

Title (en)

METHOD FOR PRODUCING METAL

Title (de)

VERFAHREN ZUR HERSTELLUNG VON METALL

Title (fr)

PROCÉDÉ SERVANT À PRODUIRE UN MÉTAL

Publication

EP 1835049 A4 20090325 (EN)

Application

EP 05814353 A 20051209

Priority

- JP 2005022651 W 20051209
- JP 2004363708 A 20041215

Abstract (en)

[origin: EP1835049A1] A method for producing a metal by an electrolytic process using an yttria-containing porous ceramic body as a diaphragm is provided; the calcium formed by electrolysis cannot pass through the diaphragm, hence the back reaction can be effectively inhibited. Preferably, to be used is a diaphragm comprising a porous ceramic body having a purity of yttrium of 90 mass % or more (more preferably, 99% or more), a porosity of 1% or more and a pore diameter of 20 µm or less, and having a thickness of 0.05-50 mm and a metal halide is used as the electrolytic bath. The method can be utilized for producing metals such as calcium or rare earth elements, in particular. For example, when the method is applied to the production of calcium, metallic calcium can be produced with ease and at low cost without the need for enormous heat energy

IPC 8 full level

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CPC (source: EP US)

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C25C 7/04 (2013.01 - EP US)

Citation (search report)

- [X] WO 2004035873 A1 20040429 - BHP BILLITON INNOVATION PTY [AU], et al
- [A] US 6187168 B1 20010213 - LACAMERA ALFRED F [US], et al
- See references of WO 2006064730A1

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