#### **CPC COOPERATIVE PATENT CLASSIFICATION**

#### PERFORMING OPERATIONS; TRANSPORTING B (NOTES omitted)

## SHAPING

#### **B27** WORKING OR PRESERVING WOOD OR SIMILAR MATERIAL; NAILING OR STAPLING MACHINES IN GENERAL

## **B27B** SAWS FOR WOOD OR SIMILAR MATERIAL; COMPONENTS OR ACCESSORIES **THEREFOR** (saws specially adapted for pruning or debranching <u>A01G 3/08</u>; sawing apparatus specially adapted for felling trees A01G 23/091; features not restricted to a particular type of wood saw <u>B23D</u>, e.g. attaching saw blades <u>B23D 51/00</u>; machine tool frames, beds, pillars or like members, in general <u>B23Q 1/01</u>)

## WARNINGS

1. The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups: B27B 5/12

B27B 33/18

covered by

2. In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

1/00	Methods for subdividing trunks or logs essentially involving sawing (features of machines used, <u>see</u> the relevant groups for the machines)	3/26	• Mechanisms for producing the reciprocating movement of the saw frame; Arrangements for damping vibrations; Arrangements for counter- balancing
1/002	• {by cross-cutting (saw benches with non-feedable circular saw blades for cross-cutting laterally fed	3/28	Components
	workpieces <u>B27B 5/228</u> ; cross-cutting reciprocating saws with power drive <u>B27B 11/00</u> }	3/28	<ul> <li>Components</li> <li>Blade attachments, e.g. saw buckles; Stretching devices</li> </ul>
1/005	<ul> <li>{including the step of dividing the log into sector- shaped segments}</li> </ul>	3/32	• • the stretching devices being equipped with screw-threaded or wedging means
1/007	• {taking into account geometric properties of the trunks or logs to be sawn, e.g. curvature}	3/34	• • • the stretching devices being actuated by fluid pressure
3/00	Gang saw mills; Other sawing machines with	3/36	• Devices for adjusting the mutual distance of the saw blades
	reciprocating saw blades, specially designed for length sawing of trunks	3/38	Spacing bars; Spacing plates
3/02	• with vertically-reciprocating saw frame	3/40	. Devices for adjusting the overhang of the saw
3/02	<ul> <li>with vertically-recipiocating saw frame</li> <li>with multiple- blade saw frame</li> </ul>		
3/04	<ul> <li>with hiddpic blade saw frame</li> <li>with side blade saw frame</li> </ul>	Circular saws	<u>8</u>
3/08	<ul> <li>combined with multiple-blade saw frame</li> </ul>	5/00	Sawing machines working with circular {or
3/10	. Saw frames or guides therefor		cylindrical} saw blades (for length sawing of trunks
3/12	<ul> <li>Mechanisms for producing the reciprocating</li> </ul>		<b>B27B</b> 7/00); Components or equipment therefor
0/12	movement of the saw frame; Arrangements for	5/02	characterised by a special purpose only
	damping vibration; Arrangements for counter- balancing ( <u>B27B 3/26</u> takes precedence)	5/04	• • for edge trimming {(equipment for adjusting the mutual distance between the saw blades
3/14	Arrangements for raising or lowering the feed		<u>B27B 5/34</u> )}
	rollers	5/06	• for dividing plates in parts of determined size, e.g.
3/16	• • Driving mechanisms for the feed rollers	<b>F</b> (0, c1	panels
3/18	• Controlling equipment, e.g. for controlling the drive	5/061	• • {Devices having saws perpendicular to each other ( <u>B27B 5/075</u> takes precedence)}
3/20	• • Equipment for guiding the sawn part of timber	5/063	• • • {Sawing travelling workpieces}
	during machining, e.g. preventing faults due to torsional stress	5/065	• • • with feedable saw blades, e.g. arranged on a carriage
3/22	• with horizontally-reciprocating saw frame	5/07	• • • the plate being positioned in a substantially
3/24	. Arrangements for raising and lowering the saw frame	5/075	<ul> <li>vertical plane (<u>B27B 5/075</u> takes precedence)</li> <li>characterised by having a plurality of saw blades, e.g. turning about perpendicular axes</li> </ul>

#### Circular saws

5/08	• for sawing with the saw blade abutting parallel against a surface of the workpiece
5/10	• Wheeled circular saws; Circular saws designed to be
	attached to tractors or other vehicles and driven by
	same {(saw assemblies designed to be mounted on
5/10	or driven by tractors <u>B27B 11/12</u> )}
5/12	• Cylinder saws {(machine for producing flat surfaces by cutting through a workpiece with a tool having
	a rotational vector parallel to the surfaces generated
	by cutting <u>B27C 1/007</u> )}
5/14	• Rim-driven circular saws
5/16	• Saw benches ( <u>B27B 15/06</u> takes precedence)
5/165	• • {Convertible sawing devices}
5/18	• • with feedable circular saw blade, e.g. arranged on
<b>5</b> /101	a carriage
5/181	• • • {the saw blade being arranged underneath a work-table}
5/182	• • • { the saw blade performing a pivoting
	movement only}
5/184	• • • • {the saw blade performing a rectilinear
5/105	movement only}
5/185	• • {the saw blade being carried by a pivoted
	lever ( <u>B27B 5/181</u> and <u>B27B 5/188</u> take precedence)}
5/187	• • {the saw blade being fitted on a movable
5/107	carriage ( <u>B27B 5/181</u> takes precedence)}
5/188	• • { the saw blade being mounted on a hanging
	arm or at the end of a set of bars, e.g.
	parallelograms}
5/20	• • • the saw blade being adjustable according to
	depth or angle of cut; Radial saws, i.e. sawing
	machines with a pivoted radial arm for guiding
5/201	the movable carriage
5/201	•••• {Radial sawing machines; Machines having a saw blade on an extendable radial arm}
5/202	• • • • {with the saw blade underneath a work-
5/203	table}
3/203	•••• {the saw blade performing a pivoting movement only}
5/205	• • • • { the saw blade performing a rectilinear
	movement only}
5/206	• • • {the saw blade being carried by a pivoted lever ( <u>B27B 5/208</u> takes precedence)}
5/207	• • • • { the saw blade being fitted on a movable
	carriage}
5/208	•••• {the saw blade being mounted on a hanging
	arm or at the end of a set of bars, e.g.
	parallelograms}
5/22	• • with non-feedable circular saw blade
5/222	• • • {the saw blade being arranged underneath
	the work-table; Guiding arrangements for the work-table }
5/224	• • { the workpieces being fitted on a pivoting
с, <u>—</u> г	support}
5/226	• • {the workpieces being radially fed by means of
	a turning drum}
5/228	• • • {Cross-cutting automatically laterally-fed
	travelling workpieces; Reducing lumber to
	desired lengths}
5/24	• • • the saw blade being adjustable according to depth or angle of cut

	B27B
5/243	•••• { the saw blade being arranged underneath the work-table (the circular saw blade arranged underneath a stationary work-table for sawing material in general <u>B23D 45/06</u> ) }
5/246	• • • {End cutting of automatically laterally-fed travelling workpieces}
5/26	the table being adjustable according to depth or angle of cut
5/265	{ with the saw blade arranged underneath the work-table }
5/29	Details; Component parts; Accessories
5/30	• • for mounting or securing saw blades or saw spindles
5/32	Devices for securing circular saw blades to the saw spindle
5/325	• • • • {using fluid pressure means}
5/34	<ul> <li>Devices for securing a plurality of circular saw blades on a single saw spindle; Equipment for adjusting the mutual distance {(arrangements for adjusting the mutual distances of circular saw machines for lengthwise sawing of trunks <u>B27B 7/04</u>)}</li> </ul>
5/36	Mounting for swivelling or tilting the circular saw blade {, e.g. using an adjustable mounting (slotting or mortising machines <u>B27F 5/02</u> )}
5/38	• Devices for braking the circular saw blade or the saw spindle; Devices for damping vibrations of the circular saw blade, e.g. silencing {(vibration-damping of sawing machines or devices working with circular saw blades <u>B23D 47/005</u> )}
	WARNING
	Group <u>B27B 5/38</u> is impacted by reclassification into groups <u>B27B 5/381</u> , <u>B27G 19/008</u> and <u>B27G 19/022</u> .
	All groups listed in this Warning should be considered in order to perform a complete search.
5/381	• • • { with at least one brake member contacting saw blade portions }
	WARNING
	Group <u>B27B 5/381</u> is incomplete pending reclassification of documents from group <u>B27B 5/38</u> .
	Groups <u>B27B 5/38</u> and <u>B27B 5/381</u> should be considered in order to perform a complete search.
7/00	Sawing machines working with circular saw blades, specially designed for length sawing of
7/02	<ul> <li>trunks</li> <li>by making use of circular saws mounted substantially at right angles, e.g. vertically and horizontally</li> </ul>
7/04	• by making use of a plurality of circular saws mounted on a single spindle; Arrangements for adjusting the mutual distances {(equipment for adjusting the mutual distance of circular wood saws in general <u>B27B 5/34</u> )}

2

9/00	Portable power-driven circular saws for
	manual operation (details or components, e.g.
	handles, casings, of portable power-driven tools
	not particularly related to the operation performed
	<u>B25F 5/00</u> )
9/02	• Arrangements for adjusting the cutting depth or the amount of tilting
9/04	• Guiding equipment, e.g. for cutting panels {(circular sawing machines for dividing plates in parts of determined size, e.g. panels <u>B27B 5/06</u> )}
11/00	Cross-cut reciprocating saws with power drive;
11/02	Appurtenances therefor
11/02	• Arrangements for guiding the saw blade
11/04	• Supports able to be attached to the work
11/06	• Arrangements for chucking the saw blade, with or
	without releasable transmission mechanisms for
11/08	uncoupling the drive
11/08	<ul><li>Frames, pillars, or beds</li><li>Devices for clamping the work or holding same in</li></ul>
11/10	position
11/12	. Saw assemblies designed to be mounted on or
	driven by tractors {(circular saws designed to be
	attached to tractors or other vehicles and driven by same <u>B27B 5/10</u> )}
Band or stra	ap sawing machines
13/00	Band or strap sawing machines (for length cutting
20,00	of trunks <u>B27B 15/00</u> ); Components or equipment
	therefor
13/02	• Frames; Pillars
13/04	• Work-tables; Arrangements for tilting the band saw
	blade
13/06	• Saw pulleys; Bearings therefor
13/08	• Arrangements for stretching the band saw blade
	{(devices for tensioning strap saw blades of sawing
	machines <u>B23D 55/10</u> )}
13/10	• Guiding equipment for the band saw blade, e.g.

13/10 Guiding equipment for the band saw blade, e.g. guide rollers, back guides, side guides { (devices for guiding or feeding strap saw blades to sawing machines <u>B23D 55/08</u>) }

- 13/12 Lubricating devices specially designed for band saw blades
- Braking devices specially designed for band sawing machines, e.g. acting after damage of the band saw blade

#### WARNING

Group <u>B27B 13/14</u> is impacted by reclassification into groups <u>B27B 13/141</u> and <u>B27G 19/008</u>.

Groups <u>B27B 13/14</u>, <u>B27B 13/141</u> and <u>B27G 19/008</u> should be considered in order to perform a complete search.

	WARNING
	Group <u>B27B 13/141</u> is incomplete pending reclassification of documents from group <u>B27B 13/14</u> .
	Groups <u>B27B 13/14</u> and <u>B27B 13/141</u> should be considered in order to perform a complete search.
13/16	• Accessories, e.g. for cooling the saw blade
15/00	Band or strap sawing machines specially designed for length cutting of trunks
15/02	• with horizontally-guided saw blade, i.e. horizontal log band saw
15/04	• with vertically-guided saw blade
15/06	<ul> <li>in combined arrangement with circular saws for performing simultaneously several sawing procedures</li> </ul>
15/08	• with a plurality of band saw blades
17/00	<b>Chain saws; Equipment therefor</b> {(slotting or mortising machines equipped with chain cutters B27F 5/06)}
17/0008	• {Means for carrying the chain saw, e.g. handles ( <u>B27B 17/0033</u> takes precedence)}
17/0016	• {Devices to adapt the chain saw for other purposes, e.g. drilling}
17/0025	• {Length measuring devices incorporated in the chain saw}
17/0033	• {Devices for attenuation of vibrations}
17/0041	• {Saw benches or saw bucks}
17/005	• {with the saw mounted on a carriage}
17/0058	• • {with the saw being pivotally mounted}
17/0066	• • {with the saw mounted upright}
17/0075	• {the workpiece being held in a cantilever manner}
17/0083	• {Attachments for guiding or supporting chain saws during operation}
17/0091	• {Wheeled chain saws; Chain saws mounted on or driven by vehicles, e.g. for sawing trees <u>in situ</u> }
17/02	• Chain saws equipped with guide bar ( <u>B27B 17/06</u> takes precedence)
17/025	• {Composite guide bars, e.g. laminated, multisectioned; Guide bars of diverse material}
17/04	Roller bearing guides
17/06	• Chain saws mounted on a bow
17/08	• Drives or gearings; Devices for swivelling or tilting the chain saw
17/083	• {Devices for arresting movement of the saw chain}
17/086	• • {Angle drives}
17/10	Transmission clutches specially designed for chain saws
17/12	Lubricating devices specially designed for chain saws

• • {with at least one brake member contacting saw

blade portions}

13/141

17/14	. Arrangements for stretching the chain saw

# WARNING

Group <u>B27B 17/14</u> is impacted by reclassification into groups <u>B27B 17/142</u>, <u>B27B 17/144</u> and <u>B27B 17/146</u>.

All groups listed in this Warning should be considered in order to perform a complete search.

17/142 . . {with adjustment by at least one cam}

#### WARNING

Group <u>B27B 17/142</u> is incomplete pending reclassification of documents from group <u>B27B 17/14</u>.

Groups <u>B27B 17/14</u> and <u>B27B 17/142</u> should be considered in order to perform a complete search.

17/144 . . {with adjustment by at least one threaded screw}

### WARNING

Group <u>B27B 17/144</u> is incomplete pending reclassification of documents from group <u>B27B 17/14</u>.

Groups <u>B27B 17/14</u> and <u>B27B 17/144</u> should be considered in order to perform a complete search.

17/146 . • {with adjustment of a non-driven sprocket or pulley relative to the guide bar}

### WARNING

Group <u>B27B 17/146</u> is incomplete pending reclassification of documents from group <u>B27B 17/14</u>.

Groups <u>B27B 17/14</u> and <u>B27B 17/146</u> should be considered in order to perform a complete search.

<ul> <li>19/006 . {with oscillating saw blades; Hand saws with oscillating saw blades}</li> <li>19/008 . {having a plurality of saw blades or saw blade having plural cutting zones}</li> <li>19/02 . Saws with a power- driven blade chucked at both ends or at one end only, e.g. jig saws, scroll saws (B27B 19/10 takes precedence)</li> <li>19/04 . characterised by power drive, e.g. by electromagnetic drive</li> <li>19/06 . Stationary machines</li> <li>19/05 {hand-operated or foot-operated}</li> <li>19/09 . portable</li> </ul>	19/00	Other reciprocating saws with power drive; Fret-
<ul> <li>19/004 . {in which the saw blade is chucked at both end (with oscillating saw blades; Hand saws with oscillating saw blades)</li> <li>19/008 . {having a plurality of saw blades or saw blade having plural cutting zones}</li> <li>19/02 . Saws with a power- driven blade chucked at both ends or at one end only, e.g. jig saws, scroll saws (B27B 19/10 takes precedence)</li> <li>19/04 . characterised by power drive, e.g. by electromagnetic drive</li> <li>19/06 . Stationary machines</li> <li>19/06 {hand-operated or foot-operated}</li> <li>19/09 . portable</li> <li>19/10 Fret-saws, i.e. with bilaterally chucked saw blade a manually-guided bow</li> <li>19/12 . with power drive</li> </ul>		saws
<ul> <li>19/006 . {with oscillating saw blades; Hand saws with oscillating saw blades}</li> <li>19/008 . {having a plurality of saw blades or saw blade having plural cutting zones}</li> <li>19/02 . Saws with a power- driven blade chucked at both ends or at one end only, e.g. jig saws, scroll saws (B27B 19/10 takes precedence)</li> <li>19/04 . characterised by power drive, e.g. by electromagnetic drive</li> <li>19/06 . Stationary machines</li> <li>19/06 . {hand-operated or foot-operated}</li> <li>19/09 . portable</li> <li>19/10 Fret-saws, i.e. with bilaterally chucked saw blade a manually-guided bow</li> <li>19/12 . with power drive</li> </ul>	19/002	• {Power-driven hand saws}
<ul> <li>oscillating saw blades}</li> <li>19/008 . {having a plurality of saw blades or saw blade having plural cutting zones}</li> <li>19/02 . Saws with a power- driven blade chucked at both ends or at one end only, e.g. jig saws, scroll saws (B27B 19/10 takes precedence)</li> <li>19/04 . characterised by power drive, e.g. by electromagnetic drive</li> <li>19/06 . Stationary machines</li> <li>19/065 {hand-operated or foot-operated}</li> <li>19/09 . portable</li> <li>19/10 . Fret-saws, i.e. with bilaterally chucked saw blade a manually-guided bow</li> <li>19/12 . with power drive</li> </ul>	19/004	• . {in which the saw blade is chucked at both ends}
<ul> <li>having plural cutting zones}</li> <li>19/02 Saws with a power- driven blade chucked at both ends or at one end only, e.g. jig saws, scroll saws (B27B 19/10 takes precedence)</li> <li>19/04 · characterised by power drive, e.g. by electromagnetic drive</li> <li>19/06 · Stationary machines</li> <li>19/065 · . {hand-operated or foot-operated}</li> <li>19/09 · portable</li> <li>19/10 · Fret-saws, i.e. with bilaterally chucked saw blade a manually-guided bow</li> <li>19/12 · with power drive</li> </ul>	19/006	Č,
<ul> <li>ends or at one end only, e.g. jig saws, scroll saws (B27B 19/10 takes precedence)</li> <li>19/04 . characterised by power drive, e.g. by electromagnetic drive</li> <li>19/06 . Stationary machines</li> <li>19/065 {hand-operated or foot-operated}</li> <li>19/09 . portable</li> <li>19/10 . Fret-saws, i.e. with bilaterally chucked saw blade a manually-guided bow</li> <li>19/12 . with power drive</li> </ul>	19/008	• {having a plurality of saw blades or saw blades having plural cutting zones}
<ul> <li>electromagnetic drive</li> <li>19/06 . Stationary machines</li> <li>19/065 {hand-operated or foot-operated}</li> <li>19/09 . portable</li> <li>19/10 . Fret-saws, i.e. with bilaterally chucked saw blade a manually-guided bow</li> <li>19/12 . with power drive</li> </ul>	19/02	• Saws with a power- driven blade chucked at both ends or at one end only, e.g. jig saws, scroll saws (B27B 19/10 takes precedence)
<ul> <li>19/065 {hand-operated or foot-operated}</li> <li>19/09 portable</li> <li>19/10 . Fret-saws, i.e. with bilaterally chucked saw blade a manually-guided bow</li> <li>19/12 with power drive</li> </ul>	19/04	
<ul> <li>19/09 . portable</li> <li>19/10 . Fret-saws, i.e. with bilaterally chucked saw blade a manually-guided bow</li> <li>19/12 . with power drive</li> </ul>	19/06	Stationary machines
<ul> <li>19/10 Fret-saws, i.e. with bilaterally chucked saw blade a manually-guided bow</li> <li>19/12 • with power drive</li> </ul>	19/065	{hand-operated or foot-operated}
a manually-guided bow 19/12 with power drive	19/09	• • portable
r i i i i i i i i i i i i i i i i i i i	19/10	• Fret-saws, i.e. with bilaterally chucked saw blade in a manually-guided bow
19/14 with hand drive	19/12	• • with power drive
	19/14	• • with hand drive

Hand some without newer drive (then dreams
Hand saws without power drive ({hand saws
with oscillating saw blades, } <u>B27B 19/14</u> takes
precedence); Equipment for hand sawing, e.g.
saw horses {(work benches B25H 1/00; saw guides
<u>B27B 11/02</u> )}
Buck or hack saws
Cross-cut saws: Pad saws

- 21/06 Arrangements for stretching the saw blade
- 21/08 Arrangements of gauging or adjusting equipment on hand saws, e.g. for limiting the cutting depth
- 23/00 Other cutting of wood by non-rotary toothed tools; Tools therefor (cutting with hot wire <u>B27M 1/06</u>)

### Components or accessories for saws

21/00

21/02

21/04

25/00	Feeding devices for timber in saw mills or sawing machines; Feeding devices for trees ({ <u>B27B 29/00</u> }, B27B 21/00 table precedence)
25/02	B27B 31/00 take precedence)
25/02	• with feed and pressure rollers
25/04	• with feed chains or belts
25/06	• Resilient feeding or pressing accessories, e.g. pads, springs
25/08	• Feeding devices able to be attached to any sawing machine
25/10	• Manually-operated feeding or pressing accessories, e.g. pushers
27/00	Guide fences or stops for timber in saw mills or sawing machines; Measuring equipment thereon (safety guards or devices specially designed for wood saws <u>B27G 19/00</u> ; constructional features of measuring devices G01B)
27/02	<ul> <li>arranged laterally and parallel with respect to the plane of the saw blade</li> </ul>
27/04	• arranged perpendicularly to the plane of the saw blade
27/06	<ul> <li>arranged angularly with respect to the plane of the saw blade, e.g. for mitring {(devices for mitring wood <u>B27G 5/00</u>)}</li> </ul>
27/08	<ul> <li>arranged adjustably, not limited to only one of the groups <u>B27B 27/02</u> - <u>B27B 27/06</u></li> </ul>
27/10	• Devices for moving or adjusting the guide fences or stops
29/00	Gripping, clamping, or holding devices for the trunk or log in saw mills or sawing machines
	(for other timber, see the relevant groups for the
	machines; safety guards or devices specially designed
	for wood saws <u>B27G 19/00</u> ); <b>Travelling trunk or log</b> <b>carriages</b> {(for logs being held in a cantilever manner <u>B27B 17/0075</u> )}
29/02	Clamping angles; Gripping equipment thereon
29/04	<ul> <li>Trunk or log carriages with gripping means which do not pass the saw blade(s), specially for gang saws; Arrangement of gripping accessories thereon</li> </ul>
29/06	• Auxiliary trunk or log carriages for carrying initially the log to the feed rollers or for carrying the sawn part of the log
29/08	• Trunk or log carriages with gripping means designed to pass the saw blade(s), especially for band saws; Arrangement of gripping accessories thereon; Turning devices thereon
29/085	• • {Turning devices thereon}

29/10

	the clamping or turning devices with respect to
	the thickness of the board to be sawn
31/00	Arrangements for conveying, loading, turning, adjusting, or discharging the log or timber, specially designed for saw mills or sawing machines ( <u>B27B 29/00</u> takes precedence {;
	arrangements for raising or lowering the feed rollers of gang saw mills <u>B27B 3/14</u> ; driving mechanisms for the feed rollers of gang saw mills <u>B27B 3/16</u> })
31/003	• {with rollers}
31/005	<ul><li>{with roles}</li><li>{with chains or belts}</li></ul>
31/000	<ul> <li>Loading equipment for travelling carriages</li> </ul>
31/04	<ul> <li>Dotating equipment for furthering earning earning earning equipment {(turning devices on trunk or log carriages <u>B27B 29/08)</u>}</li> </ul>
31/06	• Adjusting equipment, e.g. using optical projection {(see also <u>B27L 5/022</u> )}
31/08	Discharging equipment
33/00	Sawing tools for saw mills, sawing machines, or sawing devices
33/02	• Structural design of saw blades or saw teeth
33/04	Gang saw blades
33/06	• • Band saw blades
33/08	Circular saw blades
33/10	• • Hand saw blades
33/12	• Saw blades having inserted or exchangeably arranged bits or toothed segments
33/14	<ul> <li>Saw chains {(saw chains for slotting or mortising devices <u>B27F 5/08</u>)}</li> </ul>
33/141	• • {with means to control the depth of cut}
33/142	• • {Cutter elements}
33/144	• • {having cutting inserts or exchangeable cutting teeth}
33/145	• • • {having plural teeth on a single link}
33/147	• • {with incorporated lubricating means}
33/148	• • {with means permitting replacement of cutter elements}
33/16	• Saw wires; Twisted saw strips
33/20	• Edge trimming saw blades or tools combined with means to disintegrate waste

. . Assemblies for laterally adjusting or controlling