

ECLA EUROPEAN CLASSIFICATION

- 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, [C23F17/00](#))
- C22F1/00** **Changing the physical structure of non-ferrous metals or alloys by heat treatment or by hot or cold working** (apparatus for mechanical working of metal [B21](#), [B23](#), [B24](#)) [[C9506](#)]
- C22F1/00B . [N: by rapid cooling or quenching; cooling agents used therefor]
- C22F1/00D . [N: Heat treatment in fluid bed]
- C22F1/00M . [N: Resulting in heat recoverable alloys with a memory effect]
- C22F1/00P . [N: Using a protective surface layer]
- C22F1/02 . in inert or controlled atmosphere or vacuum (adjusting the composition of the atmosphere [C21D1/76](#))
- C22F1/04 . of aluminium or alloys based thereon
- C22F1/043 . . of alloys with silicon as the next major constituent
- C22F1/047 . . of alloys with magnesium as the next major constituent
- C22F1/05 . . of alloys of the Al-Si-Mg type, i.e. containing silicon and magnesium in approximately equal proportions
- C22F1/053 . . of alloys with zinc as the next major constituent
- C22F1/057 . . of alloys with copper as the next major constituent
- C22F1/06 . of magnesium or alloys based thereon
- C22F1/08 . of copper or alloys based thereon
- C22F1/10 . of nickel or cobalt or alloys based thereon
- C22F1/11 . of chromium or alloys based thereon
- C22F1/12 . of lead or alloys based thereon
- C22F1/14 . of noble metals or alloys based thereon
- C22F1/16 . of other metals or alloys based thereon
- C22F1/16B . . [N: of zinc or cadmium or alloys based thereon]
- C22F1/18 . . high-melting or refractory metals or alloys based thereon
- C22F1/18B . . . [N: of titanium or alloys based thereon]
- C22F1/18D . . . [N: of zirconium or alloys based thereon]

C22F3/00

Changing the physical structure of non-ferrous metals or alloys by special physical methods, e.g. treatment with neutrons

C22F3/02

. by solidifying a melt controlled by supersonic waves or electric or magnetic fields