

# 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>	<ul style="list-style-type: none"><li>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</li></ul>
<b>1/02</b>	<ul style="list-style-type: none"><li>by bending the ends of the workpieces to abut</li></ul>	<b>11/04</b>	<ul style="list-style-type: none"><li><ul style="list-style-type: none"><li>the ends being pierced or punched to form eyes</li></ul></li></ul>
<b>1/04</b>	<ul style="list-style-type: none"><li>by bending and interconnecting the ends of the workpieces with or without separate jointing members</li></ul>	<b>11/06</b>	<ul style="list-style-type: none"><li><ul style="list-style-type: none"><li>the workpiece being of thin strip metal</li></ul></li></ul>
<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>	<b>11/08</b>	<ul style="list-style-type: none"><li><ul style="list-style-type: none"><li>the ends being interengaged with other parts of the same link</li></ul></li></ul>
<b>3/02</b>	<ul style="list-style-type: none"><li>Machines or devices for welding chain links</li></ul>	<b>11/10</b>	<ul style="list-style-type: none"><li>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)</li></ul>
<b>3/04</b>	<ul style="list-style-type: none"><li><ul style="list-style-type: none"><li>by making use of forge or pressure welding</li></ul></li></ul>	<b>11/12</b>	<ul style="list-style-type: none"><li>Forming bead chains</li></ul>
<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>11/14</b>	<ul style="list-style-type: none"><li>Making chain links with inserted or integrally-formed studs</li></ul>
<b>5/02</b>	<ul style="list-style-type: none"><li>in such a way that interconnected links are formed</li></ul>	<b>13/00</b>	<b>Making terminal or intermediate chain links of special shape; Making couplings for chains, e.g. swivels, shackles</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>	<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>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>15/005</b>	<ul style="list-style-type: none"><li>{<a href="#">Pre-stretching chains</a>}</li></ul>
<b>9/02</b>	<ul style="list-style-type: none"><li>of roller-chain or other plate-link type</li></ul>	<b>15/02</b>	<ul style="list-style-type: none"><li>Twisting already closed links</li></ul>
<b>9/04</b>	<ul style="list-style-type: none"><li><ul style="list-style-type: none"><li>Punching or bending the different parts of the chain links</li></ul></li></ul>	<b>19/00</b>	<b>Appurtenances for chain-making not restricted to any particular process</b>
<b>9/06</b>	<ul style="list-style-type: none"><li><ul style="list-style-type: none"><li>Sorting, feeding, assembling, riveting, or finishing parts of chains</li></ul></li></ul>	<b>21/00</b>	<b>Tools or implements for repairing chains using metal-working operations, e.g. for detaching deformed chain links</b>
<b>9/065</b>	<ul style="list-style-type: none"><li><ul style="list-style-type: none"><li><ul style="list-style-type: none"><li>{<a href="#">Assembling or disassembling</a>}</li></ul></li></ul></li></ul>	<b>99/00</b>	<b>Subject matter not provided for in other groups of this subclass</b>
<b>9/08</b>	<ul style="list-style-type: none"><li><ul style="list-style-type: none"><li>Combining the chain links with auxiliary parts, e.g. welding-on wear-resistant parts</li></ul></li></ul>		
<b>11/00</b>	<b>Making chains or chain links of special shape</b>		
<b>11/005</b>	<ul style="list-style-type: none"><li>{<a href="#">Making ornamental chains</a> (<a href="#">B21L 11/02</a> - <a href="#">B21L 11/14</a> take precedence; ornamental chains <a href="#">A44C</a>)}</li></ul>		