

# CPC COOPERATIVE PATENT CLASSIFICATION

## C CHEMISTRY; METALLURGY

(NOTES omitted)

### METALLURGY

**C22 METALLURGY** (of iron [C21](#)); **FERROUS OR NON-FERROUS ALLOYS; TREATMENT OF ALLOYS OR NON-FERROUS METALS** (production of metals by electrolysis or electrophoresis [C25](#))

**C22F CHANGING THE PHYSICAL STRUCTURE OF NON-FERROUS METALS AND NON-FERROUS ALLOYS** (surface treatment of metallic material involving at least one process provided for in class [C23](#) and at least one process covered by this subclass, [C23F 17/00](#))

#### 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>Changing the physical structure of non-ferrous metals or alloys by heat treatment or by hot or cold working</b> (apparatus for mechanical working of metal <a href="#">B21</a> , <a href="#">B23</a> , <a href="#">B24</a> ) | <b>3/02</b> | . by solidifying a melt controlled by supersonic waves or electric or magnetic fields |
| 1/002       | . {by rapid cooling or quenching; cooling agents used therefor}   |             |   |
| 1/004       | . {Heat treatment in fluid bed}   |             |   |
| 1/006       | . {Resulting in heat recoverable alloys with a memory effect}   |             |   |
| 1/008       | . {Using a protective surface layer}  |             |   |
| 1/02        | . in inert or controlled atmosphere or vacuum (adjusting the composition of the atmosphere <a href="#">C21D 1/76</a> )  |             |   |
| 1/04        | . of aluminium or alloys based thereon  |             |   |
| 1/043       | . . of alloys with silicon as the next major constituent  |             |   |
| 1/047       | . . of alloys with magnesium as the next major constituent  |             |   |
| 1/05        | . . of alloys of the Al-Si-Mg type, i.e. containing silicon and magnesium in approximately equal proportions  |             |   |
| 1/053       | . . of alloys with zinc as the next major constituent   |             |   |
| 1/057       | . . of alloys with copper as the next major constituent   |             |   |
| 1/06        | . of magnesium or alloys based thereon  |             |   |
| 1/08        | . of copper or alloys based thereon   |             |   |
| 1/10        | . of nickel or cobalt or alloys based thereon   |             |   |
| 1/11        | . of chromium or alloys based thereon   |             |   |
| 1/12        | . of lead or alloys based thereon   |             |   |
| 1/14        | . of noble metals or alloys based thereon   |             |   |
| 1/16        | . of other metals or alloys based thereon   |             |   |
| 1/165       | . . {of zinc or cadmium or alloys based thereon}  |             |   |
| 1/18        | . . High-melting or refractory metals or alloys based thereon   |             |   |
| 1/183       | . . . {of titanium or alloys based thereon}   |             |   |
| 1/186       | . . . {of zirconium or alloys based thereon}  |             |   |
| <b>3/00</b> | <b>Changing the physical structure of non-ferrous metals or alloys by special physical methods, e.g. treatment with neutrons</b>  |             |   |