

Title (en)

PRODUCTION METHOD FOR SCANDIUM METAL AND AL-SC ALLOYS VIA ELECTROLYSIS OF FLUORINATED SCANDIUM SALTS OBTAINED BY THE CALCINATION OF SCANDIUM COMPOUND IN THE FORM OF (NH₄)₂NASCF₆

Title (de)

HERSTELLUNGSVERFAHREN FÜR SCANDIUMMETALL UND AL-SC-LEGIERUNGEN DURCH ELEKTROLYSE FLUORIERTER SCANDIUMSALZE AUS DER KALZINIERUNG EINER SCANDIUMVERBINDUNG IN FORM VON (NH₄)₂NASCF₆

Title (fr)

PROCÉDÉ DE PRODUCTION DE SCANDIUM ET D'ALLIAGES AL-SC PAR ÉLECTROLYSE DE SELS DE SCANDIUM FLUORÉS OBTENUS PAR CALCINATION D'UN COMPOSÉ DE SCANDIUM SOUS LA FORME DE (NH₄)₂NASCF₆

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Application

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Abstract (en)

[origin: WO2019040016A2] The invention relates to scandium metal obtained in its pure or alloy form, by removing (NH₄) form via calcining the initial scandium compound in (NH₄)₂NaScF₆ form and via molten salt electrolysis of fluorinated scandium compounds in NaScF₄ and Na₃ScF₆ forms that resulted after the calcination process.

IPC 8 full level

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CPC (source: EP)

C22B 59/00 (2013.01); **C25C 3/34** (2013.01); **C25C 3/36** (2013.01)

Citation (search report)

- [A] CN 1410599 A 20030416 - CHINESE ALUMINIUM INDUSTRY CO [CN]
- [A] M. HARATA ET AL: "Production of scandium and Al-Sc alloy by metallothermic reduction", TRANSACTIONS - INSTITUTION OF MINING AND METALLURGY. SECTION C.MINERAL PROCESSING AND EXTRACTIVE METALLURGY, vol. 117, no. 2, 1 July 2013 (2013-07-01), GB, pages 95 - 99, XP055644678, ISSN: 0371-9553, DOI: 10.1179/174328508X290876
- [A] HARATA M ET AL: "Electrochemical production of Al-Sc alloy in CaCl₂-Sc₂O₃ molten salt", JOURNAL OF ALLOYS AND COMPOUNDS, ELSEVIER SEQUOIA, LAUSANNE, CH, vol. 474, no. 1-2, 17 April 2009 (2009-04-17), pages 124 - 130, XP025970687, ISSN: 0925-8388, [retrieved on 20080813], DOI: 10.1016/J.JALLCOM.2008.06.110
- See references of WO 2019040016A2

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