

Title (en)

Metallothermic reduction of rare earth oxides with calcium metal.

Title (de)

Metallothermische Reduktion seltener Erdoxide mittels Kalzium.

Title (fr)

Réduction métallothermique d'oxydes de terres rares par du calcium métallique.

Publication

EP 0170372 A1 19860205 (EN)

Application

EP 85304046 A 19850607

Priority

US 62773684 A 19840703

Abstract (en)

Rare earth oxides can be reduced to rare earth metals by, a novel, high yield, metallothermic process. The oxides are dispersed in a suitable, molten, calcium chloride-based bath (44) along with calcium metal. The bath (44) is agitated and calcium metal reduces the rare earth oxides to rare earth metals. The metals collect in a discrete layer (43) in the reaction vessel (22).

IPC 1-7

C22B 59/00; C22B 5/04

IPC 8 full level

C22B 5/04 (2006.01); **C22B 26/20** (2006.01); **C22B 59/00** (2006.01)

CPC (source: EP KR)

C22B 5/00 (2013.01 - KR); **C22B 5/04** (2013.01 - EP); **C22B 59/00** (2013.01 - EP)

Citation (search report)

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