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DECISION of 20 November 2002

Case Number:

T 0653/00 - 3.4.2

Application Number:

95201887.7

Publication Number:

0702421

IPC:

H01M 4/48, C01G 53/00

Language of the proceedings: EN

Title of invention:

Lithiated nickel dioxide and secondary cells prepared therefrom

Patentee:

MOLI ENERGY (1990) LIMITED

Opponent:

H.C. Starck GmbH & Co. KG

Headword:

Relevant legal provisions:

EPC Art. 111(1)

Keyword:

"New evidence brought to light in the appeal procedure"

"Earlier decision of the Board relating to similar subjectmatter"

"Remittal to the First Instance"

Decisions cited:

T 0646/98

Catchword:



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Boards of Appeal

Chambres de recours

Case Number: T 0653/00 - 3.4.2

DECISION of the Technical Board of Appeal 3.4.2 of 20 November 2002

Appellant:

MOLI ENERGY (1990) LIMITED

(Opponent) 20000 Stewart Crescent

Maple Ridge, B.C., V2X 9E7

(CA)

Representative:

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S-401 22 Göteborg (SE)

Respondent:

H.C. Starck GmbH & Co. KG

(Proprietor of the patent)

Eschenallee 36 D-1000 Berlin 19 (DE)

Representative:

Zobel, Manfred, Dr

BAYER AG

Konzernbereich RP Patente und Lizenzen

D-51368 Leverkusen (DE)

Decision under appeal:

Decision of the Opposition Division of the European Patent Office posted 8 June 2000 rejecting the opposition filed against European patent No. 0 702 421 pursuant to Article 102(2)

EPC.

Composition of the Board:

Chairman:

E. Turrini

Members:

A. G. Klein

B. J. Schachemann

## Summary of Facts and Submissions

I. The appellant (opponent) lodged an appeal against the decision of the opposition division rejecting the opposition against European patent No. 0 702 421 (application No. 95 201 887.7).

The opposition filed by the appellant was based on the grounds of lack of novelty and lack of inventive step (Article 100(a) EPC).

In the decision under appeal, the opposition division held that the subject matter of the claims of the patent as granted was novel and involved an inventive step with regard to the prior art considered during the proceedings. The opposition division held in particular that there was no explicit teaching or clear evidence that the material manufactured according to document

(D2): JP-A-01 304664 and English language translation

would have a BET surface area of less than about 3  $\ensuremath{\text{m}^2/\text{g}}$  as defined in claim 1 of the patent.

- II. With the notice of appeal, the appellant introduced document EP-B-0 824 087, published after the filing date of the patent in suit, as evidence ("gutachtlich") in support of his submissions that the material manufactured according to document D2 had inherently a BET surface area within the range defined in claim 1, and requested setting aside of the decision under appeal, revocation of the patent in its entirety and, on an auxiliary basis, oral proceedings.
- III. In an annex to summons to oral proceedings, the Board commented on the appellant's submissions relying on the disclosure of document EP-B-0 824 087 and drew the

attention of the parties to the earlier decision of the same Board T 0646/98 of 20 September 2001 (not published in OJ) and in particular to point I of the Summary of Facts and Submissions and to point 2.2.3 of the Reasons, which appeared to relate to similar subject matter.

- IV. The respondent (patent proprietor) made no request in the course of the appeal proceedings and informed the Board of its intention not to attend the scheduled oral proceedings.
- V. The appellant notified the Board that he would not attend the oral proceedings and requested a decision on the state of the file.
- VI. Oral proceedings took place on 20 November 2002 in the absence of the parties in accordance with Rule 71(2) EPC. At the end of the oral proceedings, the Board gave its decision.
- VII. The wording of claim 1 of the patent as granted reads as follows:
  - "1. A lithiated nickel dioxide cathode active material for an electrochemical cell having a BET surface area of less than about  $3.0~\text{m}^2/\text{g}$ ."

Claims 2 to 9 are referred back to claim 1, claim 10 encompasses a material having all the features of the material defined in claim 1, claims 11 to 26 are directed to a method of making the material and claim 27 is directed to a material made by the process of claim 11.

VIII. The arguments of the appellant are essentially the following:

In the solid reaction manufacturing method disclosed in document D2 the solid component is heated during hours at a high temperature, resulting in particles having a smooth outer surface and a reduced internal surface. Consequently, the specific surface area of the particles can be roughly estimated on the basis of the particle size. Sample No. 117 listed in Table 3 on page 8 of document EP-B-0 824 087 refers to a lithium nickelate manufactured according to a solid phase reaction method of the type disclosed in document D2, the resulting nickelate having a particle size of 8,9  $\mu$ m and a specific surface area of 0,5 m<sup>2</sup>/g. Assuming smooth spheres all having the same size, the surface area is 0,13 m<sup>2</sup>/g, and assuming a particle size distribution over two powers of ten and a cubic particle shape, the resulting specific surface is of the order of 0,3 m<sup>2</sup>/g, in good agreement with the measured value of  $0.5 \text{ m}^2/\text{g}$  reported in EP-B-0 824 087. Consequently, the process of manufacture of lithium nickelate with a particle size between 10 and 150  $\mu\mathrm{m}$ disclosed in document D2 results inherently in a powder with a BET surface area below 3 m<sup>2</sup>/q.

IX. The respondent expressly declared that he would not comment on the appellant's submissions, and he also made no substantive response to the Board's communication accompanying the summons.

## Reasons for the Decision

- 1. The appeal is admissible.
- 2. The decision of the opposition division relies on the

absence of explicit disclosure or conclusive evidence that the material manufactured according to the disclosure of document D2 would inherently have a BET surface area within the range defined in claim 1 of the patent, i.e. a BET surface value of less than about  $3.0 \, \text{m}^2/\text{g}$ .

The Board would have no reason to question the correctness of the opposition division's conclusion in view of the only facts and evidence which were before the division when it took its decision.

The appellant, however, has cited for the first time in his statement of grounds of appeal document EP-B 0 824 087, published after the filing date of the patent in suit as an expert opinion produced instead of experiments ("gutachtlich anstelle eigener Versuche") in order to support his contention that contrarily to the view expressed by the opposition division in the decision under appeal, the material manufactured according to document D2 has inherently a value of the BET surface area within the range defined in claim 1 of the patent.

This contention, which was not contested by the respondent in the present appeal procedure, a priori seems to be consistent with the conclusion reached by the Board in its earlier decision T 646/98 (supra) - on the basis of experimental data submitted during the corresponding proceedings - that a BET specific surface area between 0.01 and 0.5 m²/g did not express any reliable distinction over the material disclosed in the same prior art document D2 (point 2.2.3 of the Reasons).

Accordingly the Board deems it appropriate, in the particular circumstances of the present case, to remit the case to the first-instance department for being

further prosecuted taking into account the new evidence brought to light in the appeal procedure (Article 111(1) EPC).

For the sake of clarity the Board wishes to emphasize that the conclusion reached in its earlier decision T 646/98 is not binding on the departments of the EPO in respect of the present procedure, which concerns entirely different parties. The evidence in the present procedure should therefore be assessed according to the principle of free evaluation of evidence and the case be decided on its own merits, on the basis of the submissions already made by the parties or those which the parties may still be invited to produce.

## Order

## For these reasons it is decided that:

- 1. The decision under appeal is set aside.
- 2. The case is remitted to the department of first instance for further prosecution.

The Registrar:

The Chairman:

P. Martorana

E. Turrini

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