

Title (en)

Process and equipment for heating an electrically conductive liquid

Title (de)

Verfahren und Vorrichtung zum Aufheizen einer elektrisch leitfähige Flüssigkeit

Title (fr)

Procédé et équipements pour le chauffage d'un liquide électriquement conducteur

Publication

**EP 0732866 A1 19960918 (FR)**

Application

**EP 96400520 A 19960313**

Priority

- FR 9503054 A 19950316
- FR 9600737 A 19960123

Abstract (en)

The method involves plunging a heating device in the liquid. The heating device has an inductive circuit (12) electrically insulated from the liquid. The inductive circuit is supplied by an alternative current to induce Foucault currents in the electrolytic liquid. The liquid can be placed in a tank (10) made of electrically conductive material. The inductive circuit may be supplied at a frequency selected in such a way that the induced magnetic field will be confined outside the heating device. The heating device may have a system for cooling the inductive circuit.

Abstract (fr)

On place le liquide à chauffer dans une cuve où se trouve en outre un circuit inducteur (12). Le circuit inducteur est alimenté en courant alternatif de façon à induire un champ magnétique, et donc des courants de Foucault dissipateurs de chaleur dans le liquide. Utilisation notamment pour chauffer des liquides corrosifs, des métaux ou alliages métalliques non ferreux en fusion, ou des verres en fusion. <IMAGE>

IPC 1-7

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CPC (source: EP)

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Citation (search report)

- [Y] FR 2694994 A1 19940225 - ELECTRICITE DE FRANCE [FR], et al
- [A] US 1362622 A 19201221 - HENDRICKS JR ALLAN B
- [A] US 3936625 A 19760203 - BURNETT HENRY J
- [Y] PATENT ABSTRACTS OF JAPAN vol. 950, no. 001

Cited by

CN105284185A; FR2821647A1; WO2014202683A1

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