

## SECTION C — CHEMISTRY; METALLURGY

## C21 METALLURGY OF IRON

## C21C PROCESSING OF PIG-IRON, e.g. REFINING, MANUFACTURE OF WROUGHT-IRON OR STEEL (refining or remelting metals in general C22B 9/00); TREATMENT IN MOLTEN STATE OF FERROUS ALLOYS

**1/00 Refining of pig-iron; Cast iron**

- 1/02 • Dephosphorising or desulfurising
- 1/04 • Removing impurities other than carbon, phosphorus, or sulfur
- 1/06 • Constructional features of mixers for pig-iron
- 1/08 • Manufacture of cast-iron
- 1/10 • Making spheroidal graphite cast-iron

**3/00 Manufacture of wrought-iron or wrought-steel****5/00 Manufacture of carbon steel, e.g. plain mild steel, medium carbon steel, or cast-steel**

- 5/02 • Crucible furnace processes
- 5/04 • Manufacture of hearth-furnace steel, e.g. Siemens-Martin steel
- 5/06 • • Processes yielding slags of special composition
- 5/28 • Manufacture of steel in the converter
- 5/30 • • Regulating or controlling the blowing
- 5/32 • • • Blowing from above (C21C 5/35 takes precedence) [5]
- 5/34 • • • Blowing through the bath (C21C 5/35 takes precedence) [5]
- 5/35 • • • Blowing from above and through the bath [5]
- 5/36 • • Processes yielding slags of special composition
- 5/38 • • Removal of waste gases or dust

- 5/40 • • • Offtakes or separating apparatus for converter waste gases or dust
- 5/42 • • Constructional features of converters
- 5/44 • • • Refractory linings
- 5/46 • • • Details or accessories
- 5/48 • • • • Bottoms or tuyères of converters
- 5/50 • • • • Tilting mechanisms for converters
- 5/52 • Manufacture of steel in electric furnaces (electric heating *per se* H05B)
- 5/54 • • Processes yielding slags of special composition
- 5/56 • Manufacture of steel by other methods (making liquid steel by direct processes C21B 13/00)

**7/00 Treating molten ferrous alloys, e.g. steel, not covered by groups C21C 1/00-C21C 5/00 (treating molten metals during moulding B22D 1/00, B22D 27/00; remelting ferrous metals C22B)**

- 7/04 • Removing impurities by adding a treating agent
- 7/06 • • Deoxidising, e.g. killing [2]
- 7/064 • • Dephosphorising; Desulfurising [3]
- 7/068 • • Decarburising [3]
- 7/072 • • Treatment with gases (C21C 7/06, C21C 7/064, C21C 7/068 take precedence) [3]
- 7/076 • • Use of slags or fluxes as treating agents (C21C 7/06, C21C 7/064, C21C 7/068 take precedence) [3]
- 7/10 • Handling in vacuum