

Title (en)
METHOD OF REMOVING/CONCENTRATING METAL-FOG-FORMING METAL PRESENT IN MOLTEN SALT, APPARATUS THEREFOR, AND
PROCESS AND APPARATUS FOR PRODUCING Ti OR Ti ALLOY BY USE OF THEM

Title (de)
VERFAHREN ZUR ENTFERNUNG BZW. KONZENTRIERUNG VON METALLNEBELBILDENDEM METALL IN GESCHMOLZENEM SALZ,
VORRICHTUNG DAFÜR UND VERFAHREN UND VORRICHTUNG ZUR HERSTELLUNG VON TI ODER EINER TI-LEGIERUNG DURCH DEREN
VERWENDUNG

Title (fr)
PROCEDE D'EXTRACTION / DE CONCENTRATION DE METAL FORMANT UN BROUILLARD METALLIQUE PRESENT DANS UN SEL FONDU,
APPAREIL CORRESPONDANT, PROCEDE ET APPAREIL DE PRODUCTION DE Ti OU D'ALLIAGE DE Ti AU MOYEN DE CEUX-CI

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Abstract (en)
The present invention provides a method by which a metal-fog-forming metal dissolved in one portion of "a molten salt mixture consisted of one or more of metal-fog-forming metal containing molten salts" (generally, a molten salt) can be removed and transferred to another portion of the molten salt to increase the concentration thereof. The method can hence be utilized as one of means for treating molten salts in various industrial fields in which metal-fog-forming metal-containing molten salts such as Ca or Na are handled. In particular, when the method is utilized in producing Ti by Ca reduction, the Ca dissolved in the molten salt to be fed to an electrolytic cell can be rapidly removed (recovered) and the Ca formation efficiency during the electrolysis of the molten salt can be enhanced. Consequently, Ca formation and TiCl₄ reduction in the electrolysis of the molten salt can be efficiently carried out and a stable operation on a commercial scale is possible. Thus, the method can be efficiently utilized in producing Ti or a Ti alloy by Ca reduction.

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