

Title (en)

Electrodes, electro-chemical cells containing said electrodes, and process for forming and utilizing such electrodes.

Title (de)

Elektroden, elektrochemische Zellen mit diesen Elektroden und Verfahren zur Ausbildung und Verwendung solcher Elektroden.

Title (fr)

Electrodes, cellules électro-chimiques contenant ces électrodes et procédés pour former et utiliser de telles électrodes.

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Application

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Priority

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Abstract (en)

The invention includes electrodes having a plurality of fibers wherein an essentially continuous metallic coating of high bond strength extends over at least a portion of each fiber, and wherein the fibers provide a large surface area. The electrodes of the invention have an efficient electrical connection at their terminals comprising fiber/metal matrices which provide the desired connections to the terminals without damage to the fibers. The fiber metal matrices also provide excellent electrical contact between all of the fibers, and inhibit wicking of the electrolyte or process stream into the electrical connections. Where the fibers are coated along a substantial portion of their length, they also have a high electrical conductivity. The invention further includes electro-chemical cells, and processes for forming and utilizing the electrodes and cells.

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Citation (search report)

- DE 2929346 A1 19810129 - CONRADTY NUERNBERG
- US 4108757 A 19780822 - FLEET BERNARD, et al
- CH 584766 A5 19770215 - MASCHF AUGSBURG NUERNBERG AG
- US 4108754 A 19780822 - FLEET BERNARD, et al
- US 4046663 A 19770906 - FLEET BERNARD, et al
- US 4046664 A 19770906 - FLEET BERNARD, et al

Cited by

AU2005275032B2; GB2296720A; US7378010B2; US8273237B2; US7736475B2; US7494580B2; WO9507375A1; US7591934B2; US7452455B2;
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CA 1273604 A 19900904; DE 3474841 D1 19881201; DK 163310 B 19920217; DK 163310 C 19920706; DK 306984 A 19841225;
DK 306984 D0 19840622; ES 533656 A0 19860116; ES 547434 A0 19861016; ES 8604321 A1 19860116; ES 8700337 A1 19861016;
FI 77271 B 19881031; FI 77271 C 19890210; FI 842530 A0 19840621; FI 842530 A 19841225; HK 5691 A 19910125; IL 72209 A0 19841031;
IL 72209 A 19880131; JP H0723549 B2 19950315; JP S6059092 A 19850405; KR 850004793 A 19850727; KR 900006119 B1 19900822;
NO 164670 B 19900723; NO 164670 C 19901031; NO 842527 L 19841227; SG 98190 G 19910214; ZA 844777 B 19850227

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DK 306984 A 19840622; ES 533656 A 19840622; ES 547434 A 19850930; FI 842530 A 19840621; HK 5691 A 19910117;
IL 7220984 A 19840622; JP 12991284 A 19840623; KR 840003600 A 19840623; NO 842527 A 19840622; SG 98190 A 19901210;
ZA 844777 A 19840622