

# CPC COOPERATIVE PATENT CLASSIFICATION

## B PERFORMING OPERATIONS; TRANSPORTING (NOTES omitted)

### SHAPING

#### B21 MECHANICAL METAL-WORKING WITHOUT ESSENTIALLY REMOVING MATERIAL; PUNCHING METAL (NOTES omitted)

#### B21L MAKING METAL CHAINS (making chains or chain links by casting [B22D 25/02](#); chains in general [F16G](#))

##### WARNING

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.

<b>1/00</b>	<b>Making chains or chain links by bending workpieces of rod, wire, or strip to form links of oval or other simple shape (<a href="#">B21L 3/00</a>, <a href="#">B21L 7/00</a> take precedence)</b>	<b>11/02</b>	• each link being formed of a single member of which both ends are bent or shaped to engage the middle portions of the next link
1/02	• by bending the ends of the workpieces to abut	11/04	• • the ends being pierced or punched to form eyes
1/04	• by bending and interconnecting the ends of the workpieces with or without separate jointing members	11/06	• • • the workpiece being of thin strip metal
		11/08	• • the ends being interengaged with other parts of the same link
		11/10	• the chain links having opposed correspondingly shaped cylindrical and hook-like parts of which one parts forms a hinge-like support for the adjacent link ( <a href="#">B21L 11/02</a> takes precedence)
<b>3/00</b>	<b>Making chains or chain links by bending the chain links or link parts and subsequently welding or soldering the abutting ends (<a href="#">B21L 7/00</a> takes precedence)</b>	11/12	• Forming bead chains
3/02	• Machines or devices for welding chain links	11/14	• Making chain links with inserted or integrally-formed studs
3/04	• • by making use of forge or pressure welding		
<b>5/00</b>	<b>Making chains or chain links by working the starting material in such a way that integral, i.e. jointless, chains links are formed</b>	<b>13/00</b>	<b>Making terminal or intermediate chain links of special shape; Making couplings for chains, e.g. swivels, shackles</b>
5/02	• in such a way that interconnected links are formed	<b>15/00</b>	<b>Finishing or dressing chains or chain links, e.g. removing burr material, calibrating (<a href="#">B21L 9/06</a> takes precedence)</b>
<b>7/00</b>	<b>Making chains or chain links by cutting single loops or loop-parts from coils, assembling the cut parts and subsequently subjecting same to twisting with or without welding</b>	15/005	• {Pre-stretching chains}
		15/02	• Twisting already closed links
<b>9/00</b>	<b>Making chains or chain links, the links being composed of two or more different parts, e.g. drive chains (<a href="#">B21L 1/04</a>, <a href="#">B21L 7/00</a>, <a href="#">B21L 11/14</a>, <a href="#">B21L 13/00</a> take precedence)</b>	<b>19/00</b>	<b>Appurtenances for chain-making not restricted to any particular process</b>
9/02	• of roller-chain or other plate-link type	<b>21/00</b>	<b>Tools or implements for repairing chains using metal-working operations, e.g. for detaching deformed chain links</b>
9/04	• • Punching or bending the different parts of the chain links		
9/06	• • Sorting, feeding, assembling, riveting, or finishing parts of chains	<b>99/00</b>	<b>Subject matter not provided for in other groups of this subclass</b>
9/065	• • • {Assembling or disassembling}		
9/08	• • Combining the chain links with auxiliary parts, e.g. welding-on wear-resistant parts		
<b>11/00</b>	<b>Making chains or chain links of special shape</b>		
11/005	• {Making ornamental chains ( <a href="#">B21L 11/02</a> - <a href="#">B21L 11/14</a> take precedence; ornamental chains <a href="#">A44C</a> )}		