CPC **COOPERATIVE PATENT CLASSIFICATION**

B PERFORMING OPERATIONS; TRANSPORTING

(NOTES omitted)

SHAPING

MECHANICAL METAL-WORKING WITHOUT ESSENTIALLY REMOVING **B21 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.

1/00	Making chains or chain links by bending workpieces of rod, wire, or strip to form links of oval or other simple shape (B21L 3/00, B21L 7/00 take precedence)
1/02	• by bending the ends of the workpieces to abut
1/04	• by bending and interconnecting the ends of the
	workpieces with or without separate jointing members
3/00	Making chains or chain links by bending the chain links or link parts and subsequently welding or soldering the abutting ends (B21L 7/00 takes precedence)
3/02	• Machines or devices for welding chain links
3/04	• • by making use of forge or pressure welding
5/00 5/02	Making chains or chain links by working the starting material in such a way that integral, i.e. jointless, chains links are formed . in such a way that interconnected links are formed
7 /00	
7/00	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
9/00	Making chains or chain links, the links being composed of two or more different parts, e.g. drive chains (<u>B21L 1/04</u> , <u>B21L 7/00</u> , <u>B21L 11/14</u> , <u>B21L 13/00</u> take precedence)
9/02	• of roller-chain or other plate-link type
9/04	• Punching or bending the different parts of the chain links
9/06	• Sorting, feeding, assembling, riveting, or finishing parts of chains
9/065	• • • {Assembling or disassembling}
9/08	• Combining the chain links with auxiliary parts, e.g. welding-on wear-resistant parts
11/00	Making chains or chain links of special shape
11/005	• {Making ornamental chains (<u>B21L 11/02</u> - <u>B21L 11/14</u> take precedence; ornamental chains <u>A44C</u>)}

11/02	• 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
11/04	• • the ends being pierced or punched to form eyes
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 (<u>B21L 11/02</u> takes precedence)
11/12	Forming bead chains
11/14	 Making chain links with inserted or integrally- formed studs
13/00	Making terminal or intermediate chain links of special shape; Making couplings for chains, e.g. swivels, shackles
15/00	Finishing or dressing chains or chain links, e.g. removing burr material, calibrating (<u>B21L 9/06</u> takes procedence)
10,00	removing burr material, calibrating (<u>B21L 9/06</u> takes precedence)
15/00 15/005 15/02	removing burr material, calibrating (B21L 9/06
15/005	<pre>removing burr material, calibrating (B21L 9/06 takes precedence) . {Pre-stretching chains}</pre>
15/005 15/02	 removing burr material, calibrating (B21L 9/06 takes precedence) {Pre-stretching chains} Twisting already closed links Appurtenances for chain-making not restricted to
15/005 15/02 19/00	 removing burr material, calibrating (B21L 9/06 takes precedence) {Pre-stretching chains} Twisting already closed links Appurtenances for chain-making not restricted to any particular process Tools or implements for repairing chains using metal-working operations, e.g. for detaching