Title (en)

A METHOD OF ELECTROCHEMICAL PRODUCTION OF RARE EARTH ALLOYS AND METALS COMPRISING A COMPOSITE ANODE

Title (de)

VERFAHREN ZUR ELEKTROCHEMISCHEN HERSTELLUNG VON SELTENERDLEGIERUNGEN UND METALLEN MIT EINER ZUSAMMENGESETZTEN ANODE

Title (fr)

PROCÉDÉ DE PRODUCTION ÉLECTROCHIMIQUE DE MÉTAUX ET D'ALLIAGES DE TERRES RARES COMPRENANT UNE ANODE COMPOSITE

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Application

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Abstract (en)

The present invention disclose a method of producing rare earth elements or rare earth alloys in a molten salt electrochemical process, comprising steps of arranging an electrolysis cell with a solid composite anode comprising raw material and a cathode facilitating deposition of rare earth elements, wherein a molten salt electrolyte in the cell comprises chloride compounds.

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

- [A] US 2016102411 A1 20160414 - FRIEDRICH BERND [DE], et al
- [A] US 2005166706 A1 20050804 - WITHERS JAMES C [US], et al
- [XDA] D K DYSINGER ET AL: "RI 9504 ~ REPORT OF INVESTIGATIONS/1994 Electrowinning of Neodymium From a Molten Oxide-Fluoride Electrolyte", 1 June 1994 (1994-06-01), XP055362193, Retrieved from the Internet <URL:https://stacks.cdc.gov/view/cdc/10116/cdc_10116_DS1.pdf?> [retrieved on 20170405]
- [A] \L S BUR6AU ET AL: "RI 9391 REPORT OF INVESTIGATIONS/1991 Electrolytic Production of Neodymium Metal From a Molten Chloride Electrolyte", 31 December 1991 (1991-12-31), XP055362234, Retrieved from the Internet <URL:https://stacks.cdc.gov/view/cdc/10115/cdc_10115_DS1.pdf> [retrieved on 20170405]

Cited by

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