

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