

Title (en)
METHOD FOR OBTAINING VANADIUM SLAG.

Title (de)
VERFAHREN ZUR HERSTELLUNG VON VANADIUMSCHLACKE.

Title (fr)
PROCEDE POUR L'OBTENTION DE LAITIER DE VANADIUM.

Publication
EP 0235291 A4 19880120 (DE)

Application
EP 86900680 A 19850822

Priority
SU 8500072 W 19850822

Abstract (en)
[origin: WO8701136A1] The vanadium slag contains the following components in per cent by weight: vanadium oxide 16-30, silicon oxide 10-24, manganese oxide 6-14, chromium oxide 1-12, titanium oxide 6-14, calcium oxide 0.3-30.0, metallic iron 2-20, iron oxide as the balance and has the following mineral composition in per cent by weight: spinellid 40-70; glass 2-10; pyroxenes and olivines representing balance. The grains of spinellid have a regular geometric shape and measure 25-80 μm . The method of obtaining the vanadium slag of the composition mentioned provides for the use of vanadium cast iron containing, in per cent by weight: vanadium 0.35-0.90, carbon 3.8-4.8, silicon 0.05-0.35, manganese 0.12-0.35, titanium 0.07-0.38, chromium 0.03-0.42, phosphorus 0.02-0.10, copper 0.04-0.32, nickel 0.04-0.32, cobalt 0.001-0.12, iron being the balance. The above-named cast iron is blown through with a gaseous oxidizer, such as oxygen, at a blast intensity of 1.5-3.0 $\text{m}^3/\text{t}\cdot\text{min}$, at a temperature of the cast iron at the beginning of blowing from 1,180 to 1,300°C and at the end of blowing from 1,400 to 1,650°C and with a specific area of the bath surface equal to 0.13 to 0.30 m^2/t .

IPC 1-7
C21C 5/36

IPC 8 full level
C21C 5/36 (2006.01)

CPC (source: EP)
C21C 5/36 (2013.01)

Citation (search report)
• [A] DE 2810458 A1 19790920 - N PROIZV OB TULATSCHERMET
• [A] DE 2509650 A1 19760916 - TSNII TSCHERNOJ METALLURG IM I
• [A] FR 1598744 A 19700706
• [A] DE 3006287 A1 19811008 - SALZGITTER PEINE STAHLWERKE [DE]

Cited by
KR20020057680A; CN1068058C; RU2656125C2; WO9804750A1

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WO 8701136 A1 19870226; DE 3575949 D1 19900315; EP 0235291 A1 19870909; EP 0235291 A4 19880120; EP 0235291 B1 19900207; JP S63500873 A 19880331

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