flipping through documents, in B25G, the search examiner mostly looks at the figures, i.e. classification of the figures is often more important than classification of the wording of broad and vague claims. Text search has a very limited use, even in very large groups (i.e. B25G1/102).

- Abstract and summary of the invention are usually enough to receive additional “text” information.

- B25G and its subgroups applies only for tools without motor – combinations with B25F are very rare.

- Classification symbols are to be attached to every technically relevant aspect, resulting in multiple (usually 2-4) classification entries per document.
Overview

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**Examples**

**Example 1**

**US2016356009**

A handheld scooping and shaping device comprising a snow shaping section, a first hollow rigid shaft segment, a plurality of additional **hollow rigid shaft segments**, and a handle. The scooping panel comprises a distal end having a plurality of teeth extending outwardly.

The first hollow rigid shaft segment is removably coupled to the snow shaping section. **The plurality of additional hollow rigid shaft segments are configured to nest within** at either the first hollow rigid shaft segment or an additional hollow rigid shaft segment. The handle is coupled or integrated to one of the additional hollow rigid shaft segments.
**Examples**

**Example 2**

**US2018036868**

A clamping mechanism for an *adjustable length* tool is provided herein. The clamping mechanism includes a body having a top end, a bottom end opposite the top end, and a top portion proximate the top end; and, a lever rotatably coupled to the body between an unlocked position and a locked position, wherein the lever engages with the body during a movement of the lever to the locked position to cause a deformation of the top portion of the body.

According to one embodiment, deformation of the top portion of the body is structured to prevent relative movement between an inner pole of the adjustable length tool and the top portion of the body.

**B25G3/20** – comprising clamping or contracting means acting concentrically on the handle or socket

**B25G1/04** – Telescopic, sectional
Examples
Example 3

US9796460
A pontoon cleaning assembly for cleaning floats on a pontoon boat includes a handle that may be manipulated ... The handle 12 has a lower portion 18 that is slidably coupled to an upper portion 20. Thus, the handle 12 has a **telescopically adjustable length**. The lower portion 18 has a plurality of apertures 22 extending therethrough. The apertures 22 are spaced apart from each other and are distributed on the lower portion 18.

The upper portion 20 has a pair of bends 24 thereon to define a first angle 26 and a **second angle 28**. A lock 30 is movably coupled to the upper portion 20 and the lock 30 may be manipulated. The lock 30 engages a selected one of the apertures 22 in the lower portion 18. Thus, the handle 12 is retained at a selected length.
Examples

Example 4

US5911258

A broom apparatus for improving the way conventional corn brooms can be assembled and thereafter shipped. The broom apparatus includes a broomcorn attachment adaptor and a quick release adaptor adapted to be threadedly connected to the attachment adaptor.

The attachment adaptor comprises an attachment portion and a threaded shaft portion protruding outwardly from the attachment portion for threadedly engaging with the quick release adaptor, wherein the quick release adaptor is provided with a handle connection means for receiving and detachably attaching a broom handle thereto. Broomcorns are wound on the attachment portion of the attachment adaptor to form a broom head.
Examples

Example 5

US2017036237

A paint roller for painting corners and other angled surfaces. The paint roller includes a handle having a forked end from which a pair of arms extends. The pair of arms are preferably perpendicular in configuration. A roller can be positioned over each arm wherein the rollers are capable of rotating around the arms. In some embodiments, **the arms are removably secured to the forked end of the handle** so as to allow the user to utilize one or two paint rollers while painting.
Thank you for your attention!