

Title (en)

Electrode with electrocatalytic coating.

Title (de)

Elektrode mit elektrokatalytischer Beschichtung.

Title (fr)

Electrode présentant un revêtement électrocatalytique.

Publication

EP 0437178 A1 19910717 (EN)

Application

EP 90810945 A 19901204

Priority

US 44777589 A 19891208

Abstract (en)

A coating is now disclosed which is especially serviceable as an improved electrocatalytic coating for an electrode. The coating is a crystalline coating of mixed oxides. The oxides are of iridium, ruthenium and titanium, in very specially defined proportions. When the coating is present on an electrically conductive metal substrate that can serve as an electrode, such electrode has, in combination, the characteristics of reduced oxygen evolution in a membrane cell, low chlorine electrode potentials, plus reduced coating weight loss in a caustic environment.

IPC 1-7

C25B 11/06

IPC 8 full level

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CPC (source: EP KR)

C23C 4/18 (2013.01 - KR); **C25B 11/053** (2021.01 - KR); **C25B 11/091** (2021.01 - KR); **C25B 11/093** (2021.01 - EP)

Citation (search report)

- [XD] US 4005004 A 19770125 - SEKO MAOMI, et al
- [A] FR 2189122 A1 19740125 - DIAMOND SHAMROCK CORP [US]
- [A] EP 0153586 A1 19850904 - TDK CORP [JP]
- [AD] US 4564434 A 19860114 - BUSSE-MACHUKAS VLADIMIR B [SU], et al

Cited by

US2013186750A1; DE102010023418A1; AU2011333664B2; US11634827B2; EP2390385A1; EP2450475A3; US10030300B2; US7566389B2; US8366889B2; US8617377B2

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