METALLURGY

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.

1/00 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)

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 C21D 1/76)

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 }

3/00 Changing the physical structure of non-ferrous metals or alloys by special physical methods, e.g. treatment with neutrons

3/02 . by solidifying a melt controlled by supersonic waves or electric or magnetic fields