

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* MAMORU SHIMAKAWA, TAKESHI USUI,  
HIDEO HONMA, and TAIJI NISHIWAKI

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Appeal 2007-4236  
Application 10/354,942  
Technology Center 1700

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Decided: November 20, 2007

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Before CHARLES F. WARREN, THOMAS A. WALTZ, and  
PETER F. KRATZ, *Administrative Patent Judges*.

KRATZ, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on an appeal from the Examiner's final rejection of claims 1 and 2, the only claims that remain pending in this application. We have jurisdiction pursuant to 35 U.S.C. § 6. We reverse.

Appellants' invention is directed to a process for making nickel oxyhydroxide wherein nickel hydroxide particles are added to an alkali metal halide aqueous solution, the solution is stirred to form a nickel hydroxide slurry, and the slurry is subjected to electrolytic oxidation to form nickel oxyhydroxide from the nickel hydroxide particles in the slurry.

Claim 1 is illustrative and reproduced below:

1. A process for producing nickel oxyhydroxide, comprising the steps of :

adding nickel hydroxide particles to an aqueous solution of an alkali metal halide to produce a mixture;

stirring the mixture to prepare a nickel hydroxide slurry; and thereafter

electrolytically oxidizing said nickel hydroxide slurry to convert said nickel hydroxide particles to nickel oxyhydroxide.

The Examiner relies on the following prior art references as evidence in rejecting the appealed claims:

Dyer	US 4,540,476	Sep. 10, 1985
Yamamoto	US 6,686,091 B2	Feb. 3, 2004

Claims 1 and 2 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Yamamoto in view of Dyer.

The Examiner has correctly determined that Yamamoto discloses that nickel oxyhydroxide can be obtained by the electrolytic oxidation of nickel hydroxide (Answer 3; Yamamoto, col. 5, ll. 3-7). However, the Examiner acknowledges that "Yamamoto does not teach the steps of the electrolytic oxidation method" corresponding to the method claimed by Appellants.

The Examiner turns to Dyer for a teaching with respect to employing halide ions in forming nickel hydroxide from nickel during an electrolytic process (Answer 3).

Based on the combined teachings of Yamamoto and Dyer, the Examiner contends that “the invention as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made because one of skill would have been motivated to use the specific electrolytic oxidation process of Dyer for the electrolytic oxidation of nickel hydroxide to nickel oxyhydroxide in Yamamoto because Dyer teaches the electrolytic process can be carried out on any nickel structure useful for nickel electrodes in battery cells” (Answer 3-4).

Appellants contend that each of the applied references do not disclose any of the three steps recited in appealed claim 1, the sole independent claim on appeal, and that the combination of their teachings likewise does not teach the claimed method (Brief 6 and 7). As for the Examiner’s proposed modification of Yamamoto base on Dyer, Appellants note that Dyer is concerned with converting a nickel plaque, not hydroxide particles, and that the Examiner has not fairly established a motivation or persuasive rationale for the proposed modification of Yamamoto’s process based on the teachings of Dyer (Br. 7 and 8).

Have Appellants identified reversible error in the Examiner’s obviousness rejection based on their contentions that the Examiner has failed to establish a reasonable basis for a proposed modification of Yamamoto’s process based on the teachings of Dyer that would have led one of ordinary skill in the art to the claimed subject matter? We answer this question in the affirmative and we reverse the Examiner’s obviousness rejection.

The Examiner bears the initial burden, on review of the prior art or on any other ground, of presenting a *prima facie* case of unpatentability. *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992). Here, the Examiner has not fairly articulated why one of ordinary skill in the art would have turned to the nickel hydroxide formation method of Dyer for a suggestion as to how to carry out the nickel oxyhydroxide formation method of Yamamoto wherein nickel hydroxide is a starting material, not a product. In Dyer, porous nickel plaque is alternately exposed to anodic and cathodic potentials for converting the nickel to an active nickel hydroxide (Abstract, col. 3, ll. 34-54). The Examiner has not reasonably explained why Dyer's disparate method is applicable to the broadly described nickel hydroxide to nickel oxyhydroxide conversion of Yamamoto by the assertion that both applied references relate to batteries and the unsupported indication that Dyer's method is applicable to any nickel structure (Answer 4).

In making the assertions set forth in the Answer, the Examiner has seemingly taken at least some of the applied references' disclosures out of context without providing persuasive reasoning to support the contention that the combination thereof would have led one of ordinary skill in the art to the here claimed subject matter.

Rejections based on § 103(a) must rest on a factual basis with these facts being interpreted without hindsight reconstruction of the invention from the prior art. See *In re Warner*, 379 F.2d 1011, 1017 (CCPA 1967), cert. denied, 389 U.S. 1057 (1968). In other words, the Examiner's basis for the rejection falls short of identifying a rationale that would have led an ordinarily skilled artisan to combine selected features from each reference in

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a way that would have resulted in a method corresponding to the claimed method. *See KSR Int'l Co. v. Teleflex, Inc.*, 127 S. Ct. 1727, 1741 (2007).

ORDER

The Examiner's decision to reject claims 1 and 2 under 35 U.S.C. § 103(a) as being unpatentable over Yamamoto in view of Dyer is reversed.

REVERSED

PL/LP Initials:  
sld/ls

PAUL D. GREELEY, ESQ.  
OHLANDT, GREELEY, RUGGIERO, & PERLE, L.L.P.  
10TH FLOOR  
ONE LANDMARK SQUARE  
STAMFORD, CT 06901-2682