

## UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte TOSHIKI MAEDA, HIROFUMI IISAKA, SATORU SUZUKI, and MANABU YAMADA

Appeal 2008-006267 Application 10/715,525 Technology Center 1700

Decided:<sup>1</sup> July 22, 2009

Before JAMES T. MOORE and ALLEN R. MacDONALD, *Vice Chief Administrative Patent Judges*, and JEFFREY T. SMITH, LINDA M. GAUDETTE, and MICHAEL P. COLAIANNI, *Administrative Patent Judges*.

COLAIANNI, Administrative Patent Judge.

## **DECISION ON APPEAL**

<sup>&</sup>lt;sup>1</sup> The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, begins to run from the Decided Date shown on this page of the decision. The time period does not run from the Mail Date (paper delivery) or Notification Date (electronic delivery).

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Appellants appeal under 35 U.S.C. § 134 the final rejection of claims 1 and 3. We have jurisdiction over the appeal pursuant to 35 U.S.C. § 6(b). We AFFIRM.

#### BACKGROUND

Appellants' invention is directed to an active material for a positive electrode of a lithium secondary battery (Spec. 1).

Claim 1 is illustrative:

1. An active material for a positive electrode of a lithium secondary battery, comprising a lithium-nickel composite oxide of the general formula  $\text{Li}_x(\text{Ni}_{1-y}\text{Co}_y)_{1-z}M_z\text{O}_2$ ; where

$$0.98 \le x \le 1.10$$
;

$$0.05 \le y \le 0.4;$$

$$0.01 \le z \le 0.2$$
; and

M is chosen from at least one element selected from the group of Al, Zn, Ti, and Mg; wherein

- a. according to Rietveld analysis, the Li site occupancy rate for Li sites in a crystal of the lithium-nickel composite oxide is 98% or greater;
- b. the average particle size of spherical secondary particles of the lithium-nickel composite oxide ranges from 5  $\mu$ m to 15  $\mu$ m; and
- c. when the active material is subjected to a washing process, the difference between the specific surface area of the active material before the washing process and after the washing process is 1.07 m<sup>2</sup>/g or less.

The Examiner relies on the following prior art reference as evidence of unpatentability:

Sunagawa

EP 0 944 125 A1

Sep. 22, 1999

Appellants appeal the following rejection:

Claims 1 and 3 are rejected under 35 U.S.C. § 102(b) as being anticipated by Sunagawa.

### APPELLANTS' CONTENTIONS

Appellants do not contest the Examiner's finding (Ans. 4) that Sunagawa's active material composition is the same as claimed by Appellants (App. Br. 10-15 generally).

Instead, Appellants argue that mere compositional identity is insufficient to establish that the claimed Li site occupancy rate and difference in specific surface area after washing are inherent properties (App. Br. 12-14). Appellants rely on Table 1 in the Specification as showing that examples of active material made of the same composition with different processing conditions have different properties (App. Br. 12-13).

Appellants contend that the data in Table 1 shows identical compositions do not necessarily exhibit the claimed Li site occupancy rate and difference in specific surface area (App. Br. 13). Appellants contend that material properties are dependent on a range of factors; including composition and processing conditions (Reply Br. 3-4).

### **ISSUE**

Having conceded that Sunagawa's and Appellants' compositions are the same, the sole issue on appeal is as follows: have Appellants satisfied their burden of showing that Sunagawa's composition does not inherently possess the claimed Li site occupancy rate and difference in specific surface area after washing properties? We decide this issue in the negative.

### PRINCIPLE OF LAW

Where the claimed and prior art products are identical or substantially identical, the PTO can require an applicant to prove that the prior art products do not necessarily or inherently possess the characteristics of the claimed product. *In re Best*, 562 F.2d 1252, 1255 (CCPA 1977).

### **FACTUAL FINDINGS**

We rely on the Examiner's factual findings stated in the Answer (Ans. 4-7) and Final Office Action (2-4).

### **ANALYSIS**

The Examiner's finding that Sunagawa's active material composition is identical to the active material composition claimed by Appellants (Ans 4-7; Final Office Action 4) properly shifted the burden of showing that Sunagawa's composition does not possess the Li site occupancy rate and difference in specific surface area. *Best*, 562 F.2d at 1255.

However, the Appellants' evidence provided in Table 1 of the Specification does not establish that Sunagawa's composition does not possess the claimed Li site occupancy rate and difference in specific surface area properties. Specifically, as indicated by the Examiner (Ans. 6), the Table 1 evidence does not include the necessary comparison of an active material composition made according to Sunagawa's disclosure to the claimed composition made according to Appellants' disclosure.

Instead, Table 1 merely provides examples of Appellants' claimed composition and Appellants' comparative examples, none of which are alleged to correspond to Sunagawa's material. Appellants have not alleged or provided persuasive evidence that the compositions in Table 1 of the Specification represent the closest prior art.

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Appellants' evidence therefore does not satisfy their burden.

## **DECISION**

We affirm the Examiner's § 102(b) rejection of claims 1 and 3 over Sunagawa.

# TIME PERIOD

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R.  $\S 1.136(a)(1)(v)(2008)$ .

## **ORDER**

# **AFFIRMED**

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