

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 14

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte CHAO-PENG CHEN and TILAK V. BOMMARAJU

Appeal No. 96-2797
Application No. 08/432,474¹

ON BRIEF

Before JOHN D. SMITH, GARRIS and OWENS, Administrative Patent Judges.

JOHN D. SMITH, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal pursuant to 35 U.S.C. § 134 from the final rejection of claims 1 through 5, 7, 8, 10, 16 through 18, 20, 21, and 23. Claim 6, 11 through 13, 15, and 22 have been withdrawn from further consideration as directed to a non-elected embodiment.

¹ Application for patent filed May 1, 1995.

Appeal No. 96-2797
Application No. 08/432,474

The subject matter on appeal relates to the reactivation of deactivated noble metal or noble metal oxide coated anodes. The reactivation is accomplished by electrolessly or electrolytically depositing a coating of a noble metal directly over the existing coating on the deactivated anode. Claims 1 and 8 are representative and are reproduced below:

1. A method of reactivating a deactivated anode which comprises a substrate having thereon an anode coating of noble metal or noble metal oxide, comprising electrolessly or electrolytically depositing on said anode coating a reactivating coating of a noble metal selected from the group consisting of platinum, palladium, iridium, rhodium, ruthenium, osmium, and mixtures thereof.

8. A method according to Claim 1 wherein said reactivating coating is deposited on said anode without removing said anode from the cell in which it was used.

The references of record relied upon by the examiner are:

de Nora et al. (de Nora) 15, 1972	3,684,543	Aug.
Fabian et al. (Fabian) 1978	4,088,558	May 9,
Beer 16, 1973	3,711,385	Jan.

The appealed claims stand rejected under 35 U.S.C. § 102(b) or 35 U.S.C. § 103 as anticipated by or obvious over Fabian in view of Beer and de Nora.

Appeal No. 96-2797
Application No. 08/432,474

With the exception of claim 8, which appellants request separate consideration for, the claims stand or fall together.

The examiner correctly indicates that the Fabian patent discloses a method of reactivating a deactivated anode which comprises a substrate having thereon an anode coating of noble metal or noble metal oxide, comprising the step of depositing on the anode coating a reactivating coating of a noble metal selected from the group consisting of platinum, iridium, rhodium, palladium, ruthenium, osmium, and mixtures thereof to form a reactivated anode. See the Abstract and column 2, lines 1-8 and lines 62-66.

The examiner's anticipation rejection of the appealed claims is based on an interpretation of the Fabian patent, which refers to and incorporates certain disclosures from U.S. Patent No. 3,711,385 to Beer and U.S. Patent No. 3,632,498 to de Nora at column 2, line 63 through column 3, line 1 as follows:

In each of the embodiments the valve metal members 1 in reticulated mesh, rod or other form are provided with an electrically conducting electrocatalytic coating which is applied and baked on as described, for

Appeal No. 96-2797
Application No. 08/432,474

example, in U.S. Patent Nos. 3,632,498 and 3,711,385, so that the reconstructed and recoated anodes do not have to be heated after the added portions are attached to the anode risers or the portions of the previously used anode envelopes or working faces which are attached to the risers [emphasis added].

Appellants contend, and we think correctly, that the "applied and baked on as described" language with reference to the de Nora and Beer patents pertains to conventional industry practice which involves applying a new coating using a thermal decomposition method rather than an electrolytic method as claimed. In this regard, de Nora refers to a coating mixture comprising halides of noble metals which is applied to a cleaned electrode to be recoated, by brush, roller, electrostatic spraying, dipping or other coating methods in a series of 5 to 15 coats with drying and baking at 300° to 460° C. between each coat until the required coating weight has been applied. See de Nora at column 4, lines 35-64.

Likewise, the Beer patent discloses a similar working example wherein a mixture of a platinum metal compound is applied to an anode core by painting or brushing with intermediate heating. See example 1A of Beer. Accordingly,

Appeal No. 96-2797
Application No. 08/432,474

we cannot sustain the examiner's rejection of the appealed claims based on an anticipation theory.

On the other hand, we find that the examiner has adequate factual support for the rejection of appealed claim 1 based on an obviousness rationale (35 U.S.C. § 103). In this regard, we find that one of ordinary skill in the art would have understood the reference to the application and baking technique referred to in Beer and de Nora as an exemplary technique for depositing a reactivating coating of a noble metal. In this regard, the Beer patent broadly indicates that an anode core can be covered with a desired noble metal by techniques such as galvanic plating or by thermal decomposition. See the reference at column 3, lines 50 through 66. Moreover, Beer specifically discloses that an electrolytic technique may be used to accomplish the same purpose. See Beer at column 4, lines 8-17. We recognize, as argued by appellants, that Beer is describing techniques for preparing a new anode, not reactivating an old deactivated anode. However, we agree with the examiner that the techniques

Appeal No. 96-2797
Application No. 08/432,474

disclosed in Beer for applying the noble metal or noble metal oxide coating would have been considered alternative obvious ways to apply the coating to a deactivated anode.

Accordingly, we agree with the examiner that the combined disclosures of the relied upon references establish a prima facie case of obviousness for the subject matter defined by appeal claim 1. Although appellants assert that the anodes reactivated according to the claimed invention last as long as new anodes,

we observe that one of the objects of the prior art as described in de Nora is to produce a recoated, previously used dimensionally stable electrode which will be equal in performance to the same electrode as initially coated. See de Nora at column 2, lines 49 through 51. Accordingly, the production of an anode reactivated according to the claimed invention which lasts as long as a new anode is an expected result in this art. Thus, we conclude as the examiner did, that the claimed subject matter defined by appealed claim 1 would have been obvious within the meaning of 35 U.S.C. § 103. Since claims 2 through 5, 7, 10, 16 through 18, 20, 21 and 23

Appeal No. 96-2797
Application No. 08/432,474

stand or fall together with claim 1, we also necessarily sustain the examiner's rejection of these claims.

Appealed claim 8 is another matter. As appellants point out, claim 8 covers a process for reactivating the anode wherein the reactivating coating is deposited without removing the anode from the cell in which it is used. We find no disclosures in any of the relied upon references, nor has the examiner referred to any disclosure, which would have suggested the subject matter defined by claim 8. Indeed, as appellants point out, the Fabian reference teaches that the electrode members to be recoated must be separated from the risers in the electrolytic cell to prevent the reheating of the risers. Thus, we reverse the examiner's rejections of appealed claim 8.

Accordingly, the decision of the examiner is affirmed-in-part.

Appeal No. 96-2797
Application No. 08/432,474

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

JOHN D. SMITH)	
Administrative Patent Judge)	
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)	
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)	BOARD OF PATENT
BRADLEY R. GARRIS)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
)	
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TERRY J. OWENS)	
Administrative Patent Judge)	

Appeal No. 96-2797
Application No. 08/432,474

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Serial No.

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Judge JOHN D. SMITH

Judge OWENS

Judge GARRIS

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DECISION: AFFIRMED-IN-

PART

Send Reference(s): Yes No
or Translation(s)

Panel Change: Yes No

3-Person Conf. Yes No

Remanded: Yes No

Brief or Heard

Group Art Unit: 1102

Index Sheet-2901 Rejection(s): _____

Acts 2: _____

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