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.

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 **Making chains or chain links by working the starting material in such a way that integral, i.e. jointless, chains links are formed**

5/02 . in such a way that interconnected links are formed

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** (B21L 1/04, B21L 7/00, B21L 11/14, B21L 13/00 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 (B21L 11/02 - B21L 11/14 take precedence; ornamental chains A44C)}

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 (B21L 11/02 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** (B21L 9/06 takes precedence)

15/005 . {Pre-stretching chains}

15/02 . Twisting already closed links

19/00 **Appurtenances for chain-making not restricted to any particular process**

21/00 **Tools or implements for repairing chains using metal-working operations, e.g. for detaching deformed chain links**

99/00 **Subject matter not provided for in other groups of this subclass**